

Assessment of Pharmaceutical Care for Patient in Retail Pharmacy

*A dissertation submitted to the Department of Pharmacy, Faculty of Allied Health
Sciences, Daffodil International University
for the partial fulfillment of the requirements for the degree of Master of pharmacy
(M.Pharm).*



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APPROVAL

This Project, **Assessment of Pharmaceutical Care For Patient in Retail Pharmacy**, submitted to the Department of Pharmacy, Faculty of Allied Health Sciences, Daffodil International University, has been accepted as satisfactory for the partial fulfilment of the requirements for the degree of Master of Pharmacy and approved as to its style and contents.

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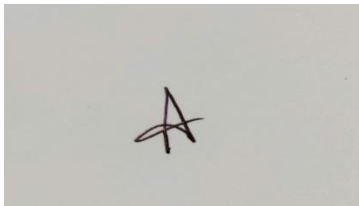
I hereby declare that, this project report is done by me under the supervision of **Md. Anamul Haque**, Assistant Professor, Department of Pharmacy, Faculty of Allied Health Sciences, Daffodil International University, in partial fulfillment of the requirements for the degree of Master of Pharmacy. I am declaring that this Project is my original work. I also declare that neither this project nor any part thereof has been submitted elsewhere for the award of Master or any degree.

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Afsana Akter Akhi
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Dedication

I would like to dedicate my work to my parents.

Md. Ali Hossain

Most. Ferdousi Akter

ABSTRACT

Pharmacists have a special chance to encourage good health by ensuring the effective use of medications. Medication therapy is one of the most crucial instruments for doing this. In order to improve drug adherence and maximize pharmacological therapy, counseling is crucial. The current state of patient counseling services must therefore be evaluated in order to improve the quality of services provided by community pharmacists. There is currently a dearth of information about the caliber of counseling services provided to patients in Saudi Arabian community pharmacy. This study seeks to close this gap by assessing the counseling abilities and content provided by pharmacists in a sample of neighborhood pharmacies. Thirty community pharmacies in Mymensingh and fifty in Dhaka city participated in the study. Considering their willingness to participate, a convenient sample of neighborhood pharmacies was selected. A form was created to collect data based on the core and supplementary drug use indicators developed by the WHO for evaluating drug use in healthcare settings. The study was carried out by watching how the community pharmacists who took part in it provided counseling services. All of the neighborhood pharmacies completed 250 forms in total. Only 25% of the counseling elements were determined to be adequately completed, compared to a total of 55% of the counseling skills.

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Chapter One

Introduction

1.1. Overview of Healthcare system in Bangladesh:

Bangladesh has recently achieved impressive strides in several of its social development indicators, especially in the area of health. Since the Alma Ata Declaration in 1978, this nation has made significant strides in the area of primary healthcare services. The population's health situation has improved, and all health indices show sustained improvement. With a significant rise in life expectancy at birth, the rates of infant, maternal, and under-five mortality have declined during the past several decades. Since 1995, it has established a reliable track record of maintaining 90% or more vaccine coverage during routine EPI and NIDs (National Immunization Days) since 1995. But there are still disparities between various racial and ethnic groups and geographical areas, and some of this improvement is uneven. Reaching the MDGs and other national health goals has been significantly hampered by the shortage of qualified health workers and the uneven distribution of skill sets. To assure patient compliance at the tertiary level, the state organ does not, however, ensure that patients receive proper pharmacy services. Government should implement good pharmacy practice (GPP) so that services like clinical pharmacy, hospital pharmacy, and retail or community pharmacy are available.

1.2. Clinical Pharmacy

The area of pharmacy practiced by pharmacists that promotes health, wellness, and disease prevention through patient care that optimizes the use of medications is known as clinical pharmacy. Although clinical pharmacists provide patient care across the board of healthcare facilities, the clinical pharmacy movement actually had its start in hospitals and clinics. Clinical pharmacists frequently work with doctors and other medical specialists. The biological, pharmacological, socio-behavioral, and clinical sciences are all areas of intense study for clinical pharmacists. The majority of clinical pharmacists hold a Doctor of Pharmacy (Pharm.D.) and the majority have also completed one or more years of post-graduate training, such as a general and/or speciality pharmacy residency. Through the Board of Pharmaceutical Specialities, many clinical pharmacists also decide to pursue certification as a Board Certified Pharmacotherapy Specialist (BCPS), Board Certified Oncology Pharmacist (BCOP), Board Certified Nuclear Pharmacist (BCNP), Board Certified Nutrition Support Pharmacist (BCNSP), or Board Certified Psychiatric Pharmacist (BCPP) (BPS). Cardiology and infectious disease are two subspecialties of the pharmacotherapy specialty. An "Added Qualification" or AQ is used to identify it. A

Board Certified Pharmacotherapy Specialist must first apply for one of these specialties before submitting a portfolio to the Board of Pharmaceutical Specialties for examination and decision on whether to award the additional credentials.

Clinical pharmacists are experts in the therapeutic use of drugs within the healthcare system. They regularly offer assessments of pharmaceutical therapy and recommendations to patients and other medical experts. Clinical pharmacists are a key resource for information and recommendations about the safe, appropriate, and economical use of drugs.

Clinical pharmacy is a section of pharmacy that deals with many aspects of patient care, drug delivery, and counseling patients on the safe and effective use of medications.

1.3. Scope of clinical pharmacy:

Drug Distribution Systems

Drug Information

Drug Evaluation and Selection

Medication Therapy Management

Formal Education and Training Program

Miscellaneous: Application of Electronic Data Processing (EDP).

1.4. Clinical pharmacists:

- Assess the status of the patient's health problems and determine whether the prescribed medications are optimally meeting the patient's needs and goals of care.
- Evaluate the appropriateness and effectiveness of the patient's medications.
- Recognize untreated health problems that could be improved or resolved with appropriate medication therapy.
- Follow the patient's progress to determine the effects of the patient's medications on his or her health.

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- Consult with the patient's physicians and other health care providers in selecting the medication therapy that best meets the patient's needs and contributes effectively to the overall therapy goals.
- Advise the patient on how to best take his or her medications.
- Support the health care team's efforts to educate the patient on other important steps to improve or maintain health, such as exercise, diet, and preventive steps like immunization.
- Refer the patient to his or her physician or other health professionals to address specific health, wellness, or social services concerns as they arise.

Clinical pharmacists participate in direct patient care in hospitals and other healthcare facilities, while hospital pharmacists focus on preparing prescriptions for patients.

1.5. Hospital Pharmacy:

Hospital pharmacy are drug stores that are typically located on a hospital's grounds. Compared to what is practical in the community context, hospital pharmacies typically carry a wider variety of medications, including more specialized and exploratory medications (drugs that are being researched but have not yet received approval). Since hospital pharmacies are not retail businesses and solely serve hospitalized patients, they normally do not fill prescriptions for members of the general public. Although some hospitals house retail pharmacies that sell both over-the-counter and prescription pharmaceuticals to the general public (see example), these are not the hospital's official pharmacy.

1.6. The role of a hospital pharmacist

- A hospital pharmacist is required to be a great source of advice for patients and work closely with medical and nursing staff on wards to ensure that the most appropriate treatment is being delivered.

- They can inform patients on all aspects of their medicines, including recommending types, as well as administration routes and dosages, which are all very dependent on the individual's needs.
- Hospital pharmacists can suggest whether tablet, injections, ointment or inhaler may be the best form of medication and frequently liaise with medical staff concerning their patients.
- Seen as a great source of advice to other healthcare professionals, they are often called upon to recommend safe combinations of medicines or solutions to specific patient problems.
- Hospital pharmacists can offer information on potential side effects and check that medicines are compatible with existing medication. They will often also monitor the effects of treatments to ensure that they are proving effective, safe and appropriate to the user.
- In a hospital setting, whether that is in the NHS or in a private setting, pharmacists may take on other roles which they may not have elsewhere.
- The hospital pharmacists are responsible for monitoring the supply of all medicines used in the hospital and are in charge of purchasing, manufacturing, dispensing and quality testing their medication stock along with help from pharmacy assistants and pharmacy technicians.

1.7. Retail/ Community Pharmacy:

Most pharmacists work in community pharmacies where they can exercise their trade. Community pharmacies typically have a retail space with a dispensary where drugs are kept and given out. The dispensary is governed by pharmaceutical law, which includes regulations for equipment, mandatory texts, and storage conditions. It used to be that pharmacists would stay in the dispensary to combine or dispense medications, but there has been an increasing trend toward using trained pharmacy technicians so that the pharmacist can spend more time interacting with patients. Community pharmacists can be found working in a range of settings, including neighborhood drug stores, clinics, chain pharmacies, and big-box retailers. These pharmacists play a crucial role in ensuring that patients receive the best possible drug therapy because they are typically the initial point of contact in the healthcare system. Every pharmacy that is open

must have a pharmacist on duty at all times. Additionally, the owner of a pharmacy must be a licensed pharmacist in many jurisdictions. This idea, which has been around for a while in wealthy Western nations, is quickly catching on with our nation's healthcare system (i.e. Meena Bazar, Laaz Pharma). A pharmacist becomes a crucial link between the patients and the products, or pharmaceuticals, through the help of community pharmacies. The pharmacist acts as a crucial conduit between patients and other healthcare providers, particularly medical specialists. The community pharmacist plays a crucial role in providing care to the patients. The following actions are taken by community pharmacists to provide patients with better health care services:

Counseling the patient regarding the use of the drug and dosage form according to the prescription.

- Providing up-to-date information drugs and dosage forms to the patients, as well as medical staff.
- Maintaining patient record and history.
- Reviewing and dispensing of prescription.
- Out-patient pharmaceutical care to the patients.
- Monitoring of drug utilization ,
- Extemporaneous preparation.
- Traditional and alternative medicines.
- Responding to symptoms of minor ailments.
- Drug information services to health care professional and the patient.

1.8. Retail Pharmacy in Bangladesh

The 1940 Drug Act, which was enacted during British colonial administration, established the regulation requiring pharmacy licenses. Since that time, no efficient administrative or regulating actions have been made to verify that a pharmacy is directly administered by a person with a pharmacy degree from an accredited university. An application to open a pharmacy must include suitable premises, a trading license from the local municipality, and a pharmacy that is registered with the Pharmacy Council of Bangladesh.

1.9. Role of a Pharmacy:

Dispensing pharmaceuticals has been and will continue to be the pharmacy's primary function. Today's community pharmacists engage in a wide range of occupations that can be categorized as either patient- or product-oriented. Community pharmacists, however, can play a significant role in patients' counseling and should be able to provide basic drug information, such as the proper way to use, administer, and dose of medications, as well as any adverse effects, storage needs, and drug-drug and drug-food interactions.

The pharmacist interacted with the patient directly as a result of his position. Both patients and pharmacists have opinions and perspectives based on this experience. The evaluation of the demand for additional services, the improvement of communication and the alignment of expectations between the two sides all depend on gathering those comments and views of performance.

Different people and groups have defined satisfaction in different ways. Examining the definitions already in use reveals three key elements and shared criteria: Consumer satisfaction is an emotional or cognitive reaction to a specific focus, such as expectations, a product, or the experience of using it. The reaction also occurs at a specific time, such as after consumption, after making a choice, or based on the experience of using it, among other examples.

1.10. Role of Pharmacist:

The pharmacist's job involves giving complete information and services that help patients get the best outcomes from their prescriptions while reducing the likelihood of any unwanted side effects, to the greatest extent possible. The work of a pharmacist also includes encouraging patient adherence to the prescription, offering advice on dosing schedules, and giving instructions on the typical adverse effects of both prescribed and over-the-counter medications (OTC).

From the perspective of society, it is anticipated that pharmacists would play a clear and active role in ensuring patient satisfaction, including counseling and offering thorough information on

pharmaceutical use. Patient satisfaction is a reliable measure of healthcare quality, which is susceptible to patient influence.

For a number of reasons, patient satisfaction is of utmost significance. High patient satisfaction levels show that community pharmacies are doing their duties effectively, but low patient satisfaction rates could result in a loss of customers since dissatisfied patients may be reluctant to return. On the other side, low levels of satisfaction may serve as a catalyst for pharmacists to enhance several facets of patient care.

The most valuable service offered by community pharmacists is thought to be counseling. According to certain research, patients respond better and are more satisfied when they receive better counseling. Another study found that monitoring and direct counseling had higher satisfaction rates and that counseling frequency was increasing.

A study on Saudi adults underlined the significance of the community pharmacist's role by demonstrating how poly pharmacy the use of more medications than are clinically necessary could be decreased with good pharmacist advice.

Chapter Two

Statement of the purposes of the study

Statement of purposes of the study:

2.1 Community pharmacy practice

During the evaluation of the community pharmacy practice in several private pharmacies, numerous detailed questions were raised. During the evaluation of the Community pharmacy practice, a question was posed to the pharmacists and the patients regarding the practice.

For pharmacy students, community pharmacy practice is a crucial area of study. The project work was done from a pharmaceutical standpoint to first assess the current facilities and then investigate how much the pharmaceutical services can be enhanced in the community pharmacy practice.

2.2. The services are:

1. Selection of Community pharmacy practice mission, vision and goal.
2. Policy and procedure of the Community pharmacy practice.
3. Medicine procurement and availability.
4. Medicine inventory system (manually and computerized system).
5. Emergency purchasing and control.
6. Drug information services as per query made by the doctors and patients.
7. Educational training.
8. Adverse drug reaction report.
9. Patient counseling services.
10. The staff members of the hospital pharmacies and community pharmacies were closely monitored while they provided their services and went about their daily business, and it was attempted to identify any issues and determine potential solutions. The outcome and discussion chapter contains a description of the noticed issues as well as their resolution.

Chapter-3

Materials and Methods

Materials and Methods:

3.1 Materials

The project effort was done to assess the retail pharmacy practice in Bangladeshi community pharmacies.

The following community pharmacies were routinely visited in order to assess the retail pharmacy practice in different types of community pharmacies in Bangladesh.

1. Laaz pharma, kalabagan, Dhanmondi, Dhaka.
2. Lazz pharma, Shyamoli, Dhaka.
3. Biomed pharma, Panthopath, Dhaka.
4. Nilu Pharmacy, 5/A Dhanmondi, Dhaka
5. Anurag Pharma, College gate, Dhaka
6. Japan garden Pharma, Mohammadpur, Dhaka
7. Lazz Pharma, C.K, Ghosh road, Mymensingh
8. Medicine Mart, Durgabari, Mymensingh
9. Shadesh Medicine Corner, Mymensingh
10. Nipon Pharmacy, Charpara, Mymensingh

3.2 Methods

Those in charge of carrying out the retail pharmacy practice in a select group of community pharmacies were physically visited on multiple occasions in order to evaluate the community pharmacy practice.

Direct conversations about the facilities and services provided by the acting staff members who are in charge of running the retail pharmacy practice were had. We gathered all kinds of information on community pharmacy services from the relevant staff. Additionally, a survey was done regarding the difficulties encountered when providing community pharmacy services. All of the aforementioned evaluations are detailed in the chapter on results and discussion in the body of this essay.

3.3 Questions for evaluation of community pharmacy practice in Bangladesh

3.2.1. Questions for Pharmacist:

1. Is there any Pharmacist work in that pharmacy as a community pharmacist?
 Yes
 No

2. If there is any Pharmacist practicing, what is his educational qualification?
a) Grade-A. b) Grade-B

3. Do the Pharmacist practice his work regularly in that pharmacy?
 Yes
 No

4. Do the Pharmacist dispense drug to the patients?
 Yes
 No

5. Do the Pharmacist maintain inventory control?
 Yes
 No

6. Do the Pharmacist follow first in first out system (FIFO)?

- Yes
- No

7. Do the Pharmacist check prescription?

- Yes
- No

8. Do they follow Pharmacy law & ethics?

- Yes
- No

9. Do they maintain log book for temperature & humidity control?

- Yes
- No

10. Do they dispense any antibiotics without any prescription?

- Yes
- No

11. Do they dispense any controlled/narcotic drug without any prescription?

- Yes
- No

12. Do the Pharmacist specially check the dose on prescription in case of children?

- Yes
- No

13. Do they make any ADR report?

- Yes
- No

3.2.2. Questions for Patients:

1. Do the Pharmacist do patient counseling?

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- Yes
- No

2. Do they answer any patient's inquiry?

- Yes
- No

3. Do they keep any patients record?

- Yes
- No

4. Do they advise or instruct about timing of drug administration?

- Yes
- No

5. Dose the Pharmacist enquire about the related health problem & any other medication which used in the past?

- Yes
- No

6. Do they check drug interaction & drug food interaction?

- Yes
- No

7. Do they change brand during delivery to the patients?

- Yes
- No

Chapter – 4 Results and Discussion

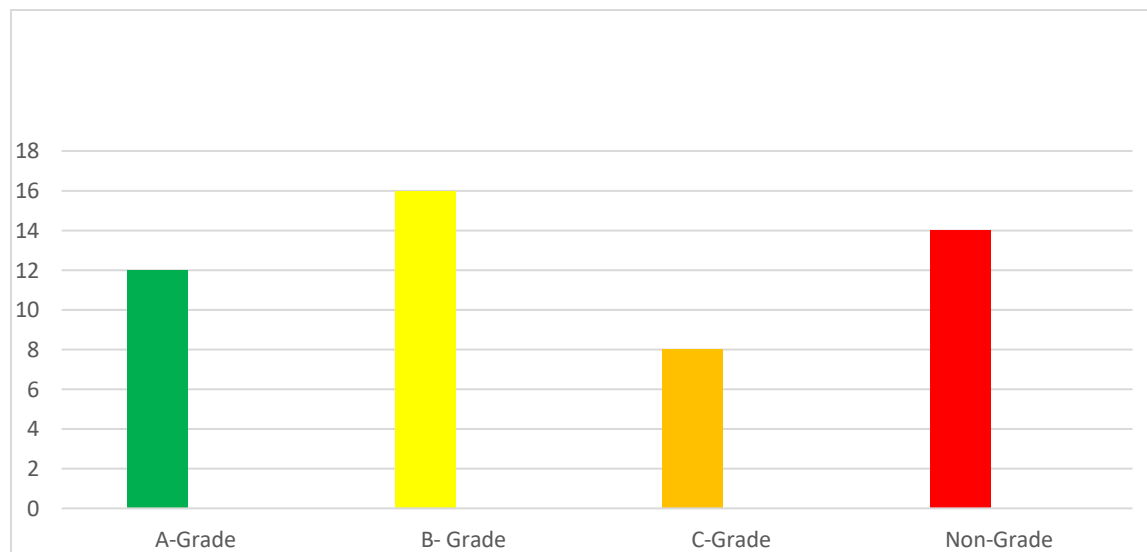
4.1. Observation:

The project effort was done to assess the retail pharmacy practice in several Bangladeshi community pharmacies. During the examination of community pharmacy practice in community pharmacies in Bangladesh, the following observation was made. For each of the community pharmacies, the observed results have been described separately in this article.

4.2. For Dhaka city:

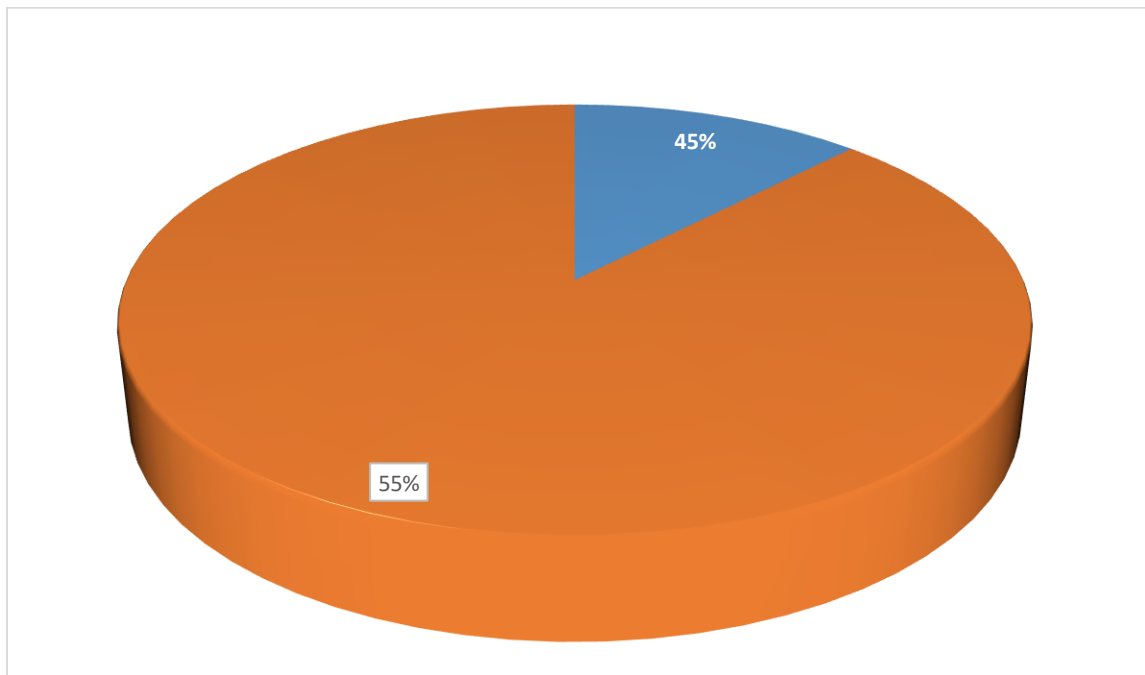
I communicate with about 200 patients throughout my observation, and I also visited 50 retail pharmacies. There are numerous grades among those retail pharmacies, including A, B, and C grades.

4.2.1. Appointment of pharmacist at Retail pharmacy:



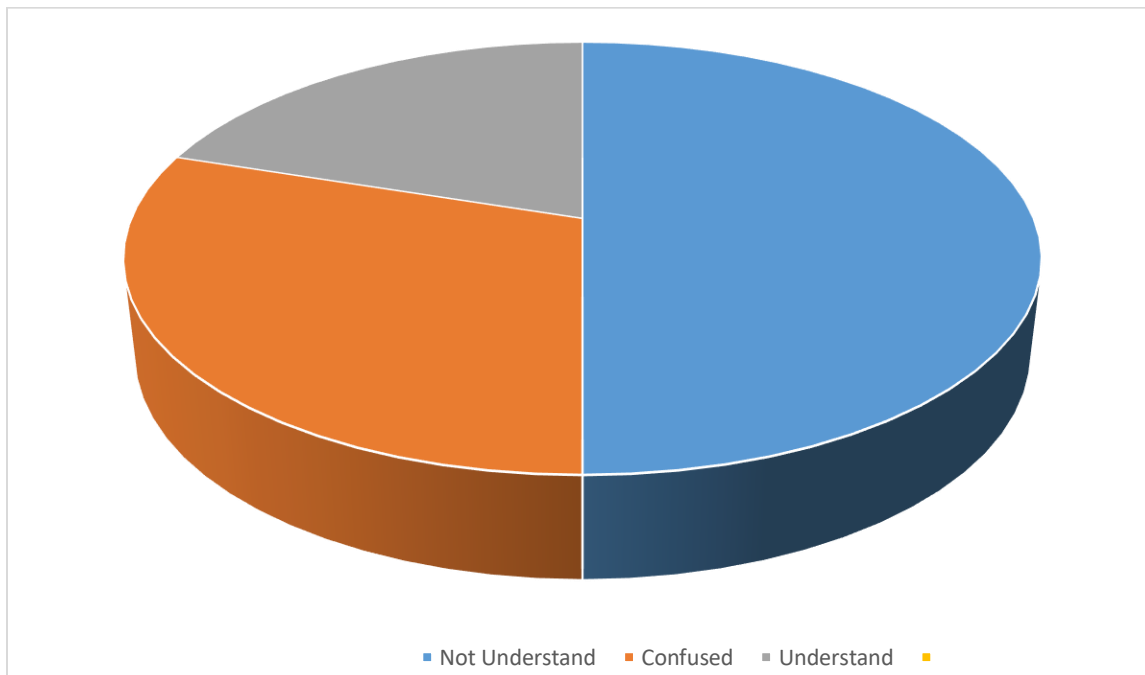
I visited roughly 50 retail pharmacies, of which 12 had pharmacists with an A grade, 16 had pharmacists with a B grade, 8 had pharmacists with a C grade, and 14 had none.

4.2.2 Result for counseling:



- I visited 12 retail pharmacy which have A-Grade pharmacist.
- From patient review, about 45% patient got counseling from the pharmacist and 55% not get any counseling from them.

4.2.3. Percentage for Patient Medication Review:

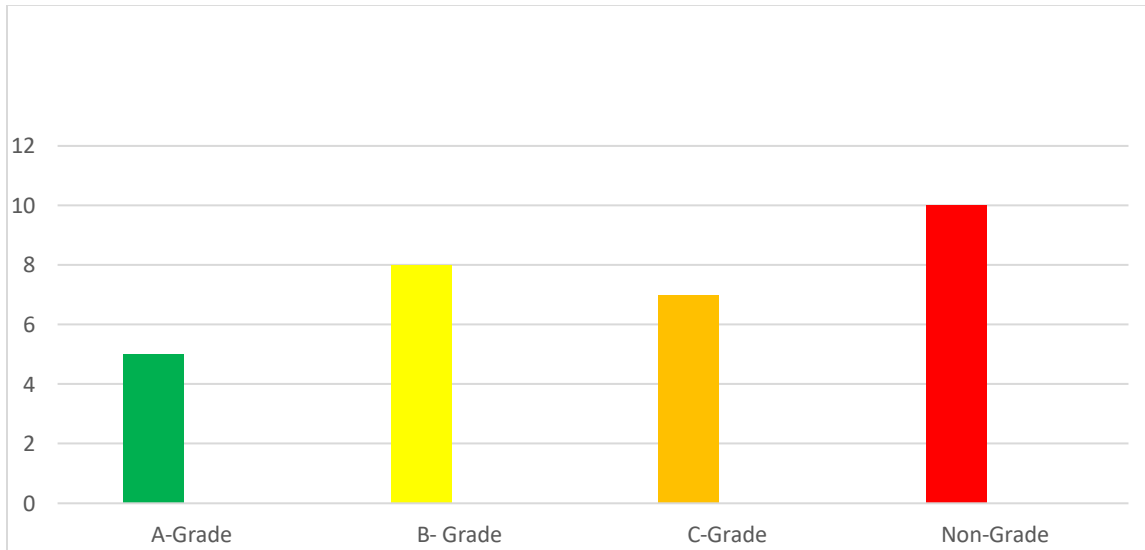


- About 50% patient don't understand the medication process.
- About 30% patient is confused to the medication process.
- Only 20% patient understand the medication system.

4.3. Outside Dhaka city:

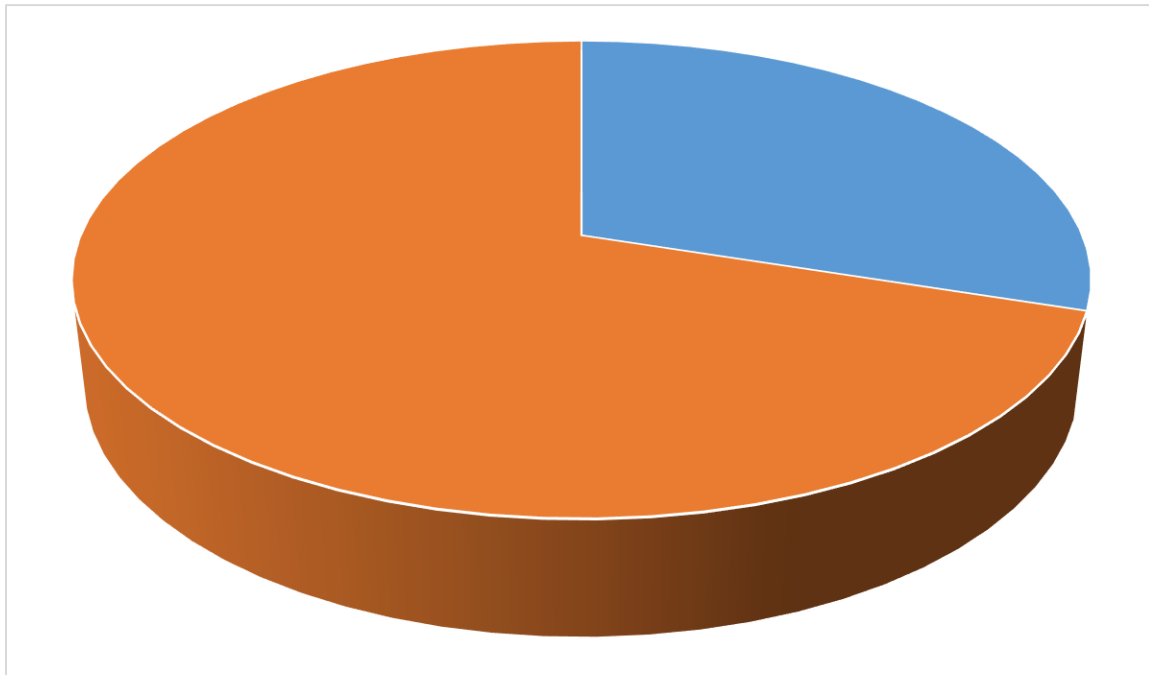
In Mymensingh, I visited a few retail pharmacies. These pharmacies have several grades, including A-Grade, B-Grade, and C-Grade.

4.3.1. Appointment of pharmacist at Retail pharmacy:



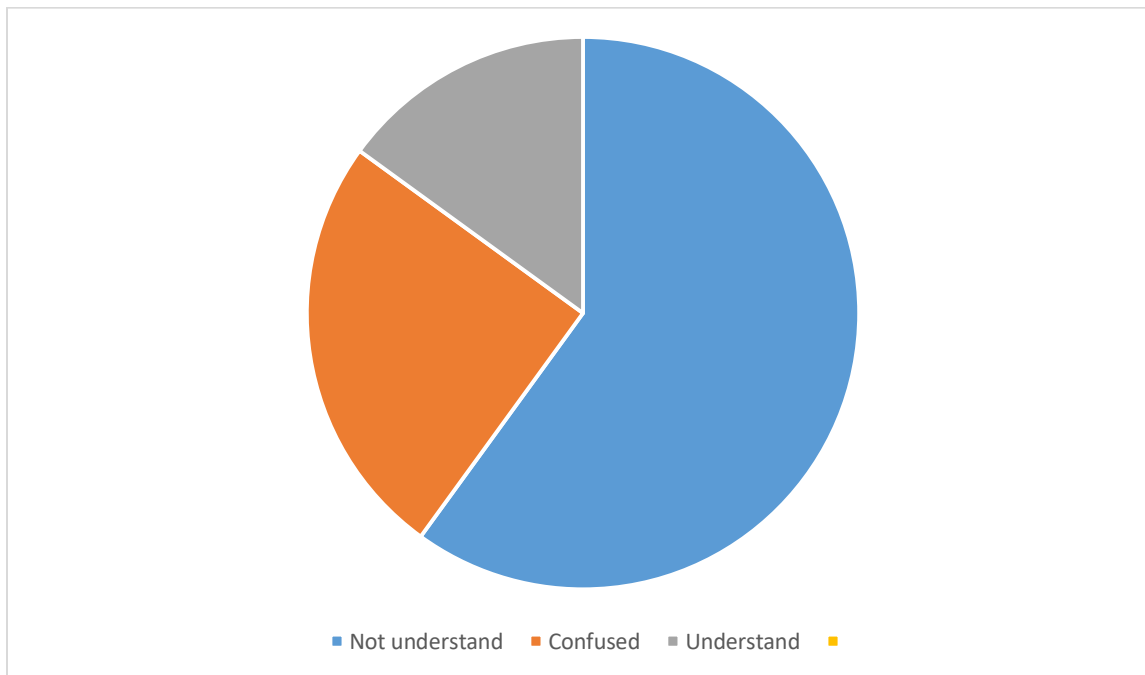
I visited roughly 30 retail pharmacies, of which 5 had pharmacists with an A grade, 8 had pharmacists with a B grade, 7 had pharmacists with a C grade, and 10 had none.

4.3.2. Result for counseling:



- I visited 5 retail pharmacy which have A-Grade pharmacist.
- From patient review, about 30% patient got counseling from the pharmacist and 70% not get any counseling from them.

4.3.3. Percentage for Patient Medication Review:



- About 60% patient don't understand the medication process.
- About 25% patient is confused to the medication process.
- Only 15% patient understand the medication system.

Chapter Five

Conclusion

The survey found that Bangladesh's pharmacy management system is in a terrible state. In the vast majority of instances, pharmacies lacked graduate pharmacists to assure effective patient counseling and pharmacological care. Where there were graduate pharmacists, however, they weren't actually providing patient counseling. The findings of this investigation showed that the general caliber of community services offered to patients to enhance their medicine consumption and, as a result, their wellbeing, was subpar. It was noted that inadequate effort was put into providing thorough patient education and that only basic information on how to administer the drug was given. Notably, the majority of times drug stores lacked even the most basic excellent pharmacy practices.

Recommendation:

From the above discussion of the project work discussion above that the majority of people in our country lack access to effective medical care. In conclusion, it may be suggested that proper pharmacy services be implemented as quickly as possible and that drug stores immediately hire graduate pharmacists.

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