

# Impact of COVID-19 Pandemic on the Attitudes and Behaviors of the Pharmacy Workforce in the Independent Drugstores in Pampanga

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**Abstract — Background:** The WHO has declared the COVID-19 outbreak a public health emergency. The pandemic's immense stress is leaving healthcare workers physically and mentally exhausted. The pharmacist, pharmacy assistant, and pharmacy owner provide a wide range of healthcare services in community pharmacies and healthcare hubs. Their community responsibilities positioned them to help manage the COVID-19 pandemic and boost a country's pandemic response and readiness.

**Objectives:** To determine the attitudes and behaviors of the pharmacy workforce before and during the pandemic and to determine the impact of COVID-19 on the changes in attitudes and behaviors of the pharmacy workforce.

**Method:** A descriptive, phenomenological study was conducted among thirty participants, ten pharmacists, pharmacy assistants, and pharmacy owners. They were interviewed face-to-face about their attitudes and behaviors while working in a community pharmacy before and during the pandemic using a researcher-made questionnaire where the responses were coded and analyzed using MAXQDA software package version 2022.

**Results:** The participants' responses were analyzed, and they have enumerated their job description, standard operating procedures, work satisfaction, and dissatisfaction before and during the pandemic. The majority of those responses were similar. Clinical-related practices, pharmacy management, and inventory management were the everyday work they did before and during the pandemic. Work satisfaction remained upbeat despite the pandemic. However, stress and fear were felt during the pandemic.

**Conclusion:** COVID-19 impacted the pharmacy workforce. The workforce's responses showed stress and fear during the pandemic. Little change was observed in how work was done before and during the pandemic. They became more aware of government health protocols during the pandemic. The workforce is more cautious about hygienic practices and avoids direct patient/customer contact during the pandemic. The pharmacy workforce is more committed to following government rules.

**Keywords — Covid-19, Attitudes, Behaviors, Pharmacy Workforce, Independent Drugstores**

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## I. Introduction

Coronavirus disease pandemic (COVID-19) has emerged as one of the most severe health disasters in this generation. The necessary actions, such as isolating entire neighborhoods, closing schools, isolating people socially, and issuing COVID facility ward orders, have drastically altered daily life (Shanafelt, T. et al., 2020). On January 30, 2020, the World Health Organization declared the coronavirus (COVID-19) outbreak a public health emergency of international concern. Most, if not all, countries worldwide have been affected. According to COVID-19 statistics, 49.7 million infected cases and over 1.2 million COVID-19 deaths in early November. According to experts, the pandemic's profound impact on human health and beyond is expected to last for a long time (Li, J. et al., 2021).

Under the immense stress of the pandemic, healthcare workers (HCW) are enduring physical and psychological exhaustion. Under tremendous strain and risk, medical staff frequently suffer from various psychological issues. Work overload, physical fatigue, a lack of Personal Protective Equipment (PPE), and nosocomial transmission, difficult decisions required to save lives had profound physical and mental repercussions on HCWs in pandemic conditions (Hathout HM et al., 2020). All healthcare professionals are caring for patients with this disease. The rapid spread of the COVID-19 virus, as well as the severity of the virus's symptoms in a subset of affected people, has pushed healthcare systems to their breaking point (Shanafelt, T. et al., 2020). Lockdown restrictions, such as travel and social distancing restrictions, as well as reductions in personnel capacity and working hours, resulted in significant modifications in healthcare delivery (Ashiru-Oredope et al., 2020). In this scenario, maintaining sufficient healthcare workforce necessitates an adequate number of physicians, nurses, advanced practice clinicians, pharmacists, and other clinicians. It maximizes each clinician's ability to care for many patients. Given that peaks in severely sick patients might last weeks or months, healthcare practitioners must perform to their maximum potential for an extended period. Healthcare workers are more likely to be exposed, have high workloads, moral difficulties, and operate in a quickly changing practice setting vastly different from what they are used to (Shanafelt, T. et al., 2020).

With the rising strain on the healthcare system, pharmacists have been enlisted as crucial healthcare team members to help assist and relieve the demand on overburdened emergency rooms, freeing up medical professionals to treat more ill patients. Pharmacies were recognized as essential services at a national level in many nations. They were one of the few services that remained open and available to the public when countries were placed in lockdown, with proposals in certain countries for closing pharmacies. The pharmacist, pharmacy assistant and pharmacy owner delivers a wide range of healthcare services in community pharmacies, healthcare hubs designed to meet community health needs. They were strategically positioned as healthcare professionals to help manage the COVID-19 pandemic and boost a country's pandemic response and readiness through their community responsibilities (Ashiru-Oredope et al., 2020).

The purpose of this study is to determine the impact of the COVID-19 pandemic on the attitudes and behaviors of the pharmacy workforce in independent drugstores in Pampanga. This study can help pharmacy organizations to develop programs that can support the pharmacy workforce during health crises such as a pandemic. The Pharmacy Workforce, specifically Pharmacy Owners, Pharmacists, and Pharmacy Assistants, are the direct beneficiaries of this study. The researchers will be able to determine the impact of COVID 19 on the attitudes and behaviors of the Pharmacy workforce.

## II. Methodology

### Research Design

Qualitative phenomenology was used to plan the research. The main goal of qualitative research is to understand, explain, investigate, discover, and make clear a group of people's situations, feelings, perceptions, attitudes, values, beliefs, and experiences (Kumar, 2011). Qualitative research study designs are better for looking at differences and differences in any part of social life (Kumar, 2011). Phenomenology is the study of experience from the point of view of the individual. It "brackets" commonly held beliefs and ways of experiencing things (Moustakas, 1994). It is especially good at putting people's experiences and thoughts from their own points of view in the spotlight and thus challenging structural or normative assumptions (Moustakas, 1994). Because of this, research designs are often based on deduction rather than induction. They are also often flexible and emergent, and they don't follow a strict order (Kumar, 2011).

### Sampling Method

The study used the convenience sampling method. Different books suggest different sample sizes for phenomenological research, but in reality, a group of 6 to 20 people is enough (Ellis, 2016). In the study, the idea of saturation was used. Charmaz (2006) says that a person should stop collecting data when the categories (or themes) are full. This means that getting new data no longer reveals new features or gives you new insights. The volunteers were recruited for their convenience and proximity to the researchers' homes. The people who took part in the study were the owners of independent drugstores as well as pharmacists and pharmacy assistants who worked there. Independent pharmacies are easy to approach and cooperate with because it is done directly with the pharmacy owners.

### Inclusion, Exclusion, and Withdrawal Criteria

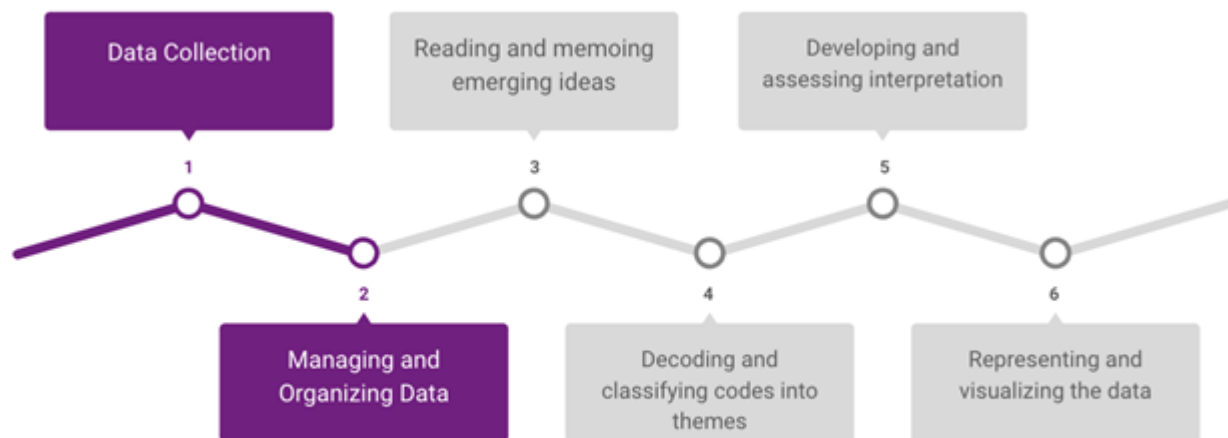
The study included all licensed community pharmacists in Pampanga with at least three years of experience, regardless of gender. Pharmacists and pharmacy assistants with three or more years of experience in a community pharmacy were guaranteed to have worked both before and during the pandemic. Pharmacy owners should have at least three years of experience in the industry. Participants who were between the ages of 20 and 59 were included in the study. The

study excluded pharmacy employees with less than two years of experience and those who were just hired during the pandemic, as it was not possible to compare working pre- and during pandemic, as well as drugstores that were formed during the pandemic. Participation in this research project was fully voluntary on the side of the participants. Participants have the right to decline to participate and to withdraw from the study at any moment without incurring any penalties and will still be treated the same.

### Ethical Considerations

This study underwent an ethics review under the University of Santo Tomas - Faculty of Pharmacy Re-search and Ethics Committee. It was approved by the FOP Research Ethics Committee (FOPREC). The confidentiality of the interview was guaranteed at all stages of the study's execution. An informed consent form to be signed by the participant was given after the nature, purpose, risks, and benefits of the study have been discussed.

### Research Process



**Figure 1. Data Analysis Process Flow**

The study sought the consent of the participating drug store first via the informed consent form. Rapport was established to gain the trust and confidence of the participants. After building rapport with the participants, the interviewer asked questions to the interviewee, and was voice recorded via a smartphone, to ensure accuracy of interpretation of the information gathered. The interview started with the pharmacy assistant, a standard set of questions was used. After the Pharmacy Assistant, the pharmacist was interviewed next, a standard set of questions was used. After the interview of the Pharmacy Assistant and Pharmacist, the researchers collated the data gathered from the Pharmacist and the Pharmacy Assistant. The information gathered from the pharmacist and pharmacy assistants was corroborated with the statements coming from the owner, and know the impact of COVID from the answers of the Pharmacist and Pharmacy Assistant. The

estimated time per participant is 15 minutes. After data gathering/interview, an expression of gratitude was given to the participant for his/her time.

### Data Processing and Analysis

The researchers used related literature to interpret the data from the interview, which was transcribed word for word. The participants were given an alpha-numeric code in the interview guide before the interview so that the researchers could readily follow their responses. During the interview, the researchers employed a voice recorder, and the file names of the audio recordings were named according to the participant's position.

Table 1: Codes used to secure the privacy of the participants.

Pharmacists	RP-01, RP-02, RP-03, RP-04, RP-05, RP-06, RP-07, RP-08, RP-09, RP-10
Pharmacy Assistants	PA-01, PA-02, PA-03, PA-04, PA-05, PA-06, PA-07, PA-08, PA-09, PA-10
Pharmacy Owners	PO-01, PO-02, PO-03, PO-04, PO-05, PO-06, PO-07, PO-08, PO-09, PO-10

The researchers used the interview guide to take notes. Researchers noted key ideas/statements. Memoing helps with data analysis, per Creswell (2017). It provides qualitative research methodology and outcomes. A field inter-view was conducted to compare verbatim transcription and memoranda to confirm response interpretation accuracy.

After memoing, qualitative data analysis centers on code construction (Creswell and Creswell 2017). According to Wolcott (1994), referenced by Creswell (2017), the data acquired will be "winnowed," with the necessary information left behind. Researchers may utilize dictionaries or thesaurus to define and verify technical terms. All of the details are reported as observed on-site (in situ) (Creswell and Poth 2017). There is a short list of codes that can be expanded. MAXQDA was used to analyze and categorize the data. A category system can be linear or network-like. MAXQDA organizes categories hierarchically in a tree. Categories can have subcategories, which can have sub-subcategories. The number of layers in more complex systems is sometimes governed by how categories are constructed (Radiker and Kuckartz, 2020).

The researchers can link their interpretation to broader works of literature (Creswell 2017). The interpretation process begins with code formulation, continues with theme construction, and ends with theme organization into larger abstraction units to make sense of the data (Creswell 2017).

Participants' (pharmacists, pharmacy assistants, and pharmacy owners) data was charted to compare their views and practices before and throughout the pandemic. Using a coding map, themes were visually sorted to monitor data trends. MAXQDA sorted and evaluated data.

### Data Triangulation

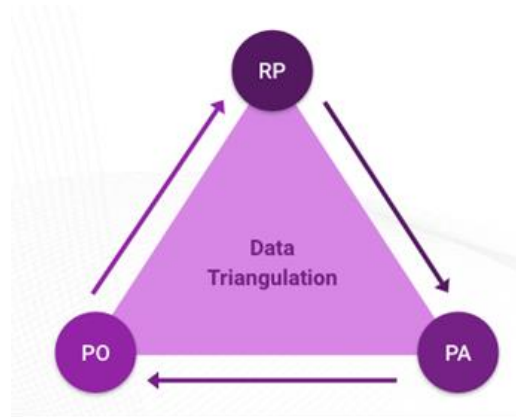


Figure 2: Data Triangulation

In qualitative research, triangulation is the process of learning about phenomena using many approaches or data sources (Patton 1999). The strength of additional data can compensate for any weaknesses in the data, boosting the conclusions' validity and trustworthiness (Carter 2014). In this study, pharmacy owners confirmed the information received from pharmacists and pharmacy assistants.

### III. Results and Discussion

This section summarizes the findings of the study that are significant to describing the impact of COVID-19 on community pharmacy attitudes and behaviors in Pampanga. A total of 30 participants were interviewed from 22 drugstores.

*1. What was the usual work in this drugstore that you did before the pandemic? How do you find these activities?*

The responses revealed that the workforce's regular job before the pandemic is dependent on their drugstore position. Pharmacists' typical tasks include medication counseling and dispensing. Housekeeping, sanitation, and retailing are typical tasks for pharmacy assistants. Both pharmacy assistants and pharmacists are involved in inventory management, ensuring that the drugstore has enough supplies and products to sell. The pharmacy owners confirmed these findings in their statements, but they are usually in charge of ordering because they manage the drug store's finances.



When asked how they felt about those tasks before the pandemic, the majority agreed that the workload was not that demanding or stressful.

*2. What were the protocols (SOPs) that this drugstore had before the pandemic? How did you find these protocols?*

Each drugstore's standard operating procedures vary based on the market they serve. Clinical, licensing, housekeeping, and inventory were the most common SOPs they mentioned. Pharmacists are adamant about following clinical guidelines while dispensing medications and providing medication counseling, while pharmacy assistants are adamant about not selling antibiotics to patients without prescriptions. When it comes to licensing requirements, pharmacy owners rely on pharmacists' competence, yet they are typically the ones who process the licensing requirements. The pharmacy assistants strictly adhere to housekeeping guidelines, ensuring that the inventories to sell are refilled prior to the beginning of pharmacy operations. If the drug store is short-staffed, the pharmacist is also expected to perform basic housekeeping. All employees follow standard operating protocols for inventory management, ensuring that no expired drugs reach patients and counting inventories to assure sustainability of the company. The SOPs implemented before the pandemic are good and easy to follow, according to all three categories.

*3. What were the usual activities during the pandemic? How did you find these activities?*

In addition to the usual work that the workforce has been doing prior to the pandemic, additional work on sanitation and hygiene is being done to be safe during the pandemic. Counseling and dispensing were still being conducted by the pharmacists. Retailing and housekeeping are still being done by the pharmacy assistants with the addition of extra sanitary procedures. Pharmacy owners affirmed the statements given by their workforce. The workforce finds the activities much stressful due to the increase in the volume of customers and the additional safety procedures being implemented.

*4. What were the SOP's during the pandemic? How do you find these protocols?*

In relation to the protocols being implemented in the pharmacy before the pandemic, additional protocols were mandated by the government to prevent the spread of the COVID-19 virus. Usual protocols include the licensing requirements, clinical-related protocols, and housekeeping procedures. However, additional protocols are mandated by the Inter-Agency Taskforce for COVID-19 (IATF), FDA, and DOH, such as sanitary procedures, wearing of personal protective equipment of both the customer and the staff. Another protocol by the FDA is limiting individual consumption of vitamins and supplements as well as alcohol and other facemasks to avoid hoarding of stocks by consumers. Social distancing or physical distancing is also being implemented strictly in their drug store. Protective barriers were also being installed on the counter for additional protection. For counseling procedures, although it is still being done by pharmacists, they do it faster than usual to avoid prolonged stay of the client in the drugstore.

The participants shared their sentiments about the new protocols being implemented in the drugstore. They shared that the protocols are very strict but conceded because it's for their safety. They also shared that this pandemic puts pressure on the workforce since people are afraid of going out of their houses. Additional stress is also being placed on the shoulder of the workforce on people panicking if medication is not available.

*5. How was your work satisfaction before the pandemic? What kept you satisfied? Was there dissatisfaction, if so, what made you dissatisfied?*

The participants' responses were unanimously positive about their work satisfaction prior to the pandemic. When asked what kept them happy, they mentioned professional fulfillment, employee relationships, and employee compensation. Professional fulfillment is included in pharmacists' job satisfaction; helping people and counseling patients is one of the factors that keeps them satisfied in their work. Professional fulfillment was also mentioned by pharmacy assistants, who stated that helping patients gives them job satisfaction. In terms of employee relationships, the majority of participants agreed unanimously that having a good relationship with coworkers increases their work satisfaction. Employee compensation was also mentioned by pharmacy assistants, who stated that having a salary makes them happy with their jobs. Pharmacy owners confirmed the statements made by both PAs and RPs about their job satisfaction prior to the pandemic.

Customer complaints and employee concerns are among the reasons for their dissatisfaction with their jobs. Irate and stubborn customers were cited as one of the reasons for work dissatisfaction by pharmacists and some pharmacy assistants. Salary delays were mentioned by the pharmacy owner, but the pharmacists and pharmacy assistants did not mention it in their interviews.

*6. How was your work satisfaction during the pandemic? What kept you satisfied? Was there dissatisfaction, if so, what made you dissatisfied?*

Despite the pandemic, some pharmacists and pharmacy assistants reported that they were satisfied with their jobs. However, due to the restrictions and lockdown, the drugstore's customer count has decreased, and they are meeting their sales quota. Some pharmacy owners reported an increase in sales during the pandemic, while others reported a decrease in sales. In terms of job satisfaction during the pandemic, pharmacists were still satisfied because they were able to help people during the pandemic. They also discussed their perceptions of their importance and role in the pandemic. Because of the additional hazard pay, pharmacy assistants cited employee compensation as one of the reasons they are still satisfied with their jobs. Some pharmacists expressed dissatisfaction by stating that they work alone and are bored during their shifts. One of the reasons for dissatisfaction, according to pharmacists, is irate and stubborn customers (which was also mentioned BEFORE the pandemic).



7. *What work-related problems did you encounter before the pandemic? Other than work, were there any other problems you encountered (family, personal, physical, mental health) How manageable were they, were you able to manage them?*

The pharmacists mentioned low wages and licensing issues as work-related issues, and one pharmacist mentioned losing patience with FDA processes. Other pharmacists reported no work-related issues prior to the pandemic. Customer service issues and late deliveries were mentioned by pharmacy assistants as work-related issues. For pharmacy owners, they did not notice any work-related issues with their employees, but they did mention that there were times when sales were down and they were having difficulty paying their utility bills. One owner stated that he is still having issues with his pharmacy assistants' certification.

Personal, family, and health issues were the outside-of-work issues that both the pharmacist and pharmacy assistants faced. The participants also discussed their transportation issues during the pandemic, including how difficult transportation was when the pandemic first began.

8. *Do these problems cause you to take a leave of absence?*

The majority of participants stated that they did not attempt to take a leave of absence prior to the pandemic due to the problems they listed in the previous question. Unless there are exceptional circumstances, some of the participants may take a leave of absence to resolve their issues.

9. *How often do you take an absence from work during the pandemic? What were the usual reasons (family, personal, physical health, mental health)?*

While the majority of participants said they would not miss work during the pandemic, the main reasons for absences would be transportation and fear of getting sick. They keep their absences to a minimum unless there is an emergency.

#### **IV. Conclusion**

COVID-19 made an impact on the attitudes of the pharmacy workforce in Pampanga. Based on their responses, it showed that the workforce experiences stress and fear during the pandemic. Little change on how a work is being done before the pandemic was observed in comparison to what was being done during the pandemic. This pandemic made them more conscious of the health protocols being implemented by the government.

There is a change in behavior of the workforce during this pandemic, they are more cautious on hygienic practices and as much as possible they avoid direct contact with patients/customers. The pharmacy workforce were more adamant on adhering to the guidelines set by the government.

## V. Recommendations

Following an analysis of the study's findings and results, the researchers made the following recommendations:

1. Despite their fortitude, the pharmacy workforce may attend wellness seminars/webinars sponsored by pharmacy organizations such as the Philippine Pharmacists Association (PPhA), Cosmetics, Health and Wellness Pharmacists Association, Inc. (COSHWellPhA), and Drugstore Association of the Philippines (DSAP). Resilience and Mental Health Wellness should be emphasized in programs.
2. The Philippine Pharmacists Association can also provide seminars/webinars on how to clean up after a pandemic. Despite the availability of a COVID-19 for Pharmacists Manual, there is no live training or live webinar about the manual.
3. Because of the erratic nature of COVID-19 cases in the Philippines, pharmacies should be prepared to adapt to any situation that may arise. The pharmacy workforce, particularly those working in independent drugstores, should engage in continuous professional learning education by regularly attending seminars/webinars on the most recent pandemic protocols.
4. Extend the study to a broader audience or a larger population to determine the impact of COVID-19 on pharmacy workforce attitudes and behaviors.

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