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"A BASIS FOR PHARMACY INTERVENTION PRACTICE: AWARENESS, KNOWLEDGE, AND ATTITUDEOF COMMUNITY PHARMACISTS TOWARDS THE IMPLEMENTATION OF PHARMACIST-ONLY OTCMEDICINES IN CHAIN DRUGSTORES WITHIN DISTRICTS 2 AND 4 OF QUEZON CITY"

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An Undergraduate Research Presented to Centro Escolar University School of Pharmacy.

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ABSTRACT

Introduction: The government's implementation on the R.A. 9502 also known as the "Universally Accessible Cheaper and Quality Medicines Act of 2008" made drugs cheaper and convenient to purchase, which brought about many desirable and certain undesirable outcomes. Years after, the government enacted a new law known as the .RA. 10918 or the "Philippine Pharmacy Act". Within the scope of this law includes a new drug classification termed as the Pharmacists-only OTC Medicines (POMs). **Methods:** The respondents were chosen through the probability stratified random sampling method. A Self-administered web-based survey interview questionnaire was used as the primary research instrument of the study. The statistical analysis method used was descriptive statistics. **Results:** Majority of the community pharmacists are aware of the Republic Act No. 10918, with it having been represented by questions 1 (95.2%), 2 (95.0%), and 5 (94.4%). Moreover, They are also aware of POMs and that there are other classifications of drugs other than the traditional prescription and OTC medicines represented by questions 3 (87.2) and 4 (85.6%). The combined results for the respondent's knowledge on POMs and non-POMs is 59.4%. The majority of the respondents' answers on attitude strongly agree. Most of their given statements on the interview question about POMs are also complimentary. **Discussion:** Most of the respondents are aware about POMs and its implementation in the Philippines. It was also found out that they have a poor knowledge level on drugs classified under POMs. Lastly, the data obtained from the respondents expresses their positive attitude towards POMs and its implementation.

KEYWORDS: R.A. 9502; R.A. 10918; Pharmacists-only OTC Medicines (POMs); Community Pharmacist; Prescription medicines; OTC medicines.

INTRODUCTION

Some of the significant responsibilities of a licensed community pharmacist focus on public access to medicines, as well as the dispensing and counseling services to patients (Lam, 2014). Traditionally, there were only two classifications of drugs, namely over-the-counter (OTC) and prescription (Rx) medicines (RA. No. 5921, 1969). Over-the-counter drugs, also known as nonprescription medicines, refers to the drugs that patients can obtain without a prescription from a physician. In contrast, prescription drugs are medicines that legally require a prescription written by an authorized healthcare professional mainly because of the patient's safety from the potential harm that can occur without professional supervision (Byrne & Pallaria, 2018). In 2016, the government added another class of medicine. It was termed as pharmacist-only OTC medicines (POMs) which are OTC drugs described as "substantially safe in use but require professional guidance or counseling from a pharmacist." (Sansom et al, 1999).

The government implemented a law that aimed to make drugs more accessible to every Filipinos. This was the Republic Act No. 9502, also known as the "Universally Accessible Cheaper and Quality Medicines Act of 2008". This allowed non-traditional outlets like convenience stores and other retail establishments to sell OTCs. The enactment of this law has the possibility to amplify the irrational use of drugs.

A few years after, the government conceptualized a law that intended to improve pharmacy practice in the Philippines. It was the Republic Act No. 10918, also known as the "Philippine Pharmacy Act" which may prevent the irrational use of medications through patient

counseling practice. Furthermore, on the 20th of September, 2018, the Food and Drug Administration released a list of drugs labeled as POMs under the FDA Circular No. 2018-014. The new class of drugs refers to the OTC medicines that can only be sold under the supervision of a licensed community pharmacist (FDA-Circular-No.-2018-014). Aside from the irrational use of medications, pharmacovigilance might have also contributed to the conceptualization of POMs.

Pharmacovigilance is a field of practice which is defined by the World Health Organization (WHO) as "the science and activities relating to the detection, assessment, understanding, and prevention of adverse effects or any other drug-related problem." (WHO, 2015) Meanwhile, as for the patients, using medications that lack information to provide for dispensing may lead to drug products being misused or abused. That being said, the implementation of POMs is for the patients' safety which will further improve healthcare, especially the proper usage and dosage of drugs to prevent risks. A new and wider range of roles for community pharmacists will also be promoted.

Community pharmacists will be the main respondents of the study. The research will be determining the awareness, knowledge, and attitude of community pharmacists in chain drugstores within Quezon City regarding the implementation of POMs. It will also help verify if they are aware and knowledgeable about this practice.

Background of the study

A community pharmacist plays an essential role in the healthcare system. Notonly are they partaking in the dispensing and compounding of drugs, but they also provide services such as coordination between medications. Community pharmacists play a part in the disease prevention and management of patients. In addition, they are also instructors that serve as the main source of drug information and knowledge to the patients or consumers (Apa, 2015). Community pharmacists play a vital role in the community as they are responsible for the dispensing of both prescription and OTC medicines to the public.

Prescription ("Rx") medicines are prescribed for a specific person for a specific use. Physicians take into consideration a lot of information when prescribing a medicine because it might be effective for one person and harmful to another. OTC medicines are considered safe for any intended purposes and are used to treat minor ailments. Since it has a wide range of safety, and it is also accessible to a large scale of individuals. Prescription drugs have higher potential risks of drug addiction and drug tolerance. Drugs such as opioids, stimulants, and anti-anxiety medication are the common drugs used in drug addiction. Some signs and symptoms of prescription drug abuse include mood swings, shallow breathing, slow reflexes, insomnia, and anxiety depending on what drug has been consumed. Some examples are Diazepam (Valium), Oxycontin, and Methylphenidate (Ritalin) (Casarella, 2020). On the other hand, OTC drugs are accessible to all, but it doesn't mean that they are not prone to drug abuse. OTC drugs also haverisks of addictions. Even though it might be less potent compared to other restricted drugs, some of it can cause hallucination or Euphoria on higher doses. OTCs such as Dextromethorphan (DXM) and Pseudoephedrine are examples of medicines that are commonly abused by consumers. (Juergens, 2020).

As of the year 2016, the government added another class of medicine. It was termed as the POMs, which comprises a limited number of drugs that are available for purchase without needing a prescription considering that a licensed pharmacist would provide patient counseling (R.A. 10918, 2016). In line with the implementation of POMs,several issues regarding patient health in Quezon City may occur since it has been the most populated city in Metro Manila (Recio, 2020). Some of these are (1) patient drug administration errors, (2) dosage errors, (3) risks of accidents due to some side effects ofa drug, and (4) abuse of some OTC drugs that lead to various undesirable effects on their health. Pharmacovigilance of OTC drugs is also an alarming issue. A study was conducted by Sujata and Yadneshwar of 2011 about the adverse drug reaction to Ibuprofen, an OTC drug for the treatment of fever, joint pain, headache, migraine,inflammatory states. It has been reported that it can develop an adverse drug reaction (ADR) of rash, gastrointestinal ulcers, hepatic toxicity, Steven Johnson syndrome, respiratory skin rashes, acute exacerbation of asthma, and anaphylaxis to non-steroidal anti-inflammatory drugs (NSAIDs) if the patients are not aware of these. With the implementation of POMs, several ADRs and errors can be prevented by promoting patient counseling conducted by the licensed community pharmacists since it is not well-practiced in the Philippines (Apa, 2015).

Republic Act No. 9502, also known as "Universally Accessible Cheaper and Quality Medicines Act of 2008", Chapter 7, Section 25, states that "Non-prescription or over-the-counter drugs may be sold in their original packages, bottles, containers or in small quantities, not in their original containers to the consuming public through supermarkets, convenience stores, and other retail establishments." (R.A. 9502, 2008). Since the government allowed non-traditional outlets like convenience stores and supermarkets to sell over-the-counter drugs, medicines became more accessible. As a result, it aggravated the irrational use of drugs which acts as one of the reasons that supplemented the conceptualization of Republic Act No. 10918. It is also known as the "Philippine Pharmacy Act", which declares that "The state must recognize the vital role of pharmacists in the delivery of quality health care services through the provision of safe, effective, and quality pharmaceutical products, pharmaceutical care,

drug information, patient medication counseling, and health promotion. The pharmacists' professional services shall, therefore, be promoted as an indispensable component of the total health care system to ensure the physical well-being of the Filipinos." (R.A. 10918, 2016) that required licensed pharmacists to mandate patient counseling practice. Since the POMs are included within the scope of this law, it will serve as some of the main reasons why the Philippines implemented the said class of drugs.

Since the implementation of POMs was 4 years ago, the researchers would like to determine the awareness, knowledge, and attitude of community pharmacists working in the chosen chain drugstores within Quezon City regarding the said matter. The study will also determine if there is a relationship between the community pharmacists' age, work position, and degree/s to their knowledge about POMs. Community pharmacists have firsthand experiences regarding the dispensing and counseling of patients which plays as the core of the implementation of POMs. With that, it is important to get the awareness, knowledge, and attitude of community pharmacists regarding the implementation of POMs due to the reason that community pharmacists in Quezon City will mostly be representing other pharmacists in other fields.

Quezon City is the largest and most populated city in Metro Manila and was the capital of the Philippines for 28 years (Recio, 2020). Since it is a well-developed city, establishments, and other business opportunities such as pharmacies are drawn to its high number of medical institutions. In addition, Quezon City is known to be the wellness capital of the Philippines which gave the researchers the idea of conducting their study on the said city (QC Gov, 2013).

The study will be relevant to our society because it will be presenting facts regarding the implementation of POMs which could further improve the healthcare delivery system in the country. Awareness of it will also promote the rational use of drugs to prevent health risks. Additionally, a new and wider range of roles for community pharmacists will also be added which will strengthen people's trust towards pharmacists all over the country, leading to an improvement in the reputation of the pharmacyprofession as healthcare professionals.

Conceptual framework

The conceptual framework of the study will show the overall flow of the research (Figure 1). It will present the variables that are important to the study such as the awareness, knowledge, and attitude of community pharmacists towards the implementation of POMs in chain drugstores within districts 2 and 4 of Quezon City. Themethod and processes for data collection will also be briefly mentioned in this section.

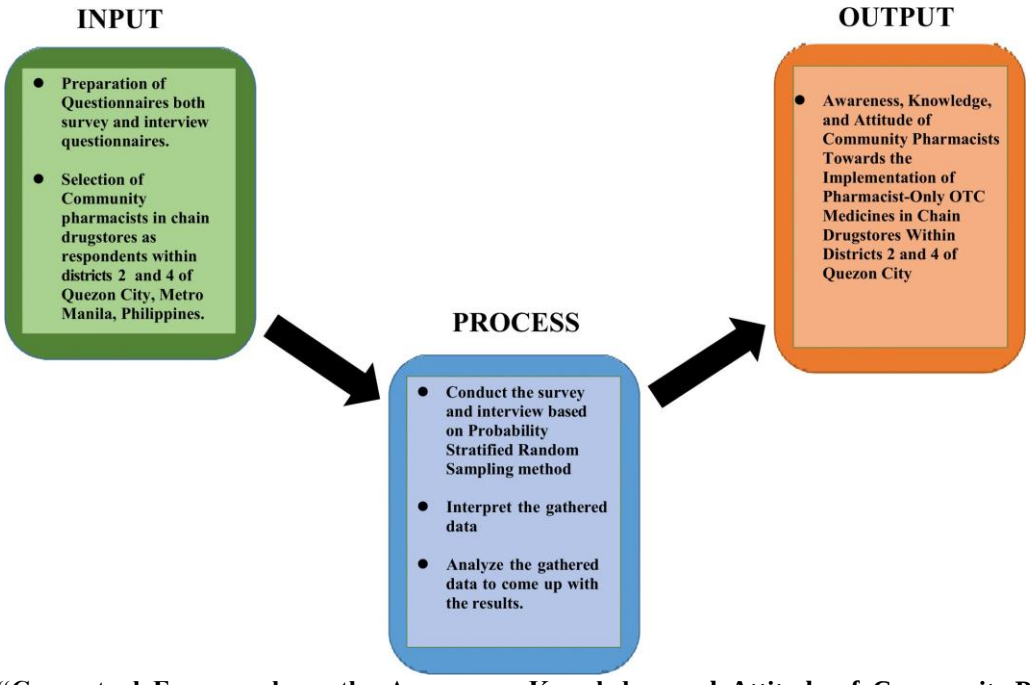

Figure 1: "Conceptual Framework on the Awareness, Knowledge, and Attitude of Community Pharmacists Towards the Implementation of Pharmacist-Only OTC Medicines in Chain Drugstores within Districts 2 and 4 of Quezon City"

Figure 1 represents the following research variables: (1) demographic profiles of pharmacists which include age, work position, degree/s earned, and branch district (2) community pharmacists' awareness (3) community pharmacists' knowledge, and (4) the community pharmacists' attitudes. These variables will be determined and will be correlated with one other by the conceptualization of a self-administered web-based

survey containing open and close-ended questions. The following are processes to be done upon the completion of the survey questionnaire: (1) distribution to community pharmacists in chain drugstores (Districts 2 and 4 of Quezon City), (2) interpretation of the collected data, and (3) evaluation of the data, correlating the relationship between thementioned variables.

Objectives of the study

The general objective of this study is:

1. To determine the community pharmacists' awareness, knowledge, and attitude towards the implementation of POMs in chain drugstores within districts 2 and 4 of Quezon City.

The specific objectives of this study are:

1. To identify the demographic profile of the respondents in terms of:

1.1 Age
1.2 Work position
1.3 Degree/s
1.4 Branch District

2. To determine the community pharmacists' awareness towards the implementation of POMs in chain drugstores within Districts 2 and 4 of Quezon City.
3. To determine the community pharmacists' knowledge towards the implementation of POMs in chain drugstores within Districts 2 and 4 of Quezon City.
4. To determine the community pharmacists' attitude towards the implementation of POMs in chain drugstores within Districts 2 and 4 of Quezon City.

Significance of the study

The study will determine and assess the awareness, knowledge, and attitude of community pharmacists within districts 2 and 4 of Quezon City towards the implementation of POMs. It is significant to determine the awareness, knowledge, and attitude of community pharmacists' about the implementation of POMs since they are mostly in charge of dispensing medicines to the public, therefore representing other pharmacists in other fields. Acquiring the said variables will provide an answer if the implementation of POMs in the Philippines will have an impact on the health-care delivery in the country. Furthermore, the study will be beneficial to the following:

Food and Drug administration (FDA)

The study will help with the improvement of RA. No. 10918 in the Philippines promoting the use of POMs as a new classification including the patient counseling practice in community pharmacies for the betterment of health.

Community pharmacists

Since the implementation of R.A. No. 10918 which included the POMs within its scope, community pharmacists within Districts 2 and 4 of Quezon City are therefore required to abide by the said law. The information that will be presented in this study will help community pharmacists to promote and raise awareness regarding the application of POMs. It will also help to extend the roles of community pharmacists not only in Quezon City but in the whole Philippines as well.

Patients

The outcome of the study will help the patients to be cautious, safe from any events involved with inappropriate use of drugs, and be aware of their rights to know more about the medication that they will take. The study will also increase the understanding of the patients and help them to be more aware of taking the medications under POMs. The patients will develop more trust in healthcare professionals and will further strengthen their relationship.

Future researchers

The objectives and data gathered in this study could be usedas a reference for conducting new researches related to POMs. The accumulated responses of community pharmacists within Districts 2 and 4 Quezon City and researchers of this study will impart knowledge and empower future researchers which will help produce an efficient research output.

Scope and Delimitation

Scope

The study will solely be focusing on the awareness, knowledge, and attitude of community pharmacists in Quezon City. The respondents of the study will be community pharmacists working in chain drugstores. The researchers will get the respondents within districts 2 and 4 of Quezon City. Lastly, the study would only focuson POMs.

Delimitation

The study will not cover the opinions of community pharmacists in Quezon City on which specific drugs would be appropriate to add to the current list of POMs. It will not include community pharmacists that are not working in a chain drugstore. This research will not cover whether the POM practice is currently being implemented in community drugstores within districts 2 and 4 of Quezon City as there isstill no definite guideline regarding its implementation. The researchers will not get the respondents on the entirety of Quezon City as it will only be conducted within districts 2 and 4 and not the totality of it as it has a total of 6 districts. Lastly, the study will notcover other remaining classifications of drugs in the Philippines.

Definition of terms

Abused: Excessive dose of the drugs taken.

Acute exacerbation of asthma: Episodes of deteriorating signs of asthma and lung function; used in the study as a literature review.

Adverse drug reaction (ADR): the undesirable effects or reaction that is due to drug intervention therapy; used in the study as a literature review.

Anaphylaxis: It is a severe and life-threatening allergic

reaction; used in the study as aliterature review.

Anti-anxiety: It has physical effects on the brain and body which can help alleviate symptoms of anxiety, such as anxiety, fear, and panic attacks; used in the study as a literature review.

Anxiety: A feeling of unease that can be mild or serious, such as concern or fear; used in the study as a literature review.

Counseling: The term used by pharmacists when guiding and assisting patients or customers in taking their medicines.

Community pharmacist: A common type of pharmacist that focuses on the public setting. Dextromethorphan (DXM). It is a cough-suppressant ingredient used in a number of over-the-counter cold and cough medicines, typically marketed in the form of powder, tablets, or gel caps; used in the study as a literature review.

Diazepam (Valium): It is used to treat anxiety, alcohol withdrawal, and seizures. It is also used to alleviate muscle spasms and to provide sedation prior to medical procedures; usedin the study as a literature review.

Euphoria: A state of deep happiness and trust in oneself; used in the study as a literature review.

Gastrointestinal ulcers: A sore on the lining of your stomach; used in the study as aliterature review.

Hallucination: A perception with characteristics of actual perception in the absence of external stimuli; used in the study as a literature review.

Hepatic toxicity: Implies chemical-driven liver damage; used in the study as a literaturereview.

Ibuprofen: A synthetic compound used widely as an analgesic and anti-inflammatory drug; used in the study as a literature review.

Implementation: The application of FDA's new classification of drugs.

Insomnia: A common sleep disorder that can make it difficult for you to fall asleep, difficult for you to stay asleep, or cause you to wake up too early and not be able to sleep again; used in the study as a literature review.

Knowledgeable: The extent of understanding of community pharmacists in theimplementation of POMs.

New roles: A new and wider range of opportunities given to pharmacists.

Non-steroidal anti-inflammatory drugs (NSAIDs): A type of drug that relieves pain andreduces inflammation; used in the study as a literature review.

Methylphenidate: A synthetic medication that activates the sympathetic and central nervous systems is mainly used in attention deficit disorder to enhance mental function; used in the study as a literature review.

Misused: Using inappropriate medicines in an appropriate way, route, and purpose. Mood swings. A sudden change in mood, and seemingly unaccountable; used in the studyas a literature review.

Opioids: A drug that is used for mild to extreme pain relief; used in the study as aliterature review.

Over-the-counter Medicine. A type of drug class that does not need a legal prescription to be bought at the local community pharmacy.

Oxycontin: A type of drug that is used to help alleviate serious ongoing pain; used in the study as a literature review.

Patient. The one who bought and uses the medication.

Patient counseling: It is an action made by the pharmacist to tell the patient or customer about the indications and storage conditions of the dispensed medicine.

Pharmacist-Only OTC medicine: An OTC drug that should only be dispensed by a licensed pharmacist. This is considered to be another class of drugs in the market.

Pharmacovigilance: A collection, detection, and prevention of adverse drug effects and any drug-drug related issues.

Potent: It is a drug activity measure expressed in terms of the quantity needed to generate an effect of the intensity given; used in the study as a literature review.

Prescription medicine: A type of drug class that requires a legally signed prescription tobe dispensed by a pharmacist.

Pseudoephedrine: A medication derived (or prepared synthetically) from plants of the genus Ephedra and used as a nasal decongestant; used in the study as a literature review.

Rash: It is a region of skin that is irritated or swollen and is usually itchy and sore; used in the study as a literature review.

Restricted drugs: A type of class that requires a yellow prescription in order to be bought or dispensed by the pharmacist.

Steven johnson syndrome: Is a rare, serious disorder of the skin and mucous membranes; used in the study as a literature review.

Stimulants: A substance that raises levels of physiological or nervous activity in the body; used in the study as a literature review.

Vital role: An essential role played by a pharmacist in the country.

Review of related Literature and Studies

This chapter contains a concise and comprehensive review of related literature and studies that provide a background on the relevance and purpose of the study. It would discuss details that are arranged based on the extent of support for this study. This chapter contains literature ranging from but is limited to journals, articles, and books that are relevant to the study.

1. Traditional classification of drugs

In the Philippines, there are two traditional classifications of drugs, namely prescription medicine, and over-the-counter medicine (OTC) (R.A. No. 5921, 1969). They are monitored and regulated by different procedures and regulations. As for the Federal Drug Administration of the United States, prescription medicine and over-the-counter medicine differ in its standards and regulations being used in creating the medicines, prescription drugs have higher and stricter standards compared to OTC drugs (Chang, Lizer, Patel, Bhatia, Tan, & Balkrishnan, 2016). In addition, it is

classified based on their safety and uses, which leads to the two traditional classifications of drugs.

1.1. Prescription drugs

As stated by Byrne and Pallaria's article in 2018, these drugs are highly regulated and require a visit to a doctor, a diagnosis, and a follow-up by a physician to ensure that the medicine functions properly and that it works safely. Prescription medications are meant to be used by one particular patient to treat a specific illness and each patient is legally entitled to talk to a pharmacist about the medication before beginning the medicine. Prescription drugs need a medical prescription in order to be dispensed by a pharmacist while the next classification of drugs, called the Over-the-counter medicines (OTCs) can be bought without a need for a prescription.

1.2. Over-the-counter drugs

Over-the-counter drugs play an increasingly important role in the health care system and are the most prevalent means of treating the most common health conditions (Caño, Plaza & See, 2015). OTC medications are available for purchase without a prescription and can be obtained in a pharmacy straight off the shelf without a visit to a prescriber or needing a pharmacist consultation. OTCs comprises mostly vitamins, minerals, herbs, supplements, and some drugs that are known to be both safe and effective when taken correctly according to their given directions on the label or as instructed by a health-care professional (El-Khatib, Yafi, N. R., & Yafi, F. A., 2019).

OTC availability has been argued to provide advantages in terms of easy access to and choice of medications, as well as the participation of individuals as active participants in their own wellbeing and the treatment of disease (Cooper, 2011). People's access to medicines in the Philippines was not easy. That led the government to create Republic Act No. 9502, also known as the "Universally Accessible Cheaper and Quality Medicines Act of 2008". The said law was implemented to make drugs more accessible to every Filipinos.

2. Republic Act No. 9502, also known as "Universally Accessible Cheaper and Quality Medicines Act of 2008"

The Philippine government implemented a law that aimed to make drugs more accessible to every Filipinos. This was the Republic Act No. 9502, also known as the "Universally Accessible Cheaper and Quality Medicines Act of 2008". This allowed non-traditional outlets like convenience stores and other retail establishments to sell OTCs. It also states that the policy of the state to protect the public health and public interest or circumstances, yet in case of emergency measures and extremely urgent, it will grant access to cheaper and quality medicines for all. Although the said law brought about many advantagesto Filipinos when it comes to easier access to medicines, it also opened the possibility to amplify the irrational use of drugs by selling it in some retail outlets without the effective advice of a pharmacist. The use of irrational medicine takes place in all nations, all health care environments, and from hospitals to households. These activities have a negative impact on the quality of drug treatment, increase the cost of health care, and may cause adverse reactions or negative psychological effects. It includes cases in which no medicinal product is necessary but prescribed; cases in which incorrect medicinal products, or inappropriate or unsafe medicinal products, are prescribed or dispensed; cases in which effective and available medicinal products are not used; and cases in which patients use medicinal products improperly (Ball, & Salenga, 2017).

Pharmacovigilance of OTC drugs is also an alarming issue. A research was performed by Sujata and Yadneshwar in 2011 on the adverse drug reaction to Ibuprofen, an OTC drug for the treatment of fever, joint pain, headache, migraine, inflammatory conditions. Adverse drug reactions (ADRs) of rash, gastrointestinal ulcers, hepatic toxicity, Steven-Johnson syndrome, respiratory skin rash, acute exacerbation of asthma, and anaphylaxis to non-steroidal anti-inflammatory drugs (NSAIDs) have been recorded. In the Philippines, these circumstances possibly led to the new classification of drugs.

3. New classification of drugs

As of the year 2016, the government added a third class of medicine. Itwas termed as the pharmacist-only OTC medicines, which comprises a limited number of drugs that are available for purchase without needing a prescription considering that a licensed pharmacist would give patient counseling.

3.1. Pharmacist-only OTC medicines (POMs)

As the law stated in R.A. No. 10918, under Chapter 1, Section 5, of Definition of Terms, POMs refer to over-the-counter medicines classified by appropriate government agencies to be obtained only from a licensed pharmacist, with mandatory pharmacist's advice on their selection and proper use. According to the study of New Zealand Pharmacist and Pharmacist-Only Medicines, POMs have been observed by others as a core component of their function and an extension that they have been seeking (Norris, 2004). In addition, these are drugs that cannot be bought firsthand, POMs are usually kept on shelves where only licensed pharmacists have access to it. Counseling about POMs gives the pharmacist to have an opportunity to show their professional skills and knowledge by assessing patients' safety. Furthermore, while counseling, the patients must expect that the community pharmacists will ask several questions before dispensing POMs such as asking for the symptoms and if the patient is currently taking other medicines to prevent further risks.

The Philippines is currently in the phase of implementing POMs. Recently, the Food and Drug

Administration released a list of drugs labeled as POMs (FDA-Circular-No.-2018-014). It includes drugs that are reclassified from OTCs into the said new classification of drugs. In dispensing POMs a pharmacist must provide patient counseling in order for the patient or a consumer to purchasedrugs within its scope.

3.1.1. Dispensing of Pharmacist-only OTC Medicines

According to R.A. No. 10918, Section 30, dispensing prescription and pharmacist-only medicines must always be dispensed by a registered pharmacist. It is stated only traditional stores (pharmacies) are the only outlets that are allowed to sell and dispense prescription medicines and POMs compared to the non-traditional stores that are only allowed to sell OTC medicines, examples such as convenience stores and gasolinestations.

3.1.2. Pharmacist requirement

Under Chapter 1, Section 5, Definition of Terms, of R.A. No. 10918, states that Philippine Practice Standards for Pharmacists refer to the established national framework for quality standards and guidelines of the practice of pharmacy that respond to the needs of the people who require the pharmacists' services to provide optimal, evidence-based care as formulated by the integrated APO and approved by the Professional Regulatory Board of Pharmacy.

3.1.3. Filling and Partial Filling of Prescription and Pharmacist-only OTC Medicines

According to R.A. No. 10918, Chapter 1, Section 33, partial filling and filling of medications must always be filled, compounded, and dispensed by a licensed pharmacist. In line with the practice standard in the country, as well as the dispensing guidelines. Partial filling of prescription and POM must be filled by a licensed pharmacist from the first filling of drugs until the last filling is conducted.

3.1.4. Penal provisions

Following sections 30 and 31 of R.A. No. 10918, which indicates that no pharmaceutical products must be sold, dispensed, and resold by any establishment except by a retail drug outlet that must be licensed by the FDA. Also, the dispensed and sold drug products must be dispensed by a licensed community pharmacist, once disobeyed, the penal provisions may cost the offender a fine of not more than five hundred thousand pesos, imprisonment for 6 years or less, or both.

Aside from the implementation of POMs in the Philippines asstated in the Republic Act No. 10918, the law also intends to promote the vital role of pharmacists in the country.

4. Role of pharmacists

There are several roles in different pharmacists' health care services, from the counseling of patients to dispensing of prescribed drugs, providing informative advice on the drug and its usage, compatibility, ADR, and side effects (Sujata & Yadneshwar, 2011). Health care professionals accept pharmacists as a supplier and distributor of medicines traditionally, but numerous medication therapy management does not agree with their clinical roles. Under the patient-oriented roles of pharmacists, the opportunity to acquire new knowledge and skills needs to be given to fully implement pharmaceutical care. There are different fields in pharmacy practice that have different job roles but community pharmacists that dispense and counsel patients to properly use the drug given.

5. Community pharmacists in quezon city

Quezon City is classified as the most populous and largest city in the Philippines. Based on the 2010 Census of Population and Housing (CPH), Quezon City, a highly urbanized city in the National Capital Region, posted atotal population of 2,761,720 persons as of May 1, 2010. This is larger by 587,889persons compared to its total population of 2,173,831 persons counted in the 2000 CPH (Philippine Statistics Authority, 2013). Considering that it is the most populous city in the metro and wellness capital of the country, many people have access to medicines and this will enhance the role of community pharmacists in terms of providing patient counseling, compounding, and dispensing safe and effective medicines in Quezon City. This will serve as a great factor why the researchers will conduct the study in the said city.

6. Awareness, knowledge, and attitude of community pharmacists towards the implementation of pharmacist-only otc medicines in chain drugstores within districts 2 and 4 of quezon city

According to the study that was entitled "Community Pharmacists' Attitudes Toward An Expanded Class Of Nonprescription Drugs", by the year 2013, Shah intends to make important recommendations assessing pharmacists' attitudes toward an enlarged nonprescription drug class in the country of United States. One of her recommendations includes future researchers to identify whether community pharmacists are able to see the importance of POMs and if they are willing to adopt the said practice in their drugstore if it will be implemented. Another is to measure the possible predictors for community pharmacists' attitudes towards POMs as it could give an insight as to how community pharmacists view POMs and may help the FDA to determine specific drugstores that can readily adopt POMs upon its implementation. Thus, the study would like to determine the awareness, knowledge, and attitude of community pharmacists regarding the implementation of POMs in the Philippine setting. The researchers would be gauging the knowledge of community pharmacists towards the existing POMs. It will also determine whether their age, work position, and degree/s are correlated with their knowledge about POMs. Community pharmacists have firsthand experiences

regarding the dispensing and counseling of patients which plays as the core of the implementation of POMs. With that, it is important to get the awareness, knowledge, and attitude of Community Pharmacists regarding the implementation of POMs due to the reason that community pharmacists in Quezon City will mostly be representing other pharmacists in other fields.

METHODS AND PROCEDURE

This chapter emphasized the outline of the research methods that were used throughout the study. It also presented the research instruments and procedures for data collection. The study determined the awareness, knowledge, and attitude of community pharmacists within districts 2 and 4 of Quezon City. It was conducted through a simple non-experimental descriptive design. The respondents were chosen through the probability stratified random sampling method in order to properly represent the total population inside Quezon City. Self-administered web-based survey questionnaires were utilized in order to gather the data essential for this study. The statistical treatments that were used in this paper were also presented here. Additionally, this chapter discussed the ethical considerations that were deemed to be necessary by the researchers.

Methodology

Study design

The research followed both qualitative and quantitative non-experimental descriptive design. The qualitative descriptive approach was employed to determine the community pharmacists' attitude towards the implementation of POMs in Quezon City. Furthermore, a quantitative descriptive approach was applied to identify the awareness and knowledge of community pharmacists towards the implementation of POMs within districts 2 and 4 of Quezon City. The study also determined if there is a relationship between the community pharmacists' age, work position, and degree/s to their knowledge about POMs. Lastly, the data collection was conducted by means of self-administered web-based survey and interview questionnaires which were distributed to the appropriate sample size of community pharmacists working in chain drugstores within the said districts of Quezon City. The said method applied both qualitative and quantitative approaches.

Setting of the study

The study took place within districts 2 and 4 of Quezon City, Metro Manila, Philippines. Quezon City is one of the cities under Metro Manila, which is made out of a large landmass with a land area of 161.126 sq. km. or 16,112.8 hectares that is estimated to be 4 times larger than Manila. Thus, Quezon City is the largest city in Metro Manila. It encompasses 6 districts. District 1 is composed of areas 1 to 6, District 2 has area 7, District 3 with areas 13 to 15, District 4 with areas 16 to 24, District 5 with areas 8 to 10, and lastly, District 6 with the areas 10 to 12.

Figure 3.1.

Vicinity map of quezon city, metro manila

The researchers decided to conduct the research in Quezon City because it is considered the most populated city in the metro (Recio, 2019). In addition, it is also known as the wellness capital of the country which serves as a great factor why the researchers will conduct the study in the said city (QC Gov, 2013). Out of 6 districts, the researchers only chose chain drugstores located within districts 2 and 4 as respondents because based on the list of chain drugstores given by the Food and Drug Administration (FDA) located at Quezon City, it was tallied that district 2 has the highest number of chain drug stores followed by district 4. Due to time constraints, the researchers have decided to limit the locale into 2 districts instead of conducting the study within all the 6 districts of Quezon City.

Subject/Respondents of the study

The study focused on the awareness, knowledge, and attitude of Community Pharmacists, particularly in districts 2 and 4 of Quezon City. As pharmacy students, the researchers looked forward to providing an essential topic that would be beneficial and will involve the profession of pharmacy. Therefore, community pharmacists, being the ones responsible for counseling and dispensing for both prescription and OTC medicines to the public, served as a significant respondent in determining the awareness, knowledge, and attitude upon the implementation of POMs. The researchers determined the respondents using the list of chain community drugstores within Quezon City which were provided by the FDA. The researchers contacted the said drugstores and asked how many community pharmacists are currently working in the said branch. Consequently, the researchers asked for the contact information of the community pharmacists present in the community drugstore.

To ascertain that there would be no respondent bias throughout the data collection, the researchers applied techniques that may address the said concern. First, the researchers placed a statement on the survey questionnaire that encouraged the respondents to answer the questions truthfully and with full honesty. The second was to carefully design the survey questionnaire. The researchers made the survey questions as concise and clear as much as possible which allowed the respondents to understand the given queries with ease. The use of leading questions were also avoided. The researchers also arranged the structure of the survey appropriately with the questions about awareness as first, second is knowledge, followed by attitudes, and lastly, an interview question.

The researchers also considered having both inclusion and exclusion criteria for the respondents. The respondents were included as participants in the study if they were a (1) Licensed Pharmacist, (2) Community Pharmacist, (3) Community pharmacist working in a chain drugstore, and (4) Community pharmacist working in districts 2 and 4 of Quezon City. Consequently, the respondents was not included as participants in the study if they were (1) Not a licensed pharmacist, (2) Pharmacist working in other fields (3) Community pharmacist working non-chain drug stores (4) Community pharmacist not working within districts 2 and 4 of Quezon City, (5) unable to be contacted, (6) unable to completely answer the questionnaire, and (7) refusing to participate.

Sampling technique

The researchers used Stratified Random Sampling that is under the Probability Sampling method which involved the random selection of respondents. Stratified Random Sampling means that the population is divided into subpopulations that may vary significantly. Quezon City, being the setting of the study, were divided into 6 districts. In relation, the researchers randomly selected within districts 2 and 4 of Quezon City with a total population of 180 community pharmacists. The computation that was applied in order to get thetotal number of participants for community pharmacists within Quezon City was calculated using the Sample Size formula (See the formula in Appendix 6). The computed number of participants using the sample size formula is 123.

Research instrument

To gather the appropriate data that is needed for the study, the researchers utilized both quantitative and qualitative research methodology. For the questionnaire, see Appendix 4. The researchers provided a self-administered web-based survey questionnaire which was classified under a quantitative method and some interview essay-type questions under a qualitative method via Google Forms. The first part consists of the items which indicated the respondent's profile such as their name (optional), age, work position, degree/s, and the district of the community pharmacist in Quezon City. The second consists of a set of questions that the researchers provided to assess the respondent's awareness, knowledge, and attitude.

There were 15 questions for a quantitative survey questionnaire that were divided into 3 sets. The first set was answerable by yes or no to assess the community pharmacists' awareness, the second was answerable by a 4 pointLikert scale to assess their attitudes, and the third was a quiz type of questions that assessed their knowledge about POMs. Whereas, for the qualitative question, the researchers provided 1 interview question to assess the respondent's attitudes as well. The total number of questions were 16 which required an average of at least 15 to 30 minutes relative to its completion.

Research procedure

Data collection

The researchers have proceeded to the testing of procedures upon the completion of the questionnaire. The survey was used to gather information from community pharmacists within Quezon City and the data concentrated primarily on their awareness, knowledge, and attitude towards the implementation of POMs.

The whole population of Quezon City was divided into 6 districts according to the respondent's designated area of work. The researchers used stratified random sampling which involved the division of the population into subpopulations. After the researchers got the total population of community pharmacists within districts 2 and 4 of Quezon City, the researchers computed the sample size and gave the required total number of respondents for each district. This helped the study to draw more accurate conclusions by ensuring that each subgroup is correctly represented in the sample.

The provided questionnaire was converted into Google

forms as a tool for online surveys. The set of questions made by researchers were disseminated to the community pharmacist via an online survey questionnaire sent through their respective email addresses.

Data analysis

The statistical analysis method that was used to obtain the results was descriptive statistics. In conducting descriptive statistics, it exemplified the demographic and other basic characteristics of the respondents/participants in which the mean and frequency are used. The distribution of frequencies displayed either the real number of observations that fell in each range or the percentage of observations. The mean described the measures of central tendency providing the average number that represented the entire set of scores (See the formula in Appendix 6). The knowledge level scoring system of Marzan et al. (2021) was used for the quantitative analysis of data gathered for knowledge. It stated that "an obtained score higher than 80% was considered acceptable, between 60% and 80% was considered moderate, and less than 60% was considered low".

Ethical consideration

This study's protocols were submitted to the Centro Escolar University Research and Evaluation Office for review by the Institutional Ethics Review Committee (IERC).

Presentation, Analysis, Interpretation of data

The study was conducted through a simple non-experimental descriptive design. The respondents were chosen through a probability stratified random sampling method inorder to properly represent the total population of community pharmacists working in the selected chain drugstores. The research instrument of the study was a self-administered web-based survey and interview questionnaires which were then used as the primary tool for data collection. This chapter contains the results from the data collection procedure which was further interpreted in a concise and comprehensive manner that highlights the efforts given throughout the study.

1. Demographic profile

1.1. Age

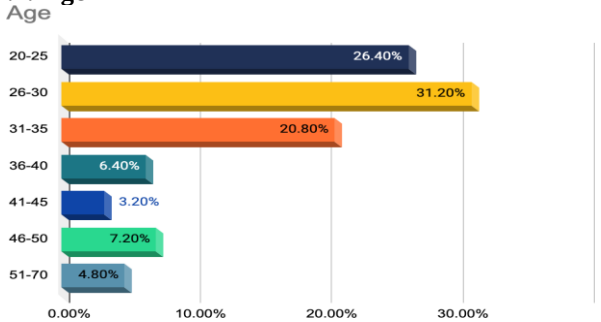

Figure 1.1: Percentage graph of the community pharmacists' age.

Figure 1.1 shows that the majority of the respondents are community pharmacists with experience as they are within the age brackets of 26-30 and 31-35 having 31.2% and20.8% respectively. of the total population. It is then followed by fresh graduates as they are within the age bracket of 20-25 years old with 26.4%. The age brackets 36-40 and 41-45 years old are senior pharmacists with 6.4% and 3.2% respectively. Lastly, 46-50 and 51-70 are veteran pharmacists with 7.2% and 4.8% respectively.

1.2. Work position

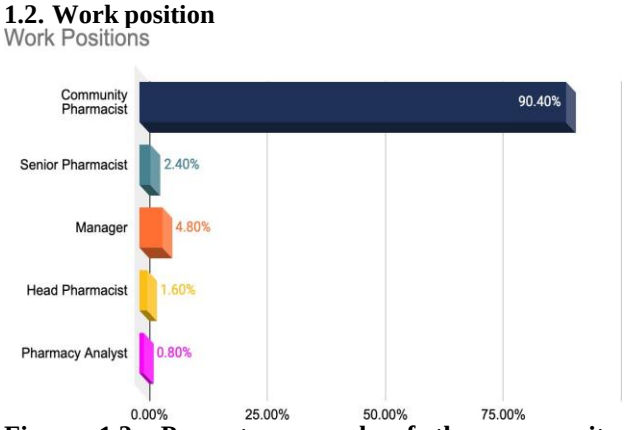

Figure 1.2: Percentage graph of the community pharmacists' work position

Figure 1.2: Shows that the majority of the respondents with 90.4% equivalent to 113 respondents answered Community Pharmacist, which suggests that community pharmacists have more time and are approachable than other positions like the (1) Manager with 4.8% equivalent to 6 respondents, (2) Senior Pharmacist with 2.4% equivalent to 3 respondents, (3) Head Pharmacist with 1.6% and (4) Pharmacy Analyst with 0.8% equivalent to 1 respondent.

1.3. Degree/s

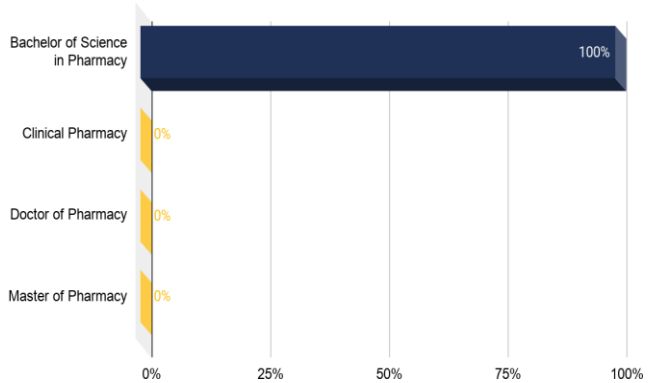

Figure 1.3: Percentage graph of the community pharmacists' degree/s.

Figure 1.3 shows that all of the respondents are Bachelor of Science in Pharmacy graduates and did further pursue a higher degree of education.

1.4. Districts

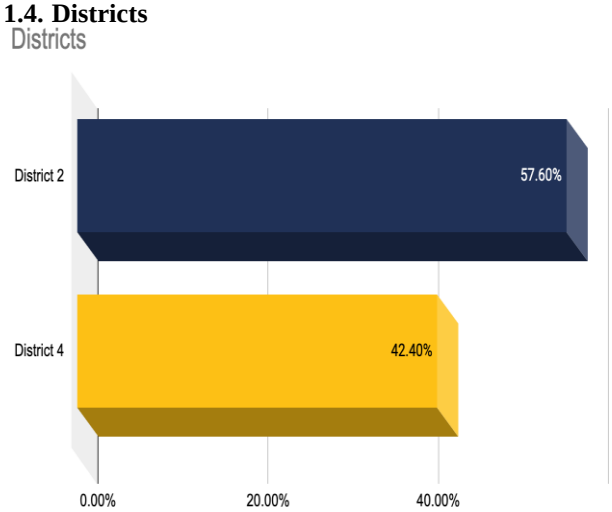

Figure 1.4: Percentage graph of the community pharmacists' districts.

Figure 1.4 shows that the majority of the respondents with 57.6% equivalent of 72 respondents are from District 2. This signifies that there are more community chain drug store branches within District 2 than District 4 of Quezon City. Consequently, 42.4% equivalent of 53 respondents are from District 4.

2. Community Pharmacists' Awareness on the Implementation of POMs

2.1. Are you aware of the Republic Act No. 10918?

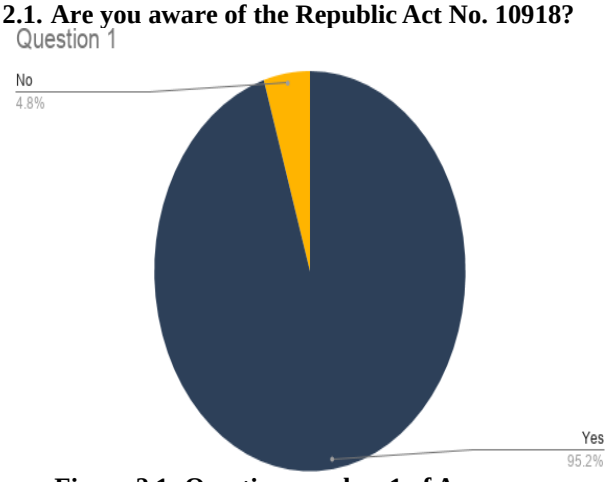

Figure 2.1: Question number 1 of Awareness.

Figure 2.1 shows that the majority of respondents answered yes with 95.2% as its representative value. This means that they are aware and/or updated of the Republic Act. No. 10918. Consequently, the remaining 4.8% of respondents answered no which signifies that they are not aware and/or not updated of the said Republic Act.

2.2. Do you know the purpose of the Republic Act No. 10918?

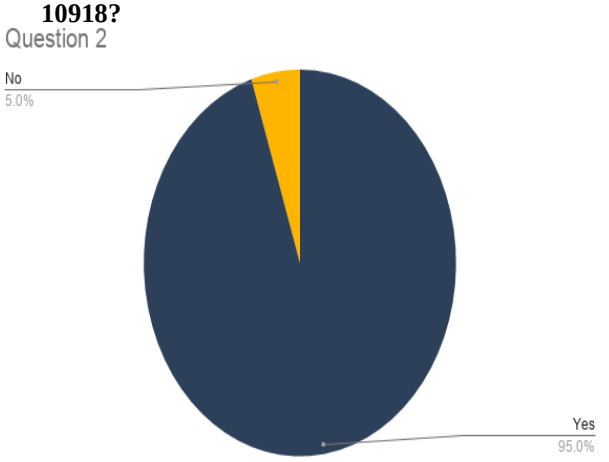

Figure 2.2 Question number 2 of Awareness.

Figure 2.2 shows that the majority of respondents answered yes with 95.0% as its representative value. This means that they are aware and updated on the purpose of the Republic Act. No. 10918. Consequently, the remaining 5% of respondents answered no which signifies that they are not aware and updated of the purpose of the said Republic Act.

2.3. Are you aware that there are other classifications of drugs other than the traditional prescription and Over-the-counter drugs in the Philippines?

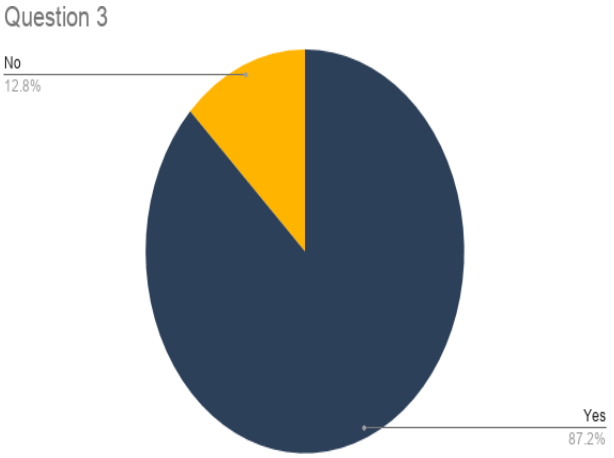

Figure 2.3: Question number 3 of Awareness.

Figure 2.3 shows that the majority of respondents answered yes with 87.2% as its representative value. This means that they are aware and/or updated that there are other classifications of drugs other than the traditional prescription and Over-the-counter drugs in the Philippines. Consequently, the remaining 12.8% of respondents answered no which signifies that they are not aware and/or updated that there are other classifications of drugs other than the traditional prescription and Over-the-counter drugs.

2.4. Do you know what Pharmacist-only Over-the-counter Medicines(POMs) are?

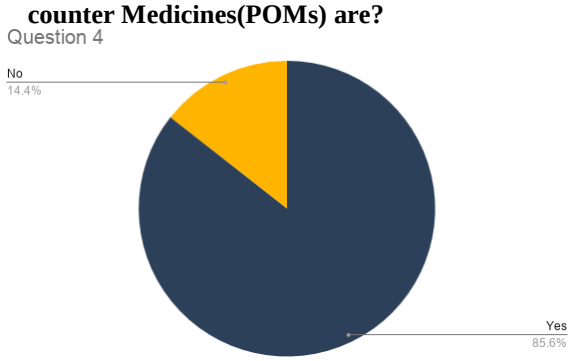

Figure 2.4: Question number 4 of Awareness.

Figure 2.4 shows that the majority of respondents answered yes with 85.6% as its representative value. This means that they are aware and/or updated on what Pharmacist-only Over-the-counter Medicines (POMs) are. Consequently, the remaining 14.4% of respondents answered no which signifies that they are not aware and/or updated on what Pharmacist-only Over-the-counter Medicines (POMs) are.

2.5. Are you aware of the Republic Act No. 10918 also known as "The Philippine Pharmacy Act" and its implementation here in the Philippines?

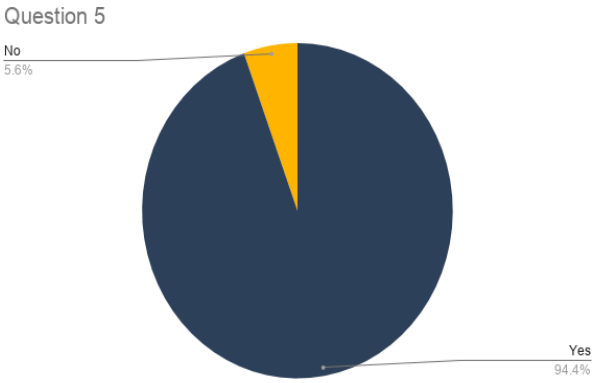

Figure 2.5: Question number 5 of Awareness.

Figure 2.5 shows that the majority of respondents answered yes with 94.4% as its representative value. This means that they are aware and/or updated of the Republic Act No. 10918 also known as "The Philippine Pharmacy Act" and its implementation here in the Philippines. Consequently, the remaining 5.6% of respondents answered no which signifies that they are not aware and/or not updated of the said Republic Act and its implementation here in the Philippines.

3. Community Pharmacists' Knowledge on the Drugs Classified Under POMs

3.1. Knowledge of the Respondents on Drugs Classified Under POMs

Table 1: Knowledge of the Respondents on POMs.

Pharmacist-only OTC Medicine	Percentage of the Respondent'sKnowledge
Ibuprofen (Oral)	82.4%
Loperamide (Oral)	65.6%
Cetirizine (Oral)	57.6%
Guaifenesin (Oral)	62.4%
Paracetamol (Oral)	65.6%
Aspirin (Oral)	56.8%
Bisacodyl (Oral)	72.8%
Guaifenesin + Sodium Citrate (Oral)	57.6%
Aluminum Hydroxide + MagnesiumHydroxide (Oral)	58.4%
Loperamide (Oral)	72.8%
MEAN TOTAL	65.2%

Table 1 shows the knowledge of community pharmacists about drugs under the POM classification. The result showed that 65.2% of the respondents have a moderate knowledge level about the drugs classified under Pharmacists-only OTC Medicines.

3.2. Knowledge of the respondents on drugs classified under non-POMs

Table 2: Knowledge of the respondents on non - poms medicine.

Non - OTC Medicine	Percentage of the Respondent'sKnowledge
Polyethylene Glycol (Oral)	68%
Iron and its derivatives and/or salt/s (Oral)	49.6%
Sodium bicarbonate (Oral)	50.4%
Hexetidine (Oral)	56%
Alendronic Acid (Oral)	76%
Folic Acid (Oral)	54.4%
Diclofenac Sodium (Oral)	40.8%
Levocetirizine Dihydrochloride (Oral)	40.8%
Anastrozole (Oral)	45.6%
Phenylephrine HCl + Chlorophenamine Maleate + Paracetamol (Oral)	54.4%
MEAN TOTAL	**53.60%**

Table 2 shows the knowledge of community pharmacists about the drugs that do not belong to the POM classification. The result showed that 53.6% of the respondents have a poor knowledge level about the drugs not classified under POMs.

3.3. Knowledge of the respondents on the drugs classified under Pomsand Non-POMs

The combined results for the respondent's knowledge on POMs and non-POMs is 59.4%**.** This signifies that the community pharmacists from chain drug stores located in districts 2 and 4 of Quezon City have a poor knowledge about drugs classifiedunder POMs.

4. Factors Affecting the Attitude of the Community Pharmacists towardsPOMs

Table 3: Factors Affecting the Attitude of the Community Pharmacists towards POMs The Mean Distribution for factors affecting the community pharmacists' attitude towards POMs are shown above and were computed to interpret the totality of answersby the respondents. The respondents strongly agree to all of the statements shown on the table above, which indicates that they are definitely performing the practice/s mentioned in it.

	Weighted mean	Description
I allot time to assist patientsin selecting appropriate medications.	3.44	Strongly Agree
I am able to give professional advice and factsthat are essential when it comes to the Pharmacist-only OTCMedicines.	3.416	Strongly Agree
I am able to offer professional advice before acustomer purchases Pharmacist-only OTC Medicines.	3.464	Strongly Agree
I am able to personally dispense Pharmacist-onlyOTC Medicines.	3.352	Strongly Agree
I allot a special shelf forPharmacist-only OTC Medicines.	3.288	Strongly Agree

4.1. Community pharmacists' responses on the interview Question.

Table 4 Qualitative Interpretation on the Responses from the Interview Question According to the interview that was conducted, most of the communitypharmacists agreed that the implementation of Pharmacist-only Over-the-counterMedicines can improve the patient's safety.

Response	Verbatim Concept	Theme
It's better to talk to your doctor first, just to be sure for your treatment, and also to avoid mistreatment So that the pharmacists will beable to educate patients/ customers We can inform them on how totake properly So that the Pharmacist can counsel The patient upon taking the medication. It will open the minds of every patient because they will now know how to take it without being harmed. Lagi namin nireremind lalo na sa antibiotics. Its better to go to the doctor first. The pharmacist is giving the right advice, the patient will be safe provided that he/she will comply. So they can have a background knowledge before taking the OTC drugs. It promotes the rational use of medications. Not only can it make make patients more knowledgeableabout drugs. For we can give simple advises to patients in the otc medicines they will intake By counseling the px about its doseand when to take the drug will improve px's safety Lessen Medication error, self medication always consult licensed prescriber. As long as we never forget to counsel the patients	Doctors advise To educate To Inform Counsel To know Reminder Advice Rational use Compliance Assessment	Proper Consultation/ advise/ patient counseling
To assess patient needs, dispense right medication and remind its dosage and safe effects. We can easily explain to the customer how to use, when to use, where to use, & even the efficacy &effects of the drugs. We can only assure patient's safety when they are religiously doing a follow up check ups. Yes, for a good consultation and for knowledge about the drugs Some patients can't go to hospitals to consult doctors, There's pharmacists who can give a patient professional advice and dispense OTC medicine. Because pharmacist can give counseling with patients that arehesitant about their drugs To give professional advice and facts for them		
It can really help the patient to be safe and healthy It lessened the drug misuseFor patient's safety Prevent the risk in misusage and overuse of drugs.	Help Lessened Drug misuseSafety OverdosingToxicity	Prevention/ Cure

Because unprescribed medicine or Rx medicine can be dangerous for the health of patients. Because it helps the patients to make safe and informed decisions when it comes to their health and the proper use of certain medicines. Para makaiwas sa maling pag-inom ng gamot. Minimizes errors in the field Pharmacist would be a great help in the medication safety of patients if and when he/she is willing to understand and advice the patient whether be if regarding OTC or prescription drugs. Lessen the stress of patient and it will help improve people's lives. Overdosing a drug will result intoxicity in our body. For safety and well being of every patient/s customer. Results to them being safer from the negative effects of overusing certain drugs. Because it is for the customers sakeand healthy mindset	Right Dose Lower risks of exposure Side effectsOveruse Minimizes errors Improved health outcomes	
For the reason that most of these POMs are more likely to be used inappropriately With the guidance of pharmacists, patients will not abuse the use of otc medicine. For patients to be able to take the meds at the right dose and dosage. Patients will no longer visit hospital for some illness they feel and they'll lower risks of havingexposure to the hospital Improves patient's safety as it helps the patient to understand more about the medicines they are taking Yes, to lessen drug side effects and interactions to patients. Patients should know how to take the drug and how long they can take it and also the adverse effects that comes with taking the drug.		
Being aware of the medication even with OTC drugs is essential Not knowledgeable of what and how to take OTC meds, somedemonstrates self medication. Matutulungan ng mga pharmacists halos lahat ng pasyente para	Awareness of Medication Not Knowledgeable Self medication Eye Opener Information	Information dissemination

mabuksan yung utak nila sa klase ng gamot na kailangan nila inumin Pharmacist can rely more information about the medication they needed For better accuracy of the meds For the patient to understand the meaning of medicine. As long as we inform the customers about the medicines on how to takeit. Yes, because to make the patient aware that this otc drugs can beharmful if they misuse Ang mga patients need lagi iinformkaya yes is my answer To give patients essential information about the medication they are taking The patients will have bettereducation	To inform	
Increase the role of a pharmacist in the community. We are not like doctors that diagnose their illness but we can interview them about the history oftheir illness, what medicine they are taking, allergies of certain meds before giving the exact meds.	Expansion of RolesInterview Roles and ResponsibilityMonitoring	Promotion of profession
Because these particular drugs still need monitoring and adequate patient counseling for they have adverse reactions and side effects if taken for a long period of time. It's their profession/practice. makakatulong to in both sides ofthe patients and pharma ha. Malalaman ng mga tao kung ano ang silbi ng isang pharmacist, at hindi lang taga benta ng gamot		
A lot of people do not have the money to consult for the doctor. OTC medicines can save the time and money of the customers.	Saves time and money	Customer/Patient Convenience

- The respondents said that it will help increase patient safety if they will be able to inform and explain to their customers how to use when to use, where to use, and even the efficacy and effects of the drugs.
- Other respondents stated that some patients cannot afford to go to hospitals for professional consultation, and would mostly go to drugstores in order to buy appropriate medications for their symptoms.
- Some respondents replied that POMs can expand the roles of pharmacists here in the Philippines.
- A small number of respondents answered that the implementation of POMs cannot improve the safety of the patient as it was better to consult a doctor first before taking any medicine for the symptoms that they experience.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter comprises three sections: Summary of findings, conclusions, and the researchers' recommendations to the future researchers. It contains a concise and comprehensive presentation of the study's substantial findings.

Summary of findings

1. The majority of the respondents are in the age group of 26-30 which is 31.2% of the total population, with community pharmacists as the indicated work position in a total of 113 respondents. Furthermore, their highest degree of attainment was being a Bachelor of Science in Pharmacy graduate and are mostly from District 2 of Quezon City, with a total of 72 community pharmacists.
2. Majority of the respondents are aware of the Republic Act No. 10918 together with its purpose and implementation here in the Philippines, with it having been represented by questions 1 (95.2%),2 (95.0%), and 5 (94.4%). Moreover, most of them are also aware of POMs and that there are other classifications of drugs

other than the traditional prescription and OTC medicines represented by questions 3 (87.2) and 4 (85.6%).

3. The combined results for the respondent's knowledge on POMs and non-POMs is59.4%, which signifies that the community pharmacists from chain drug stores located in districts 2 and 4 of Quezon City have a poor knowledge level on drugs classified under POMs.
4. The majority of the respondents' level of agreement for all of the items listed on attitude are strongly agreed. Most of their given statements on the interview question about POMs are also complementary, which expresses their positive attitude towards POMs and its implementation.

CONCLUSION

Community pharmacists in chain drug stores located in districts 2 and 4 of QuezonCity are aware, possess poor levels of knowledge, and have positive attitudes on POMs and its implementation in the Philippines.

Recommendations

The researchers would like to recommend the following:

- The study suggests to enhance the number of respondents and widen the scope or area.
- The study suggests to consider other locations as the setting of the study.
- The researchers would like to significantly recommend getting the community pharmacists' opinions regarding what specific drugs will be a valuable addition to the current list of Pharmacist-only OTC Medicines in the Philippines. Through this, the variety of drugs within POMs can eventually be expanded.

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study.

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