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## **BASIS FOR PRACTICE DEVELOPMENT: ACCEPTABILITY OF THE COMMUNITY PHARMACIES' PHARMACEUTICAL SERVICES IN KORONADAL CITY, SOUTH COTABATO DURING COVID-19 PANDEMIC**

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### **ABSTRACT**

**Objective:** To identify the level of acceptability of the Community Pharmacies' Pharmaceutical Services in Koronadal City, South Cotabato during the COVID-19 pandemic.

**Methods:** A descriptive quantitative research design was used in this study through survey questionnaire form.

**Results:** Results of the study indicated that the level of practices/acceptability of pharmaceutical services delivered by community pharmacies based on cost, drug supplies, dispensing/counseling services, human resources and pharmacy extended services was found to be between on high and very high. For the community pharmacies pharmaceutical service provider, the result shows 3.50, 3.61, 3.55, 3.56, and 2.70 respectively. For the customers, the result shows 3.38, 3.42, 3.47, 3.44, and 3.20 respectively. For the significant relationship in the demographic profile of community pharmacies' service provider and customers and the level of acceptability of the community pharmacies' services, in terms of age, current position, working of hours and years of work experience, results revealed that there is no significant relationship. In testing the significant difference in the level of acceptability on community pharmacies' services of customers and community pharmacies' services, results revealed that there is a significant difference in human resources and pharmacy extended services. In human resources, according to NBC News, staff shortages is the main issue that community pharmacies are facing since the start of pandemic. This means that they should work on managing and organizing their working staff members who are

currently employed by community pharmacies to complete all tasks without errors and delays. On a similar note, pharmacy extended services has a significant difference in the level of acceptability on their offered community pharmacies' services. It implies that community pharmacies should provide their customers with extra services that will benefit them and improve their patients' health. On the other hand, the cost, drug supplies and dispensing/counseling services has no significant difference because in cost, the DOH implements the Maximum Drug Retail Price and the Cheaper Medicine Act, the cost of medications in community pharmacies is regulated and controlled. For the drug supplies, all drug suppliers or distributors behave the same and for the dispensing/counseling services, all community pharmacies follow Republic Act No. 10918 or Pharmacy Law, which mandates that all medication dispensed by a pharmacist must be thoroughly explained to patients for improved health outcomes and to help them complete their treatment program.

**Conclusion:** This research was conducted to identify the level of acceptability of the community pharmacies' pharmaceutical services in Koronadal City, South Cotabato during the COVID-19 pandemic. The study enables the researcher to determine the level of acceptability of the pharmaceutical services based on the community pharmacies pharmaceutical service providers and the customers, and also to identify what is the significant relationship of the community pharmacies pharmaceutical service providers' demographic profile on the pharmaceutical services they offered amidst the COVID-19 pandemic. In conclusion, the level of acceptability on the offered pharmaceutical services in the community pharmacies in Koronadal City, South Cotabato has a descriptive equivalent between high and very high, which means that the gathered data based on the overall results, claim that the pharmaceutical services offered by the Community pharmacies in Koronadal City, South Cotabato are highly acceptable. In addition, the age of the community pharmacies pharmaceutical service provider significantly influences on ensuring the drug supplies in the community pharmacy while their years of current employment has a significant relationship on ensuring justifiable costs of medicine, drug supplies, drug counseling / dispensing and human resources.

**Keywords:** COVID-19, Community Pharmacies, Pharmaceutical Services

## INTRODUCTION

In December 2019, the coronavirus started and everything changed (WHO, 2020) Working in the office becomes work from home, online learning platforms is being used to deliver education, social distancing is a must, and wearing of face mask and face shield is becoming a new part of an everyday outfit. With the changes that had to happen since the outbreak of COVID 19, many are affected, and the mortality and morbidity rate is increasing all over the globe.

Pharmaceutical Services include the acquisition, dispensing, distribution, storage,

and management of all pharmaceuticals used in the facility, as well as the monitoring of patient drug therapy to improve quality of life. The dispensing method is part of the pharmaceutical service providing, according to Bobbins et al., 2020.

COVID-19 affects us all, including community pharmacy services. According to Zaidi et al., 2020, the COVID-19 epidemic affects pharmaceutical services by challenging community pharmacists' personal safety and pharmacy service delivery. Inappropriate patient and caregiver behavior must be addressed immediately to protect community pharmacists.

Thus, the researchers chose to study and aim to identify if there are any changes and what is the level of acceptability when it comes to the Pharmaceutical Services offered by the Community Pharmacies in Koronadal City, South Cotabato during the COVID-19 pandemic.

## **MATERIALS AND METHODS**

A descriptive quantitative type of research design was used for this study. The researchers used a survey questionnaire to collect the data and it includes the distribution of the survey questionnaire to the selected community pharmacies in Koronadal City, South Cotabato. The sample size has a total of 395 respondents and the participants who were unable, unwilling and does not meet or qualified on the provided inclusion criteria were excluded from the study.

### **Sampling and Sample Size**

The sample size has a total of 395 respondents consisting of fifty (50) community pharmacies pharmaceutical service providers and three hundred forty-five (345) selected customers from the selected barangays near the location of chosen community pharmacies.

The sample size was based on the total number of population listed in the six (6) selected barangays, emphasizing the highest number among them given by the population office of the different selected barangays in Koronadal City, South Cotabato, with a total

of 3,022 population. This was determined by using an online sample size calculation, Raosoft

(<http://www.raosoft.com/samplesize.html>).

The sample size is 341 with a response rate of 95% and a margin error of 5%.

### **Survey Instrument**

The researchers used a self-made questionnaire after thoroughly reviewing the literature on the Community Pharmacies in Koronadal City, South Cotabato. The survey questionnaire is used to gather information about the Pharmaceutical services offered by the Community Pharmacies during the COVID-19 pandemic in Koronadal City, South Cotabato.

To collect data from the participants, the researchers conducted a survey using a questionnaire. The rating scale of the questionnaire used the four-point Likert scale with responses to choices ranging from 4 which means Strongly Agree; 3 as Somewhat Agree; 2 as Somewhat Disagree; and 1 as Strongly Disagree that has a description equivalent that is based on the Results-based Performance Management System implemented by the Civil Service Commission under the Memorandum Circular No. 6 series of 2012.

### **Data Analysis**

The researchers utilized the F-test to determine if there is a significant relationship between the demographic profile of the customers and community pharmacies' service providers on the level of acceptability in terms of the pharmaceutical services they offered in the community pharmacies during

the COVID-19 pandemic in Koronadal City, South Cotabato. Furthermore, a T-test was also used to determine if there is a significant difference between the level of acceptability of the customers and community pharmacies' service providers in terms of the Pharmaceutical services they offered in the community pharmacies during the COVID-19 pandemic in Koronadal City, South Cotabato.

For interpretation of the mean responses, the following 4-point rating scale was used to determine the degree of service and performance assessment of the Community Pharmacies in Koronadal City, South Cotabato, on its Pharmaceutical Services during the COVID-19 pandemic.

**RESULTS**

**Table 1.0 Demographic Profile of the Community Pharmacies' Service Provider**

|   |                          |    |      |
|---|--------------------------|----|------|
| <b>Current Position</b>   | Pharmacist               | 21 | 42.0 |
|   | Pharmacist/Owner         | 1  | 2.0  |
|   | Pharmacy Aide            | 1  | 2.0  |
|   | Pharmacy Assistant       | 23 | 46.0 |
|   | Pharmacy assistant/Owner | 1  | 2.0  |
|   | Pharmacy Owner           | 2  | 4.0  |
|   | Pharmacy technician      | 1  | 2.0  |
| <b>Working Hours</b>  | 3 hours                  | 1  | 2.0  |
|   | 5-8 hours                | 36 | 72.0 |
|   | 9 hours and above        | 13 | 26.0 |
| <b>Years of Purchasing Pharmaceutical Products and Services</b> | 1-3 years                | 34 | 68.0 |
|   | 4-6 years                | 2  | 4.0  |
|   | 7-9 years                | 3  | 6.0  |
|   | 10-12 years              | 6  | 12.0 |
|   | 13 years and above       | 5  | 10.0 |

| Profile    | Category           | F  | % Distribution |
|------------|--------------------|----|----------------|
| <b>Age</b> | 21-30 years old    | 34 | 68.0           |
|            | 31-40 years old    | 7  | 14.0           |
|            | 41-50 years old    | 4  | 8.0            |
|            | 51-60 years old    | 1  | 2.0            |
|            | 61 years and older | 4  | 8.0            |

Overall data in table 2.0 showed that most of the respondents were 21-30 years old (68.0%), working as pharmacists and pharmacy assistants, constituting 42.0% and 46.0% of the respondents, respectively. Meanwhile, the majority of them worked for 5-8 hours in community pharmacy with 1-3 years of working experience (68.0%). The demographic profile was essential in this study since it determines if it significantly influences the pharmaceutical services

delivered by pharmacists to pharmacies' service providers' patients/customers. pharmaceutical services.

**Table 1.1 Demographic Profile of Community Pharmacies' Customers**

| Profile  | Category           | F   | % Distribution |
|--|--------------------|-----|----------------|
| Age  | 21-30 years old    | 141 | 41.0           |
|  | 31-40 years old    | 77  | 22.0           |
|  | 41-50 years old    | 60  | 18.0           |
|  | 51-60 years old    | 18  | 5.0            |
|  | 61 years and older | 49  | 14.0           |
| Gender   | Male               | 145 | 42.0           |
|  | Female             | 200 | 58.0           |
| Marital Status   | Single             | 155 | 45.0           |
|  | Married            | 161 | 47.0           |
|  | Widowed /Separated | 29  | 8.0            |
| Years of Purchasing Pharmaceutical Products and Services | 1-3 years          | 37  | 11.0           |
|  | 4-6 years          | 47  | 14.0           |
|  | 7-9 years          | 95  | 27.0           |
|  | 10-12 years        | 21  | 6.0            |
|  | 13 years and above | 145 | 42.0           |

Overall data in table 2.1 showed that most of the respondents were female (58.0%) and between 21-30 years old (41.0%). Meanwhile, most of them are already married, with a percent distribution of 47.0% with 13 years and above purchasing pharmaceutical products and services from community pharmacies. The demographic profile was an essential component in this study since it is used to determine if it significantly influences the community

**Table 2.0 Overall Mean Level of Acceptability Based on Community Pharmacies' Service Provider**

| Cost   | Mean | Description           |
|--|------|-----------------------|
| 1. The medicines in my pharmacy adhere to the suggested retail price of the Department of Health.                  | 3.68 | Strongly Agree        |
| 2. My pharmacy offers low-cost generic products to customers.  | 3.70 | Strongly Agree        |
| 3. My pharmacy offers promo-product deals of medicine to customers (e.g. Revicon 8 + 2 , Enervon 8 + 2)            | 3.20 | Strongly Agree        |
| 4. My pharmacy gives discounts to Senior Citizens and PWD customers.   | 3.86 | Strongly Agree        |
| 5. My pharmacy offers a special promo deals on special occasions on OTC medicines (e.g. Establishment Anniversary) | 3.04 | Strongly Agree        |
| <b>Overall mean</b>  | 3.50 | <b>Strongly Agree</b> |
| <b>Drug Supplies</b>   |      |                       |
| 1. There is enough drug supplies in my pharmacy for our patient/consumers.   | 3.14 | Strongly Agree        |
| 2. My pharmacy conducts monthly inventory and run report of nearby expiry medicines for monitoring.                | 3.78 | Strongly Agree        |
| 3. Orders of fast-moving medicines to suppliers is prioritized   | 3.72 | Strongly Agree        |

|  |             |                       |
|--|-------------|-----------------------|
| to meet our customer's demand.   |             |                       |
| 4. My pharmacy maintains adequate supply of medicine of prescription drugs (hypertension, diabetes etc)        | 3.70        | Strongly Agree        |
| 5. All medicine supplies are monitored including the right temperature control.                                | 3.72        | Strongly Agree        |
| <b>Overall mean</b>  | <b>3.61</b> | <b>Strongly Agree</b> |
| <b>Dispensing/Counseling Services</b>  |             |                       |
| 1. The pharmacists counsel patients before dispensing.   | 3.62        | Strongly Agree        |
| 2. Counseling area is available at the Pharmacy with proper protocol.  | 3.32        | Strongly Agree        |
| 3. The pharmacy personnel follows designated area for dispensing with plastic cover.                           | 3.62        | Strongly Agree        |
| 4. The pharmacy personnel always check the correct medication and expiry date before dispensing.               | 3.70        | Strongly Agree        |
| 5. The Pharmacist counsel the patient on lifestyle modification (exercises, diet, quit smoking, mental health) | 3.48        | Strongly Agree        |
| <b>Overall mean</b>  | <b>3.55</b> | <b>Strongly Agree</b> |
| <b>Human Resources</b>   |             |                       |
| 1. There are enough staff working for the Pharmacy Services.   | 3.50        | Strongly Agree        |
| 2. The work load is equally distributed to all pharmacy staff.   | 3.46        | Strongly Agree        |
| 3. Pharmacy staff knows their job  | 3.64        | Strongly Agree        |

|  |             |                       |
|--|-------------|-----------------------|
| responsibilities in the Pharmacy Services according to the IATF protocol.                                      |             |                       |
| 4. Customers' inquiries are being attended without delay.  | 3.50        | Strongly Agree        |
| 5. Concerns and complaints are being addressed well in a professional manner.                                  | 3.68        | Strongly Agree        |
| <b>Overall mean</b>  | <b>3.56</b> | <b>Strongly Agree</b> |
| <b>Pharmacy Extended Services</b>  |             |                       |
| 1. Blood glucose monitoring and free blood pressure are offered at my pharmacy.                                | 2.14        | Somewhat Agree        |
| 2. My pharmacy extended hours of services to cater more consumers.   | 3.24        | Strongly Agree        |
| 3. My pharmacy provides counseling for lifestyle modifications, smoking cessation program, mental health, etc. | 2.90        | Somewhat Agree        |
| 4. My Pharmacy provides COVID-19 information in a poster, leaflet, video etc format.                           | 2.82        | Somewhat Agree        |
| 5. My pharmacy provides telepharmacy services and delivery.  | 2.42        | Somewhat Agree        |
| <b>Overall mean</b>  | <b>2.70</b> | <b>Strongly Agree</b> |

Results of the study indicated that the level of acceptability of pharmaceutical services delivered by the community pharmacy was found to be strongly agreed in terms of Costs, with an overall mean of 3.50. In terms of drug supplies, results showed a mean value of 3.61 and were described as strongly agree. Meanwhile, in terms of counseling services, the community pharmacies have provided an

overall mean value of 3.55 and are described as strongly agreeing. Regarding human resources, the results have shown an overall mean value of 3.56 and are described as strongly agree. On the other hand, in terms of extended pharmacy services, the overall mean value was found at 2.70 and described as somewhat agree.

**Table 2.1 Overall Mean Level of Acceptability Based on Community Pharmacies' Customer**

| Cost  | Mean        | Description           |
|---|-------------|-----------------------|
| 1. The medicines in pharmacy adhere to the suggested retail price of the Department of Health.                              | 3.30        | Strongly Agree        |
| 2. The pharmacy offers low-cost generic products to customers.  | 3.37        | Strongly Agree        |
| 3. The pharmacy offers promo-product deals of medicine to customers (e.g. <i>Revicon 8 + 2</i> , <i>Enervon 8 + 2</i> )     | 3.38        | Strongly Agree        |
| 4. The pharmacy gives discounts to Senior Citizens and PWD customers.   | 3.51        | Strongly Agree        |
| 5. The pharmacy offers a special promo deals on special occasions on OTC medicines (e.g. <i>Establishment Anniversary</i> ) | 3.35        | Strongly Agree        |
| <b>Overall mean</b>   | <b>3.38</b> | <b>Strongly Agree</b> |
| <b>Drug Supplies</b>  |             |                       |
| 1. There is enough drug supplies in pharmacy for patient/consumers.   | 3.37        | Strongly Agree        |
| 2. The pharmacy conducts monthly  | 3.44        | Strongly Agree        |

|  |             |                       |
|--|-------------|-----------------------|
| inventory and run report of nearby expiry medicines for monitoring.  |             |                       |
| 3. Orders of fast-moving medicines to suppliers is prioritized to meet the customer's demand.                  | 3.37        | Strongly Agree        |
| 4. The pharmacy maintains adequate supply of medicine of prescription drugs (hypertension, diabetes etc)       | 3.41        | Strongly Agree        |
| 5. All medicine supplies are monitored including the right temperature control.                                | 3.72        | Strongly Agree        |
| <b>Overall mean</b>  | <b>3.42</b> | <b>Strongly Agree</b> |
| <b>Dispensing/Counseling Services</b>  |             |                       |
| 1. The pharmacists counsel patients before dispensing.   | 3.44        | Strongly Agree        |
| 2. Counseling area is available at the Pharmacy with proper protocol.  | 3.36        | Strongly Agree        |
| 3. The pharmacy personnel follows designated area for dispensing with plastic cover.                           | 3.48        | Strongly Agree        |
| 4. The pharmacy personnel always check the correct medication and expiry date before dispensing.               | 3.65        | Strongly Agree        |
| 5. The Pharmacist counsel the patient on lifestyle modification (exercises, diet, quit smoking, mental health) | 3.42        | Strongly Agree        |
| <b>Overall mean</b>  | <b>3.47</b> | <b>Strongly Agree</b> |
| <b>Human Resources</b>   |             |                       |

|   |             |                       |
|---|-------------|-----------------------|
| 1. There are enough staff working for the Pharmacy Services.  | 3.39        | Strongly Agree        |
| 2. The work load is equally distributed to all pharmacy staff.  | 3.39        | Strongly Agree        |
| 3. Pharmacy staff knows their job responsibilities in the Pharmacy Services according to the IATF protocol.     | 3.55        | Strongly Agree        |
| 4. Customers' inquiries are being attended without delay.   | 3.41        | Strongly Agree        |
| 5. Concerns and complaints are being addressed well in a professional manner.                                   | 3.45        | Strongly Agree        |
| <b>Overall mean</b>   | <b>3.44</b> | <b>Strongly Agree</b> |
| <b>Pharmacy Extended Services</b>   |             |                       |
| 1. Blood glucose monitoring and free blood pressure are offered at pharmacy.                                    | 3.21        | Strongly Agree        |
| 2. The pharmacy extend hours of services to cater more consumers.   | 3.30        | Strongly Agree        |
| 3. The pharmacy provides counseling for lifestyle modifications, smoking cessation program, mental health, etc. | 3.12        | Strongly Agree        |
| 4. My Pharmacy provides COVID-19 information in a poster, leaflet, video etc format.                            | 3.35        | Strongly Agree        |
| 5. My pharmacy provides telepharmacy services and delivery.   | 3.03        | Strongly Agree        |
| <b>Overall mean</b>   | <b>3.20</b> | <b>Strongly Agree</b> |

Overall results on the level of acceptability of the community pharmacies' services in terms of cost have an overall mean of 3.38 and are

described as strongly agree and in terms of drug supplies, it has an overall mean of 3.42 and is described as strongly agree. For dispensing/counseling services, the result shows an overall mean of 3.47 and is described as strongly agreed. Regarding human resources, it shows an overall mean of 3.44 and is described as strongly agree and in the extended pharmacy services, it has an overall mean of 3.20 and described as strongly agree.

**Table 3.0 Testing the Significant Relationship in the demographic profile of Community Pharmacies' Service Provider and Level of Acceptability of the Community Pharmacies' Services**

| Test Variables |                                    | F-value  | P-value | Decision                   | Remarks         |
|----------------|------------------------------------|----------|---------|----------------------------|-----------------|
| Age            | Cost                               | 1465.68  | 0.139   | Accept the null hypothesis | Not significant |
|                | Drug Supplies                      | 2616.28  | 0.438   | Accept the null hypothesis | Not significant |
|                | Dispensing and Counseling Services | 8192.71  | 0.447   | Accept the null hypothesis | Not significant |
|                | Human Resources                    | 19462.02 | 0.792   | Accept the null hypothesis | Not significant |
|                | Pharmacy Extended                  | 1000.11  | 0.299   | Accept the null            | Not significant |



|                      | Services  |             |           | hypot<br>hesis                           |                        |
|----------------------|---|-------------|-----------|--|------------------------|
|                      | Cost  | 1023<br>.20 | 0.2<br>86 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
|                      | Drug<br>Suppl<br>ies                                    | 1826<br>.43 | 0.8<br>98 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
|                      | Dispe<br>nsing<br>and<br>Couns<br>eling<br>Servic<br>es | 5719<br>.36 | 0.9<br>17 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
|                      | Huma<br>n<br>Resou<br>rces                              | 1358<br>6.5 | 0.1<br>62 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
|                      | Phar<br>macy<br>Exten<br>ded<br>Servic<br>es            | 698.<br>18  | 0.6<br>13 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
| Work<br>ing<br>Hours | Cost  | 2.28<br>7   | 0.1<br>43 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
|                      | Drug<br>Suppl<br>ies                                    | 4.08<br>3   | 0.3<br>59 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
|                      | Dispe<br>nsing<br>and<br>Couns<br>eling<br>Servic<br>es | 12.7<br>88  | 0.3<br>66 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
|                      | Huma<br>n   | 3.07<br>9   | 0.6<br>49 | Acce<br>pt the<br>null                   | Not<br>signif<br>icant |

|                               | Resou<br>rces   |           |           | hypot<br>hesis                           |                        |
|-------------------------------|---|-----------|-----------|--|------------------------|
|                               | Phar<br>macy<br>Exten<br>ded<br>Servic<br>es            | 1.56<br>1 | 0.2<br>45 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
| Years<br>of<br>Exper<br>ience | Cost  | 2.15<br>7 | 0.5<br>31 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
|                               | Drug<br>Suppl<br>ies                                    | 0.19<br>3 | 0.1<br>27 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
|                               | Dispe<br>nsing<br>and<br>Couns<br>eling<br>Servic<br>es | 1.55<br>9 | 0.4<br>62 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
|                               | Huma<br>n<br>Resou<br>rces                              | 1.34<br>1 | 0.6<br>78 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |
|                               | Phar<br>macy<br>Exten<br>ded<br>Servic<br>es            | 2.25<br>4 | 0.1<br>90 | Acce<br>pt the<br>null<br>hypot<br>hesis | Not<br>signif<br>icant |

As supported by the computed F-value and p-value, which are all greater than  $\alpha = 0.05$  ( $p\text{-value} > \alpha$ ), do not reject the null hypothesis. This implies that there is no significant relationship between the demographic profile in terms of the age, current position, working hours and years of experience of the Community Pharmacies Pharmaceutical Service Providers and the acceptability of the community pharmacies' pharmaceutical services in Koronadal City, South Cotabato.

**Table 3.1 Testing the Significant Relationship in the demographic profile of Community Pharmacies' Customer and Level of Acceptability of the Community Pharmacies' Services**

| Test Variables |                                    | F-value | P-value | Decision                   | Remarks                    |
|----------------|------------------------------------|---------|---------|----------------------------|----------------------------|
| Age            | Cost                               | 6.889   | 0.71    | Accept the null hypothesis | Not significant            |
|                | Drug Supplies                      | 0.743   | 0.61    | Accept the null hypothesis | Not significant            |
|                | Dispensing and Counseling Services | 0.571   | 0.70    | Accept the null hypothesis | Not significant            |
|                | Human Resources                    | 0.172   | 0.94    | Accept the null hypothesis | Not significant            |
|                | Pharmacy Extended Services         | 0.417   | 0.76    | Accept the null hypothesis | Not significant            |
|                | Sex                                | Cost    | 4.013   | 0.966                      | Accept the null hypothesis |
|                | Drug Supplies                      | 2.559   | 0.393   | Accept the null hypothesis | Not significant            |

|                |                                    |       |       |                            |                            |
|----------------|------------------------------------|-------|-------|----------------------------|----------------------------|
|                | Dispensing and Counseling Services | 3.934 | 0.378 | Accept the null hypothesis | Not significant            |
|                | Human Resources                    | 0.129 | 0.536 | Accept the null hypothesis | Not significant            |
|                | Pharmacy Extended Services         | 1.122 | 0.755 | Accept the null hypothesis | Not significant            |
| Marital Status | Cost                               | 6.944 | 0.477 | Accept the null hypothesis | Not significant            |
|                | Drug Supplies                      | 1.435 | 0.194 | Accept the null hypothesis | Not significant            |
|                | Dispensing and Counseling Services | 1.866 | 0.463 | Accept the null hypothesis | Not significant            |
|                | Human Resources                    | 1.229 | 0.647 | Accept the null hypothesis | Not significant            |
|                | Pharmacy Extended Services         | 3.731 | 0.694 | Accept the null hypothesis | Not significant            |
|                | Years of Purchasing                | Cost  | 0.457 | 0.515                      | Accept the null hypothesis |

|                                      |                                       |       |       |                               |                  |
|--------------------------------------|---------------------------------------|-------|-------|-------------------------------|------------------|
| Pharmaceutical Products and Services |                                       |       |       | hypot he sis                  |                  |
|                                      | Drug Suppl ies                        | 1.973 | 0.270 | Acce pt the null hypot he sis | Not signif icant |
|                                      | Dispe nsing and Coun seling Servic es | 0.559 | 0.468 | Acce pt the null hypot he sis | Not signif icant |
|                                      | Huma n Resou rces                     | 1.441 | 0.336 | Acce pt the null hypot he sis | Not signif icant |
|                                      | Phar macy Exten ded Servic es         | 2.104 | 0.106 | Acce pt the null hypot he sis | Not signif icant |

As supported by the computed F-value and p-value, which are all greater than  $\alpha = 0.05$  ( $p\text{-value} > \alpha$ ), do not reject the null hypothesis. This implies that there is no significant relationship exists between the demographic profile regarding the age, sex, marital status, and years of purchasing pharmaceutical products and services in the Community Pharmacies Customers and the level of acceptability of the community pharmacies' pharmaceutical services in Koronadal City, South Cotabato.

#### 4.0 Testing the Significant difference in the level of acceptability on Community Pharmacies' Services of the Customers and Community Pharmacies' Services

| Variables                       | Comp uted t- value | P- val ue | Decis ion                       | Rema rks         |
|---------------------------------|--------------------|-----------|---------------------------------|------------------|
| Cost                            | 0.702              | 0.522     | Acce pted the null hypot he sis | Not signif icant |
| Drug Supplies                   | 1.558              | 0.194     | Acce pted the null hypot he sis | Not signif icant |
| Dispensing/c ounseling services | 0.939              | 0.379     | Acce pted the null hypot he sis | Not signif icant |
| Human Resources                 | 2.230              | 0.030     | Rejec t the null hypot he sis   | Signif icant     |
| Pharmacy Extended Services      | -2.481             | 0.028     | Rejec t the null hypot he sis   | Signif icant     |

The statistical analysis results revealed that the overall data gathered from the community pharmacies' service providers and customers significantly differ in the level of acceptability of their offered community pharmacies' services in terms of their Human Resources and Pharmacy Extended Services ( $p < 0.05$ ). On the other hand, the cost, drug

supplies and dispensing/counseling services has no significant difference in the level of acceptability on community pharmacies' services of the customers and community pharmacies' services.

## DISCUSSION

In the demographic profile, we have gathered a result which, showed that the majority of the respondents were 21-30 years old (68.0%), working as pharmacists and pharmacy assistants which constitute 42.0%, and 46.0% of the respondents, respectively. Meanwhile, the majority of them have worked for 5-8 hours in community pharmacy with 1-3 years of working experience (68.0%). The determine of the demographic profile was an essential component in this study since it is use to determine if it significantly influence the pharmaceutical services delivered by pharmacists in-charge to its patients/customers. And showed that the majority of the respondents were Female (58.0%) and in between 21-30 years old (41.0%). Meanwhile, the majority of them are already married with a percent distribution of 47.0% with a 13 years and above of purchasing pharmaceutical products and services from the community pharmacies. The determine of the demographic profile was an essential component in this study since it is used to determine if it significantly influence the pharmaceutical services offered by the Community Pharmacies' Service Provider.

Results of the study indicated that the level of acceptability of pharmaceutical services delivered by the community pharmacy was found to be strongly agree in terms of Costs with an overall mean of 3.50. This means that pharmacies are following the DOH suggested retail price on medicines and offers deals that can benefit the customers. This agrees to the study of Saiyarsari *et. Al* 2020, stating that

the effect of the COVID-19 pandemic in terms of Pharmaceutical Services does not affect the cost of the product, changes and development process, but on the approval delays, and the changes on the trend on health-market product. This also shows that the Community Pharmacies in Koronadal City, South Cotabato adheres to the Republic Act 7581 or commonly known as the Price Act and Republic Act No. 9502 or known as the Universally Accessible Cheaper and Quality Medicines Act of 2008 that ensures quality and reasonable prices for the customers of any basic necessities or prime commodities. In terms of drug supplies, results showed a mean value of 3.61 and described as strongly agree. This means that Community Pharmacies have ensured that there are sufficient drug supplies during the COVID-19 pandemic. Accordingly, during the pandemic, the public mostly rely on community pharmacies to get adequate supply of their daily medications and COVID-19 preventative products (e.g. masks, alcohol-based hand rubs). Community pharmacies in this case have kept appropriate stocks of pharmaceutical products to supply the demand. The results have confirmed the statement of the Department of Health in a press release in April 2021, in which they have assured that the supplies of medicines and as well as Personal Protective Equipment, Sanitation and Hygiene especially on these time of pandemic, are enough and the continuous distribution in the country will not stop to assure the safety of all people. On the other hand, the expanding roles of Community Pharmacies have led to the establishment of "Pharmacy emergency support guarantee system" that is according to the Chinese health workers and officials, which aims to implement strategies and mechanisms that cope with drug shortages through active surveillance and ensuring drug emergency supply and distribution during the COVID-

19 pandemic (Liu *et. Al*, 2020). Meanwhile, in terms of counseling services, the community pharmacies have provided an overall mean value of 3.55 and described as strongly agree. This means that pharmacy personnel always check the correct medication and expiry date and gives counseling before dispensing the medicine. According to Smith *et. al* (2020), that a clear patient education and counseling is essential to support medication use and prevent drug related problems since the Community Pharmacies are medication experts who plays an important role in the provision of pharmaceutical care. In addition, according to Rogers 2019, Pharmaceutical Service Providers, especially the Pharmacists, are obligated to devote more time on patient care including comprehensive patient counseling and education to ensure that the patients comprehend how to take their medications and adhere to their medication regimens. In terms of human resource, the results have shown an overall mean value of 3.56 and described as strongly agree This means that there is enough number of pharmacy staff and they know their job responsibilities in the Pharmacy Services and customers are attended on time. According to Velez, *et.al* (2019). Human Resources are the present focus of attention in health care systems because high workload may place the pharmaceutical service providers under work pressure that can influence on the pharmaceutical services they offer to the community. Considering the continuous progression in the health care system, community pharmacies has increased responsibility on their duties and task which basically translated to increment of workload but since the pandemic happen, there are protocols advising workers to work from home and some are on 50% capacity only (DOH, 2021). On the other hand, in terms of pharmacy extended services, the overall mean value was found at 2.70 and described

as somewhat agree. This means that some pharmacies extend time to cater additional services such as blood glucose and blood pressure monitoring for free. This result is emphasizing the study of Mugo *et. Al*, 2020 stating that amidst the COVID-19 pandemic, the provision of extended pharmacy services in a community pharmacy has increased in recent years. It shows that even the COVID-19 pandemic strikes, the continuous offering of extended services by the Community Pharmacies are still being performed by the Community Pharmacies Pharmaceutical Service Provider with proper interventions to deliver quality health care to the community. Meanwhile, in the significant relationship in the demographic profile and acceptability on community pharmacies pharmaceutical services in Koronadal City, South Cotabato in terms of cost, drug supplies, dispensing and counseling services, human resources, and pharmacy extended services, we have identified two pharmaceutical services that has a significant influence in the demographic profile of the community pharmacies pharmaceutical service providers. The results of the data revealed that the age of the pharmaceutical service providers may significantly influence the level of practices in terms of ensuring the drug supplies in the community pharmacy. The other theme is the years of current employment, there is a significant relationship between ensuring justifiable costs of medicine, drug supplies, drug counseling/dispensing and human resources. The result has proven the study of Chiara 2019, that the role of pharmacists are expanding through time, so the longer a pharmaceutical service provider works for a company, the easier it is to deliver and offer services according to the needs of the individual patients.

### **Recommendation**

In line with the findings of the study, the following recommendations are offered as

follows: For the Department of Health: Implement educational campaigns such as infographics, advertisements and placards about different programs (e.g. smoking cessation program, alcohol cessation program, mental health program, etc.). and Plan for expansion on the different pharmacy extended services. For the Food and Drug Administration: Conduct further discussions and disseminate information such as webinars that discuss proper handling, storage and transportations of different medicines for longer shelf life in the community pharmacies. For the Students, Teachers and Academe: Expand the knowledge of the students about different available programs offered by Community Pharmacies for faster dissemination of information. To the future researchers: Engage in further researches, such as identifying different variables that can have an impact in the pharmaceutical services of the different community pharmacies, Engage in further researches, such as including the demographic profile of the customers as the respondent, and Further study and identify the level of community pharmacies pharmaceutical services on different places or areas to have more insights regarding this topic (National and International).

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