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**Research Article****Counseling Practices on Anti –TB drugs among Community Pharmacies in Manila****Rogie Royce Carandang\*, Jover Mosqueda, Noraisa Mangondato, Rudy Fernandez, Johaira Datuemam, Embraida Aslahon, John Paul Alvarez**

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**Abstract:** Patient counseling is an integral part of community pharmacy practice. It is an important service which helps improve the knowledge and understanding of patients on drugs requiring longer duration of regimen. This is particularly important in tuberculosis (TB) control where lack of knowledge and understanding can lead to drug resistance. The study aimed to measure the frequency of verbal counseling in community pharmacy and to determine the types of information provided. Three phases were done in 89 randomly selected community pharmacies. The first phase was face-to-face counseling of simulated patient (SP) with prescription, second was telephone counseling and the last phase was survey questionnaire using an 11-point likert scale which measured the practices of community pharmacists in patient counseling. During Phase I, most of the pharmacists and staff provided insufficient information on anti-TB drugs. In Phase II, some pharmacists provided only little information needed by the SP. In Phase III, a mean of 6.15, interpreted as “satisfactory” showed that pharmacists and staff provided counseling on anti-TB drugs but was limited to common information like name of the medication, indication and the dosage of the drugs. The results of the study suggest that good counselling practices on anti-TB drugs should be improved.

**Keywords:** counselling, community, pharmacists, pharmacy, tuberculosis, practices.

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**INTRODUCTION**

Tuberculosis (TB) remains a major global health problem, responsible for ill health among millions of people each year. TB ranks as the second leading cause of death from an infectious disease worldwide, after the human immunodeficiency virus (HIV). The Philippines is one of 22 countries identified by the World Health Organization (WHO) which has a high burden of TB, ranking at fifteenth worldwide [1].

Patient counseling in community pharmacies is very vital for TB control. This will help the government in educating the patients on anti-TB drugs to prevent the occurrence of drug resistance. Evidence has shown that patient counseling may figure out and determine the solution for drug related problems, empower patients to adopt positive self-management behavior, enhance patient contentment with pharmacy care and optimize quality of care [2-3]. In the Philippine setting, patient counseling is up to the physician, where it should have been both the physician and pharmacist role. Due to the increasing number of consumers coming to community pharmacy every day, it seems that the role of the pharmacist in patient counseling has been misguided and forgotten. The counseling practice among the community pharmacies has not been well established which results to the inflated rate of the

number of the patients that acquire resistance to anti-TB drugs [4]. Thus, a policy on strengthened and improved patient counseling practices on anti-TB drugs should be acted upon for better TB control.

The overall goal of this study was to assess the patient counseling practices of community pharmacies in Manila with regards to anti-TB drugs. Specifically, the study measured the frequency of verbal counseling, identified the types of information provided and created policy recommendation on the improvement of patient counseling skills to community pharmacies.

**METHOD****Research Design**

A cross-sectional study design was used for the study because determination of variables will be done at one point in time.

**Sampling Design and Sample Size**

The study was held in Manila, where major health institutions and health-related establishments are located. It was divided into three phases. Phase I was face-to-face counseling. The simulated patient (SP) methods were used in the study. The SP visited the pharmacy and presented the prescription to the staff. The SP was trained not to offer any information unless

questioned and not to ask for any information from the pharmacy staff. Phase II was telephone counseling and the same scenario was used by the SP. If asked, the SP told the pharmacy staff that this was their first prescription and that they had not received any information from the doctor. The Phase III was survey questionnaire. Registered pharmacists were asked to answer the survey questions. They were notified a week before being hand-delivered the questionnaires. This is to allow them to fit into their schedules for the completion of the questionnaire, which was brought to them personally by one of the investigators and retrieved on the following day. Registered pharmacists who answered all questions were included in the study. Those who fail to answer even one item on the questionnaire were excluded as respondents.

A pilot testing was conducted to assure the questionnaire's validity. This was conducted among 15 randomly selected registered pharmacists in Manila. The questionnaires were modified accordingly based on the comments and pretesting results.

**Box 1: Description of scenarios used and SPs involved.**

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| <ul style="list-style-type: none"><li>• Rifampicin (Rifamax®) for TB, presented by a female SP, 18–26 years old.</li><li>• Fixed Dose Combination HRZE (Myrin-P Forte®) for TB, presented by male or female SPs, 27–43 years old.</li><li>• Fixed Dose Combination of HR (Bifix®) for TB, presented by male or female SPs, 47–64 years old.</li></ul> |
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Information about the age and role of the person serving the SP, and the number of employees on the visit day were gathered during a follow-up phone call. “No questioning” was when the SP was not asked about previous use, allergies, use of other medicines or knowledge of indications or dosing instructions. “No information provision” occurred when no verbal information was given about indications, dosing instructions, adverse effects or specific instructions. “No counseling” was lack of both questioning and information provision.

**Phase II**

**Telephone Counseling**

Same three scenarios mentioned above were used for the telephone counseling. The trained SP did the same treatment. If asked, the SP told the pharmacy staff that this was their first prescription and that they had not received any information from the doctor. They were trained not to offer any information unless questioned and not to ask for any information from the pharmacy staff. Information about the age and role of the person serving the SP was included.

**Phase III**

**Survey Questionnaires**

The questionnaires were prepared, tested, evaluated, and adjusted based on a pilot study with 15 randomly selected registered pharmacists. The questionnaire included demographic data such as age, gender, occupation, and years of work in pharmacy. It also includes the perception of the registered pharmacy about patient counseling in the Philippines and standard

**Data Collection**

**Phase I**

**Face-to-face counseling**

An SP method was used for the face-to-face counseling. Trained SPs were told to neither ask nor offer information, unless questioned. All pharmacies were visited once, each by a different SP with a different prescription (Box 1). All pharmacies were told about the study, although not when their pharmacy would be visited. Data on waiting times, questions asked, and information provided, staff serving them and privacy when served was recorded. Prescriptions were written using trade names, in the usual Philippine fashion. If asked, the SP told the pharmacy staff that this was their first prescription and that they had not received any information from the doctor. They were trained not to offer any information unless questioned and not to ask for any information from the pharmacy staff. The three scenarios were:

of practice they prefer. In counseling introduction item on anti – TB drugs, it includes the purpose, contraindication, special precaution of anti-TB drug and the reason of treatment. In counseling content item on anti – TB drugs, it includes the knowledge of the registered pharmacist in the medication. In the counseling process on anti – TB drugs, it includes how registered pharmacist practice or delivers patient counseling. Lastly, counseling conclusion on anti – TB drugs included how they summarize the patient counseling medication in terms of patient understanding. The scales on encouragement for continuous education, demands for knowledge and use of knowledge were constructed for this study. All variables were measured on an 11-point likert scale (never, rarely, sometimes, often, and always in which 0 – lowest and 10 – highest).

**Data Analysis**

Analysis of the responses to the questionnaire was carried out using the Epi Info 2000. The information gathered from the respondents was presented using frequency counts, tables and percentages.

**RESULTS AND DISCUSSION**

**Phase I**

**Face-to-face counseling**

**The pharmacies and pharmacy staff involved in the counseling episodes**

Table-1 shows that the majority of the pharmacies visited by the simulated patients were small pharmacies (76.9%) which have five or fewer employees. Large and

center pharmacies were also visited and comprise mostly of 1-10 employees on the day of visits. Majority of the staff (79.8%) involved in the counseling episodes were female and only 20.2% were male. The age of the majority of the counseling staff (75.3%) was less than 31 years old. Most of the counseling staff was pharmacy assistants (84.3%) and only a few pharmacists (15.7%) were involved. This showed that the chance of receiving counseling straight from the pharmacists was quite low. Patients rely mostly to the advice given by the pharmacy assistants. Thus, the adequacy and accuracy of the drug information shared may not be substantial to encourage the patients to comply with their TB treatment regimen.

#### Description of the counseling visits

The 89 pharmacies were visited four times a week at different time of the day from 8 am to 10 pm (Table-2). The waiting time according to the SPs was less than 6 minutes and the not more than five patients (87.6%) were waiting in line. The counseling approach was done in public (69.7%) wherein the staff conducted the counseling not per individual but with more than one patient at a time. Only 30.3% of the patients were counseled in semi-private. Indeed, there was a need to improve the culture of spending enough time talking to patients about their medications. A rushed counseling may not be effective as it may not cover the essential details and may be unorganized making the patient struggle to follow instructions about their medications [5].

#### Description of face-to-face counseling received by simulated patients

Table-3 shows the questions asked and information given by the pharmacy staff when the simulated patient handed a prescription to them. Majority of the staff

(77%) failed to ask any questions pertaining to the previous use, allergies, use of other medicines and knowledge of indications or dosing instructions. The most commonly asked question (6.7%) was whether the simulated patients had taken this medicine before to which the answer was always "no". If asked this, the simulated patients were more likely to be asked subsequent questions but no further questioning occurred. The information was given directly by the staff and was limited to the name of the drug, purpose and dosing instructions. Most of the staff (93.2%) explained the indications of the drug and less than 50% talked about the medication instructions and treatment duration. Information about side effects, precautions and special instructions were not shared. Only 6.7% of the staff gave the patient written information. All counseling was done verbally.

What is significant here was that there is no good culture of encouraging patients to talk to pharmacists or pharmacy assistants about their medication. No questioning and provision of limited information are reflections of poor counseling skill. Patient counseling is an important obligation for pharmacists. The pharmacists must ensure that the patients have sufficient knowledge of their medicines to facilitate their safe and effective use most especially for diseases, which require longer treatment duration such as TB. Pharmacy assistants, on the other hand, should have a good basic and continuing education that covers drug therapies, therapeutic guidelines and communication skills in order to counsel the patients more effectively [6]. If unsure of the drug information, pharmacy assistants are expected to call the attention of the pharmacists and let the pharmacists do the counseling on their behalf.

**Table-1: The pharmacies (n = 89) and pharmacy staff involved in the counseling episodes**

Frequency (%)	
<b>VISITS TO PHARMACIES</b>	
<b>Type of pharmacy visited</b>	
Center Pharmacy	9 (10.1)
Large Pharmacy	20 (22.5)
Small Pharmacy	60 (76.9)
<b>Number of employees on the day of visit</b>	
1 – 10	85 (95.5)
11 – 20	4 (4.5)
> 20	0
<b>STAFF INVOLVED IN COUNSELING EPISODE</b>	
<b>Gender of counseling staff</b>	
Male	18 (20.2)
Female	71 (79.8)
<b>Age of counseling staff</b>	
< 31	67 (75.3)
31 – 50	21 (23.6)
> 50	1 (1.1)
<b>Role of counseling staff</b>	
Pharmacist	14 (15.7)
Pharmacy Assistant	75 (84.3)

**Legend:** Centre Pharmacy – in a city or shopping center; Large Pharmacy – more than five employees; Small Pharmacy – five or fewer employees

**Table-2: Description of the 89 counseling visits**

Frequency (%)	
<b>Days of the week</b>	
Tuesday	17 (19.1)
Thursday	30 (33.7)
Saturday	37 (41.6)
Sunday	5 (5.6)
<b>Time of the day</b>	
8am - 12nn	20 (22.5)
12:01pm - 2pm	18 (20.2)
2:01pm - 10pm	51 (57.3)
<b>Waiting time according to SP</b>	
0 - 6 minutes	89 (100)
> 6 minutes	0
<b>Number of other patients waiting</b>	
0 - 5 patients	78 (87.6)
6 - 10 patients	10 (11.2)
> 10 patients	1 (1.1)
<b>Privacy when counseled</b>	
Semi – Private	27 (30.3)
Not Private	62 (69.7)

**Table-3: Description of face-to-face counseling received by simulated patients presenting prescriptions in the three scenarios used**

Scenarios used	Rifamax <sup>A</sup>	Myrin P	Bifix <sup>B</sup>	Total
	n = 31	n = 35	n = 23	n = 89 (%)
No questioning	26	31	20	77 (86.5)
No information provision	0	0	0	0
No counseling (i.e. no questioning and no information)	1	4	1	6 (6.7)
<b>Questioning about</b>				
Whether had taken this medicine before	3	2	1	6 (6.7)
Why the medicine was prescribed	0	0	0	0
How the medicine should be taken	1	0	0	1 (1.1)
If other medicines taken	0	0	0	0
If allergic to any medicines	0	0	0	0
If have any questions or concerns about this medicine?	0	0	0	0
If there is anything else you want to ask?	0	0	0	0
<b>Information given about</b>				
The name of the medicine	29	19	6	54 (60.7)
How to take the medicine <sup>C</sup>	19	18	8	45 (50.5)
The purpose of the medication <sup>D</sup>	31	29	23	83 (93.2)
Duration of the medicine	6	17	12	35 (39.3)
Possible side effects of the medicine	0	1	5	6 (6.7)
Precautions about the medicine	0	0	1	1 (1.1)
Special instructions for the medicine	5	2	0	7 (7.9)
Given written information <sup>E</sup>	4	2	0	6 (6.7)

<sup>A</sup> 4 aborted as the pharmacy did not have Rifamax stock. <sup>B</sup> 2 aborted as the pharmacy did not have Bifix stock.

<sup>C</sup> 2 simulated patients were also given incorrect information. <sup>D</sup> 1 simulated patient was also given incorrect information.

<sup>E</sup> In addition to mandatory package insert with price of the drug

**Phase II****Telephone counseling**

A representative clustered sample was collected randomly in Manila. The telephone survey was conducted one week after the face-to-face counseling. The same respondents were used which include all the pharmacies visited during the first phase of the study. However, not all community pharmacies that were visited had a telephone. Only 56% of them offer this kind of service. Thus, telephone counseling may not be a common service among community pharmacies in Manila.

**Demographic data of telephone counseling**

The demographic data of telephone counseling was shown in Table -4. From 8 am to 10 pm, the simulated patients were required to call the pharmacy. Most of the

counseling staff during the survey was pharmacy assistants and 46% of them were registered pharmacists. Majority of them were females (72%) with age less than 31 years old. The counseling lasted for less than 6 minutes.

The time required to counsel the patient and the availability of the registered pharmacist to conduct the telephone counseling may contribute to the compliance of the patient to a certain medication. Telephone counseling is a simple way to receive counseling without going to the pharmacy. It is therefore convenient and can save time but the availability of the counseling staff and the time allotted to address patients' health issues play a big role for this kind of service.

**Table-4: Demographic data of telephone counseling (n = 50)**

	Frequency (%)
<b>Gender</b>	
Male	14 (28)
Female	36 (72)
<b>Age <sup>A</sup></b>	
< 31 years old	38 (76)
31 - 50 years old	12 (24)
> 50 years old	0
<b>Role of counseling staff</b>	
Pharmacist	23 (46)
Pharmacy Assistant	27 (54)
<b>Time of the day</b>	
8am - 12nn	15 (30)
12:01pm - 2pm	8 (16)
2:01pm - 10pm	27 (54)
<b>Waiting time according to SP</b>	
0 - 6 minutes	50 (100)
> 6 minutes	0

<sup>A</sup> Aged < 31 years old are considered to be young adults, aged 31 - 50 are considered to be middle-aged and aged > 50 are considered to be elderly.

**Description of telephone counseling received by simulated patients**

In the telephone counseling episodes (Table-5), similar situation was experienced by the simulated patients. The counseling staff did not ask any questions nor elicit more information from the simulated patients. The most commonly asked question was if they have taken these medicines before. Only 10% of the staff cared about the patients' previous use of their anti-TB drugs. Information provision was only limited to the name of the drug and its purpose (82%). Less than half of the counseling staff provided information about

dosing instructions and treatment duration. Possible side effects, precautions and other special instructions were not covered.

On the other hand, there were instances wherein the simulated patients were given wrong information during the telephone counseling episodes. These communication lapses can have very negative impact on patient safety [7]. Poor information transfer and faulty communication can compromise patient safety [8].

**Table-5: Description of telephone counseling received by simulated patients presenting prescriptions in the three scenarios used**

Scenarios used	Rifamax <sup>A</sup>	Myrin P	Bifix <sup>B</sup>	Total
	n = 20	n = 20	n = 10	n = 50 (%)
No questioning	18	17	8	43 (86)
No information provision	0	0	0	0
No counseling (i.e. no questioning and no information)	1	3	1	5 (10)
<b>Questioning about</b>				
Whether had taken this medicine before	1	2	2	5 (10)
Why the medicine was prescribed	0	0	0	0
How the medicine should be taken	1	0	0	1 (2)
If other medicines taken	0	0	0	0
If allergic to any medicines	0	0	0	0
If have any questions or concerns about this medicine?	0	0	0	0
If there is anything else you want to ask?	0	0	0	0
<b>Information given about</b>				
The name of the medicine	16	20	5	41 (82)
How to take the medicine <sup>C</sup>	11	9	6	26 (52)
The purpose of the medication <sup>D</sup>	18	15	8	41 (82)
Duration of the medicine <sup>E</sup>	4	7	7	18 (36)
Possible side effects of the medicine	0	1	4	5 (10)
Precautions about the medicine	0	0	0	0
Special instructions for the medicine	0	2	0	2 (4)

<sup>A</sup> 1 aborted as the pharmacy did not have Rifamax stock. <sup>B</sup> 1 aborted as the pharmacy did not have Bifix stock.

<sup>C</sup> 3 simulated patients were also given incorrect information. <sup>D</sup> 5 simulated patients were also given incorrect information.

<sup>E</sup> 1 simulated patient was also given incorrect information.

### Phase III

#### Survey Questionnaires

The survey was carried out after the face-to-face and telephone counseling. The survey questionnaires were consisted of structured questions, which were adapted in USP's Medication Counseling and Behavior Guidelines [9-10]. The content of the questionnaires were divided into different activities such as counseling introduction, counseling content, counseling process and counseling conclusion items. The questions were modified to fit the counseling practices in the Philippine setting.

#### Demographics of the Respondents

Table-6 shows that most pharmacists in the community practice were females (89%) and only 11% were males. More than half of the pharmacists (64%) fall between 21-30 years old, which indicates a younger age group. Majority of the pharmacists had less than 10 years of experience in both community pharmacy practice and overall pharmacy profession (Table-7). Most of them were employees and only 6.7% were self or part owner (Table-8).

**Table-6: Age and Gender of Respondents**

Age	Frequency (%)
21 – 30	57 (64.0)
31 – 40	19 (21.3)
41 – 50	10 (11.2)
51 – 60	3 (3.4)
Total	89 (100)
Gender	Frequency (%)
Male	10 (11.2)
Female	79 (88.8)
Total	89 (100)

**Table-7: Years in Pharmacy Practice and Profession**

Years in community pharmacy practice	Frequency (%)	Years in pharmacy profession	Frequency (%)
0 – 10	73 (82.0)	0 – 10	67 (75.3)
11 – 20	11 (12.4)	11 – 20	14 (15.7)
21 – 30	4 (4.5)	21 – 30	6 (6.7)
31 – 40	1 (1.1)	31 – 40	2 (2.2)
Total	89 (100)	Total	89 (100)

**Table-8: Employment position**

Employment position	Frequency (%)
Self or part owner	6 (6.7)
Employee	83 (93.3)
Total	89 (100)

Table-9 represents the estimated number of prescriptions dispensed per day in the last 6 months of both the pharmacy and the pharmacists themselves. Most of the community pharmacies dispensed not more than 1,000 prescriptions (95.5%) and majority of the prescriptions were personally dispensed by the

pharmacists (96.6%). The large number of prescriptions that were dispensed by the pharmacy may have contributed to the amount of time that they spend in counseling their patients. In the pharmacy, there was a need to improve the culture of spending enough time talking to patients about their medications.

**Table-9: Estimated no. of prescriptions dispensed per day in the last 6 months**

Pharmacy dispensed per day in last 6 months	Frequency (%)	Personally dispensed per day in last 6 months	Frequency (%)
0 - 1000	85 (95.5)	0 – 1000	86 (96.6)
1001 - 2000	1 (1.1)	1001 – 2000	1 (1.1)
2001 - 3000	2 (2.2)	2001 – 3000	1 (1.1)
3001 and above	1 (1.1)	3001 and above	1 (1.1)
Total	89 (100)	Total	89 (100)

Table-10 shows the estimated percentage of time per eight hours shift spent in counseling the customers. Most of the pharmacists (39.3%) said that they were spending 21-40% of their shift doing the counseling. That was estimated to be 100 to 192 minutes of counseling per shift. The counseling

episodes depend entirely on the number of prescriptions dispensed each day and when the patients first initiated the questioning about their prescribed medicines. Only a few pharmacists (less than 13.5%) did counseling for more than 60% of their eight hours shift in the pharmacy.

**Table-10: Estimated % of time per eight hours shift in counseling customers**

% time spending in counseling customers	Frequency (%)
0 - 20%	15 (16.9)
21 - 40%	35 (39.3)
41 - 60%	21 (23.6)
61 - 80%	12 (13.5)
81 - 100%	6 (6.7)
Total	89 (100)

**Pharmacists stand on patient counseling**

Table-11 shows the number of pharmacists who agreed and done patient counseling within the past six months. 100% agreed that community pharmacists in the Philippines should do patient counseling at all

times. 94.4% of pharmacists answered that they have done patient counseling in the past six months and considered the provision of drug information, regardless of the contents and time spent was part of counseling.

**Table-11: Pharmacist who agreed and done patient counseling within 6 months**

Agreed in patient counseling	Frequency (%)	Done patient counseling within the past 6 months	Frequency (%)
YES	89 (100)	YES	84 (94.4)
NO	0 (0)	NO	5 (5.6)
TOTAL	89 (100)	Total	89 (100)

Table-12 represents the pharmacists' stand on counseling practice. More than half of the respondents (55.1%) answered that pharmacist should do patient counseling at all times. Others said (23.6%) that the pharmacists should do patient counseling when only asked by the customers whereas the rest of the respondents (21.3%) believe that patient counseling must be done only when needed.

It was worth noting that not all pharmacists believe in the importance of patient counseling. Pharmacist did not see counseling as an important obligation. As a standard of practice, a pharmacist shall promote the safe and effective use of medication by educating the patients. The only way to optimize the drug therapy especially for those diseases that require longer treatment duration like TB is to ensure that the patient have attained sufficient knowledge and understanding of their treatment regimen [6, 11].

**Table-12: Pharmacist stand on counseling practice**

Practice standard	Frequency (%)
Pharmacist should do patient counseling at all times	49 (55.1)
Pharmacist should do patient counseling when only asked by the customers	21 (23.6)
Pharmacist should do patient counseling only when needed	19 (21.3)
Total	89 (100)

### Medication Counseling Behavior of Pharmacists on anti-TB drugs

#### A. Counseling introduction activities on anti – TB drugs

Based on the scoring obtained during the counseling introduction activities (Table-13), the pharmacists gained an average score of 5.9 which falls within the unsatisfactory remark (3.00 to 5.99). The pharmacists

fell short when it comes to introducing themselves as the pharmacist, explaining the purpose of counseling session, obtaining pertinent initial drug related information and asking the patients of other medical conditions. On the other hand, the pharmacist showed a satisfactory score in giving patients special precautions and in assessing patients' understanding of the reason of therapy.

**Table-13: Counseling introduction activities on anti – TB drugs**

Activities	Mean
1. Conducts appropriate counseling introduction by identifying self to the patient or the patient's agent.	5.8
2. Explains the purpose of the counseling session	5.3
3. Obtains pertinent initial drug related information (e.g. allergies, other medications, age, etc.)	5.8
4. Warns patient about taking other medications, including OTCs, herbals and alcohol which could interact with the prescribed medication	6
5. Determines if the patient has any other medical conditions which could influence the likelihood of an adverse reactions	5.6
6. Assess the patient's understanding of the reason(s) for the therapy	6
7. Assess any actual or potential concerns or problems of importance to the patient	6
<b>Average Mean:</b>	<b>5.9</b>
<b>Interpretation:</b>	<b>unsatisfactory</b>

#### B. Counseling content activities on anti – TB drugs

The pharmacists scored an average score of 6.3 in the counseling content activities (Table-14). This can be interpreted as a satisfactory remark (6.00 to 7.99). The pharmacists scored high in discussing the name and indication of the medication, explaining the dosing instructions, emphasizing the benefits of completing the

medication prescribed and in providing accurate information. The pharmacists scored the lowest (5.2) in discussing the significant drug-drug, drug-food, and drug-disease interactions. For TB patients, it is essential to discuss about the drug interactions and potential problems that may arise while taking the medications.

This is to give the patient a better understanding of drug safety and to increase compliance with the regimen.

**Table-14: Counseling content activities on anti – TB drugs**

Activities	Mean
8. Discuss the name and indication of the medication	6.8
9. Explain the dosage regimen, including scheduling and duration of therapy when appropriate	6
10. Assist the patient in developing a plan to incorporate the medication regimen into his or her daily routine	5.7
11. Explain how long it will take for the drug to show an effect	5.7
12. Discuss storage recommendations and ancillary instructions	5.8
13. Emphasize the benefits of completing the medication as prescribed	6.6
14. Discuss potential (significant) side effects	5.5
15. Discuss how to prevent or manage the side effects of the drug if they do occur	5.4
16. Discuss precautions (activities to avoid, etc.)	5.6
17. Discuss significant drug-drug, drug-food, and drug-disease interactions	5.2
18. Explain in precise terms what to do if the patient misses a dose	5.9
19. Explore with the patient potential problems in taking the medication as prescribed (e.g. cost, access, etc.)	5.4
20. Help patient generate solutions to potential problems	5.4
21. Provide accurate information	6.5
<b>Average Mean:</b>	<b>6.3</b>
<b>Interpretation:</b>	<b>satisfactory</b>

#### C. Counseling process activities on anti-TB drugs

Table-15 shows the counseling process activities. It is worth noting that the pharmacists scored a satisfactory remark of 6.5, which indicates a dynamic and interactive communication between patient and

pharmacist. The pharmacists scored an excellent mark (7.5) in using the language the patient is likely to understand. The use of nonverbal behaviors and showing empathy to the patients' health condition were significantly favored.

**Table-15: Counseling process activities on anti – TB drugs**

Activities	Mean
22. Use language the patient is likely to understand	7.5
23. Use appropriate counseling aids to support counseling	6.1
24. Respond with understanding of patient concerns or emphatic responses	6.6
25. Present facts and concepts in a logical order	6.1
26. Maintain control and direction of the counseling session	6.4
27. Probe for additional information	6.1
28. Use open-ended questions	6.3
29. Display effective nonverbal behaviors (e.g. eye contact, audible voice, pace is good, gestures, distance, etc.)	6.8
<b>Average Mean:</b>	<b>6.5</b>
<b>Interpretation:</b>	<b>satisfactory</b>

#### D. Counseling conclusion activities on anti – TB drugs

In the counseling conclusion activities (Table-16), the pharmacists scored an unsatisfactory remark of 5.9, which indicates relatively poor summarizing skills of the respondents. The pharmacists must verify patient's understanding via feedback and help them plan for follow-up and next steps. By involving the patients to

participate in decisions about their health care, they should be encouraged to ask questions about the medicines they are receiving. Pharmacist must ensure that before the patient leave the pharmacy, they have obtained sufficient knowledge and understanding of their medications to facilitate their safe and effective use [12].

**Table-16: Counseling conclusion activities on anti – TB drugs**

Activities	Mean
30. Verify patient's understanding, via feedback	5.9
31. Summarize by acknowledging and or emphasizing key points of information	5.8
32. Provide an opportunity for final concerns or questions	6
33. Help patient to plan follow-up and next steps	5.7
<b>Average Mean: Interpretation:</b>	<b>5.9 unsatisfactory</b>

## CONCLUSIONS

The study has found that there was no good patient counseling practice existing in the community pharmacies in Manila with regards to anti-TB drugs. Both Phase I and Phase II supported this claim. The counseling staff provides limited information and other essential drug information needed by the simulated patients were not provided. The study also observed that both the pharmacists and pharmacy assistants failed to ask the simulated patients regarding previous use of anti-TB medications and if whether they understand what the medicines are for. They just simply provide the drug information without verifying patients' understanding via feedback. The communication was a one-way street and the counseling staff failed to elicit information from the simulated patients.

It is also worth noting that after the counseling staff provided the information, they ended up the conversation by asking how many do you need instead of asking the patient to repeat the information given just to check patient's understanding. Thus, the community pharmacy is deemed to be more profit-oriented rather than patient-centered. They are more concerned of doing business and putting the patients' health only as a second priority. A rushed counseling may not be effective as it may not cover the essential details, may be unorganized and may be difficult for the patient to follow and understand.

The results have indicated that most of the pharmacists and staff have not played their important role in providing the patients the information which would be helpful in their treatment. It can also be realized that the results of the survey are somehow contradicting with what really happened during the face- to-face and telephone counseling. Thus, what the pharmacists perceived they do was not reflected during the actual counseling demonstration to the SPs. The huge gap between these three-phases must be filled in to empower the role of pharmacist as an information provider and as a reliable partner in achieving positive health outcomes. What has been perceived to be the actual role of the pharmacist as a counsellor must be totally reflected and be always put into actual practice.

The Philippine government has to provide a policy that will make counseling practice as an integral part in providing the patients' need in health care services. It must require the pharmacists alone to conduct patient counseling in the community setting because they are the ones equipped with sufficient knowledge and skills. A structured and comprehensive scheme must be imposed in order to cover all the essential elements of counseling. To help the government in TB control, the pharmacists should empower their image as drug experts and not as drug traders. This means that pharmacist will serve as an active partner in helping the patients receive the much needed drug information and ensure that they comply with their treatment regimen. Building up greater trust in the pharmacists will enhance the therapeutic relationships between them, which are critical to the provision of pharmaceutical care. By doing so, we could help stop TB at the source.

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