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Lived experiences and resilience of hospital pharmacists during the COVID-19 pandemic: An interpretative phenomenological analysis



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ABSTRACT

Background: Globally, the COVID-19 pandemic has challenged the overall healthcare system. Healthcare workers are an essential workforce during a pandemic as they have been involved in treating patients with COVID-19. They have been exposed to detrimental effects such as high infection and death rates, chronic stress, and fear of uncertainty. Their adaptability in providing care and maintaining psychological equilibrium under unprecedented crises like COVID-19 is poorly understood.

Objectives: This study aimed to explore the lived experiences and resilience of hospital pharmacists in the Philippines during the COVID-19 pandemic.

Methods: A qualitative study was conducted among hospital pharmacists in Metro Manila, Philippines. In-depth interviews were conducted virtually using a semi-structured topic guide. Interview transcripts were transcribed verbatim and analyzed using interpretative phenomenological analysis.

Results: The two themes that emerged from the data were challenges during the COVID-19 pandemic and the resilience of hospital pharmacists. Under challenges, it was subdivided into workplace and personal challenges. As for resilience, it was composed of positive coping mechanisms and positive outlooks of hospital pharmacists.

Conclusions: Hospital pharmacists faced many challenges and learned to adapt to the continued impact of the pandemic. Hospitals are encouraged to implement measures to prepare for future public health crises and provide resources for both physical and mental health meant for hospital pharmacists.

1. Introduction

The Coronavirus 2019 (COVID-19) pandemic has posed severe health and economic challenges to the worldwide community's growth and development. The World Health Organization (WHO) later designated it as a public health emergency of worldwide significance. SARS-CoV2 was highly contagious, resulting in life-threatening respiratory problems. As countries worldwide face the continuing threat of the COVID-19 pandemic, national governments and health ministries formulate, implement and revise health policies and standards based on recommendations by the WHO, experiences of other countries, and on-the-ground experiences. Despite fragmented international efforts to contain the spread, SARS-CoV2 has spread to 213 countries, resulting in more than 650 million cases and deaths approaching 7 million since its formal identification in Wuhan, China, in December 2019.

COVID-19 was initially identified in the Philippines on January 27, 2020, and local transmission was reported on March 7, 2020. Following

this, on March 8, the entire country was placed under a State of Public Health Emergency. By March 25, the Inter-Agency Task Force released a National Action Plan to control the spread of COVID-19. A community quarantine was initially put in place for the national capital region (NCR) starting March 13, 2020, and it was expanded to the whole island of Luzon by March 17. The coronavirus has caused a dramatic toll of deaths and inflicted a severe burden from a societal and economic point of view. In the Philippines, the total number of cases exceeded 4,000,000 and 60,000 deaths.

Providing patient-centered pharmaceutical care is crucial during the pandemic. This approach combines quality care and structured education at the individual, professional, and organizational levels and helps patients become active participants in their treatment. It increases the quality and effectiveness of medical care and patient satisfaction. Alongside intensive care unit (ICU) nurses, physicians, and respiratory therapists, hospital pharmacists have been part of the COVID-19 efforts. Their roles include the management of drug shortages, development of treatment protocols,

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participation in patient rounds, interpreting lab results for COVID-19, participant recruitment for clinical trials, exploring new drugs, medication management advice, and antimicrobial stewardship. ¹⁰ As part of antimicrobial stewardship programs, hospital pharmacists have been involved in developing local treatment protocols that repurpose antivirals and monitoring the use of antibiotics in cases of bacterial coinfections in COVID-19 patients. ¹¹ Hospital pharmacists have not stopped working because of COVID-19 and have stepped up to take on more responsibilities.

Hospital pharmacists' lived experiences have spoken out about the necessity for the institution to take action and that they should be compensated for their efforts in combating COVID-19. Hospital pharmacists also complained about working in a stressful environment due to increasing workload, an influx of patients, and a lack of medical personnel and medications. They voiced their resentment about the working environment being a "toxic" workplace. During the COVID-19 pandemic, the quality of life of hospital pharmacists may be negatively impacted by shifting working and living situations, such as isolation and separation from family, perceptions of stigma, and physical and mental health problems. Hospital pharmacists are generally exposed to various stressful work-related factors, many of which hurt their quality of life.

Resilience has traditionally been defined as the capacity to adapt to and maintain psychological equilibrium under conditions of extreme stress. ¹⁴ Individual practitioners' quick adaptability and resilience, particularly hospital pharmacists, are critical in responding to the rapidly shifting conditions of this pandemic. ¹⁵ Furthermore, the ability of hospitals to withstand pandemic situations depends on the level of preparedness of the institutions, and not all hospitals are equal in their preparedness. A reduced level of adaptability and resilience will impact the long-term viability of healthcare systems. Despite the impact on healthcare providers, excellent management of a pandemic depends on the level of preparedness of healthcare workers, including hospital pharmacists. ¹⁶ Healthcare workers who have developed adaptability and resilience are better equipped to cope with stress, lower their risk of burnout, and preserve their overall well-being when faced with difficult situations. ¹⁷

Early COVID-19 research was primarily quantitative in nature, reporting on a slew of surveys and mainly evaluating rates of distress in specific populations. ¹⁸ While significant, quantitative studies failed to grasp the complexity and nuances of healthcare workers' experiences, nor their perspectives on what support is most useful to them and when. A greater understanding of this will allow administrators and policymakers to develop and assist healthcare workers in acceptable and timely ways, per healthcare workers' stated views and preferences. Understanding healthcare workers' views, experiences, and demands is crucial today more than ever, as countries worldwide continue to confront ongoing waves of COVID-19. Tackling these issues will be essential in the future as we face other impending healthcare crises.

Therefore, this qualitative study aimed to explore hospital pharmacists' lived experiences and resilience during the COVID-19 pandemic. This will provide new insights on hospital pharmacists' adaptability in their role as healthcare workers.

2. Methods

2.1. Study design

A phenomenological approach was used in this qualitative study. Phenomenology is a type of qualitative research that focuses on the study of an individual's lived experiences in the world. ¹⁹ It is a powerful research method that is well-suited for exploring challenging problems in society. ¹⁹ It entails direct exploration, analysis, and description of the hospital pharmacists' experiences to achieve maximum intuitive presentation. At the same time, data on hospital pharmacists during COVID-19 were scarce. ²⁰ The study design was suitable to describe the dilemma that hospital pharmacists were facing during the time of pandemic.

2.2. Study participants

Participants include hospital pharmacists working in a tertiary hospital in Metro Manila, Philippines. Metro Manila was chosen as the target area because of the large number of hospital pharmacists and because it is the epicenter of the COVID-19 pandemic in the Philippines. ²¹ Selection criteria were clinical pharmacist, dispensing pharmacist, or in- and out-patient pharmacist, currently working in a tertiary hospital in Metro Manila, and with a minimum of two years working experience in a hospital setting. Municipality of Pateros and cities of Parañaque, Navotas, and Malabon were not included as there are no tertiary hospitals present in the area.

Data saturation was achieved among 18 hospital pharmacists. Data saturation is the limit wherein no new information was received from the participants. Data saturation is the most commonly employed concept for estimating sample sizes in qualitative research. ²² Each of the participants met the requirement for the inclusion criteria.

2.3. Data collection

Purposive sampling was the sampling technique used in this study. It is the most effective selection technique to gather rich information from limited sources.²³ Recruitment strategies such as sending emails to every tertiary hospital in Metro Manila and posting to social media platforms were utilized. Before conducting the interview, the hospital pharmacists were given a link from a survey administration software, composed of an informed consent form and demographic profile, for them to answer and to determine whether they would agree or disagree with the terms and conditions of the study. If the pharmacists agreed, they were automatically asked for an interview date and time. However, if the pharmacists disagreed with the terms and conditions or withdrew from the study, they were free to do so without any consequences. In-depth interviews were conducted virtually face-to-face for the 18 hospital pharmacists from June to July 2022 via Zoom meetings (video telephony software program), using a semistructured topic guide (Appendix 1) due to the restriction of face-to-face interaction brought about by COVID-19. Also, a formal letter was sent to the hospital pharmacists, and individual informed consent for the participants was given days before the scheduled interview. Detailed information and instructions regarding the virtual interview are in the letter. Interviews lasted 45 to 90 min and each was recorded and transcribed verbatim in either Filipino or English.

2.4. Data analysis

Interpretative phenomenological analysis was used to analyze the collected data and manually coded the process. According to the British Psychological Society and Blackwell Publishing, interpretative phenomenological analysis comprises the elicitation of self-report data via interview in conjunction with a sophisticated thematic analysis.²⁴ The analysis procedure started with identifying the significant statements from the hospital pharmacists. After gathering all the significant statements (n = 962), each statement was converted into meaning. The meaning was based on the significant statements provided by the hospital pharmacists. The relevance of experience and meaning in qualitative research is generally accepted and is common ground for qualitative studies.²⁵ Then, codes were formulated and used to develop the sub-themes and emergent themes. The results are formed with emergent themes, sub-themes, codes, and quotes from the hospital pharmacists. All the quotes were translated into English. It is essential to establish rigor and trustworthiness in qualitative studies so that the study findings have the "integrity" to have an impact on practice, policy, or both. Due to concerns over subjectivity and bias in qualitative research, a number of measures were implemented to assure rigor and trustworthiness throughout the study process, including ethical considerations.²⁶ All the themes and codes were also validated through peer debriefing and consultation with experts. Before finalizing the results, a summary of themes, sub-themes and descriptions was shared with hospital pharmacists to elicit further comments (member checking).²⁶ The

Table 1 Demographic characteristics of hospital pharmacists (n = 18).

Characteristics n (%)			
Sex			
Female	14 (77.8)		
Male	4 (22.2)		
Age (years)			
20–24	3 (16.7)		
25–29	10 (55.6)		
30-34	1 (5.6)		
35–39	2 (11.1)		
40–44	1 (5.6)		
45–49	1 (5.6)		
Years in practice (hospital setting)			
2–5	12 (66.7)		
6–10	3 (16.7)		
11 and above	3 (16.7)		
Role in the hospital			
Staff Pharmacist	4 (22.2)		
Clinical Pharmacist	4 (22.2)		
Pharmacist II	2 (11.1)		
Dispensing Pharmacist	2 (11.1)		
In- Patient Dispensing Pharmacist	1 (5.6)		
ER Satellite Pharmacist	1 (5.6)		
Clinical Pharmacist I	1 (5.6)		
Clinical Pharmacist II	1 (5.6)		
Senior Clinical Pharmacist	1 (5.6)		
Assistant Chief Pharmacist	1 (5.6)		
Hospital location			
Makati City	2 (11.1)		
Manila City	2 (11.1)		
Muntinlupa City	2 (11.1)		
Pasig City	2 (11.1)		
Quezon City	2 (11.1)		
Caloocan City	1 (5.6)		
Las Pinas City	1 (5.6)		
Mandaluyong City	1 (5.6)		
Marikina City	1 (5.6)		
Pasay City	1 (5.6)		
San Juan City	1 (5.6)		
Taguig City	1 (5.6)		
Valenzuela City	1 (5.6)		

ER — Emergency room.

qualitative methods and reporting of results adhered to the Consolidated Criteria for Reporting Qualitative Studies (COREQ) guidelines 27 and Standards for Reporting Qualitative Research (SRQR) 28 (Appendix 2).

2.5. Ethical considerations

The study received ethical approval from the University Ethics Review Committee of Adamson University (2022–02-PHA-05-038). Interactions with the hospital pharmacists were in a manner that would not breach

their privacy without their consent, would not injure their feelings, and acknowledge and accurately portray the information obtained from them. Privacy and voluntary participation of hospital pharmacists were ensured, and electronic informed consent was secured before the interviews.

3. Results

3.1. General characteristics of participants

Table 1 shows the demographic characteristics of hospital pharmacists. Most pharmacists were female (77.8%), aged 25–29 years (55.6%), and had 2–5 years of hospital experience (66.7%). At the same time, most of them (44.4%) were staff pharmacists and clinical pharmacists. Each city had two hospital pharmacists: Makati, Manila, Muntinlupa, Pasig, and Quezon. While Caloocan, Las Piñas, Mandaluyong, Marikina, Pasay, San Juan, Taguig, and Valenzuela each had one participant. Hospital pharmacists from the municipalities of Pateros, Parañaque, Navotas, and Malabon were omitted because there are no tertiary hospitals in the area.

3.2. Challenges during the COVID-19 pandemic

Table 2 illustrates the analytical framework of the challenges that hospital pharmacists confronted during the COVID-19 pandemic. The analysis revealed two themes: (1) workplace challenges, such as lack of personal communication, stressful work environment, increased workloads, virus exposure, medication shortage, problems with procurement of drugs, essential but undervalued, and (2) personal challenges, such as fear of the risk of transmission to family, work obligations, health challenges, transportation problems, and stigma on healthcare workers.

3.2.1. Workplace challenges

Lack of personal communication: A lack of communication impacts hospital pharmacists' interactions with coworkers, patients, and work. As communication was restricted, it was difficult for them to communicate with each other. Misinterpretation, miscommunication, and misunderstanding may cause errors when medications are involved, primarily if not explained adequately.

"We have difficulty communicating with patients and nurses especially in the COVID wards when they request medication and supplies. That's how difficult it was for us because we can't talk personally." (Participant 021420, 24 years)

Stressful work environment: A few hospital pharmacists talked about having a stressful work environment, which has already been talked about since the pre-pandemic days. One hospital pharmacist shared about the influx of patients and others explained that procuring and searching for medications that were not available in the hospital made working stressful and toxic.

Table 2The analytical framework of the challenges that hospital pharmacists confronted during the COVID-19 pandemic.

Sub-Themes	Categories	Description
Workplace challenges	Lack of personal communication	Personal communications are restricted
	Stressful work environment	Unorganized and pressured environment
	Increased workloads	Additional responsibilities and facilities
	Virus exposure	Exposure of the hospital pharmacists to the COVID-19 virus
	Medication shortage	Inadequate supply of medication
	Problems with procurement of drugs	Difficulty acquiring drugs and medicines
	Essential but undervalued	Scarcity of pharmacy staff, not properly compensated and absence of assistance
Personal Challenges	Risk of transmission to family	Fear to the risk of transmission to the family members
	Work obligations	Fulfilling their duties and working longer hours, despite not having enough rest
	Health challenges	Physical: Insufficient rest, exhaustion and tiredness
		Mental: Fear, anxiety, uncertainty, and confusion
		Emotional: Burnout, lack of support, stigma and being away from the family
	Transportation problems	Suspension of public transportation during the COVID-19 lockdowns
	Stigma on healthcare workers	Discriminated disease carrier and unrecognized part of the healthcare team

"Actually, we were a bit toxic at that time because we didn't know where to look for the drugs, where to get them, so we had a hard time then." (Participant 030629, 48 years)

"It's really a bit toxic because there are many patients. Since we cannot refuse the patients, the emergency room is occupied with 300 patients even though the limit is only 150 and we don't have enough personnel." (Participant 020703, 29 years)

Increased workloads: Increased workloads were visible in all working sectors during the COVID-19 pandemic, particularly in hospitals. Because of the fast-moving stocks of drugs and medicines, additional deliveries and replenishments were made to cater the high demand for medications. Another factor was a lack of human resources; many hospital pharmacists were relocated from their areas to be placed in a new facility, leaving heavy workloads on the pharmacy's remaining professionals.

"Our workload has increased a bit, more patients, more medications. We always seem to have daily delivery because of the need to replenish what we used." (Participant 030629, 48 years)

"There are 9 dispensing pharmacists and 4 were transferred to the handling of vaccines because our hospital is the storage facility of the local government unit (LGU). As pharmacists, we are dedicated to that area, the job of dispensing was heavier for the remaining pharmacists due to the additional workload." (Participant 020703, 29 years)

Virus exposure: Hospital pharmacists who worked as part of the healthcare workforce to battle COVID-19 were particularly susceptible to exposure to the virus. They risked their health daily by serving patients who are COVID-positive. As a result of their line of work, a significant number of healthcare workers took precautions to avoid infecting those around them.

"Usually, you might be cautious because based on what you see, of course you are exposed to a lot of positive patients and then most of the patients you see didn't really survive, this time it's important to just be honest like 'Hey I am exposed to the virus." (Participant 021705, 36 years)

Medication shortage: Medication shortages were one of the earliest difficulties to emerge during the pandemic's peak. The inability of distributors to provide medicines and drugs was one factor that contributed to the medication shortage. Vitamin C and drugs for cough, fever, and cold were the most prominent medications in great demand during the pandemic outbreak.

"There was a real shortage because there were many distributors who did not have transportation, so they could not deliver." (Participant 020330, 26 years)

Problems with procurement of drugs and medicines: In addition, the shortage of medications made it difficult for hospital pharmacists to dispense and meet the rising demand for medication among hospitalized patients. One hospital pharmacist experienced difficulty processing specific permits for pharmaceutical procurement. At the same time, other pharmacists were having difficulty obtaining drugs and medicines outside of their facilities.

"We had some difficulty in processing special permits to procure medicines. We are tasked to look for a place to buy the needed medicines." (Participant 030629, 48 years)

Essential but undervalued: Hospital pharmacists were essential but undervalued as they risked their lives during the pandemic with small and insufficient compensation, inadequate pharmacy staff, and less access to protective equipment and supplies. Even though the workload increased during the pandemic, hospitals did not compensate their workers for

overtime, and in some situations, their compensation was inadequate. Additionally, because the hospitals now have new facilities served by the pharmacist, additional pharmacists would have been a better solution for the hospital. This should have been done instead of hiring other healthcare workers. There has been a shortage of pharmacy staff since the pandemic up until now, and some hospitals have not addressed this concern, which has driven pharmacists to resent the hospital for failing to take action. In certain hospitals, pharmacists were ineligible for accommodation, even if they lived far away from the hospital, because they did not have direct patient contact; hence, nurses and physicians were given the top priority to receive accommodation.

"But never a pharmacist was hired. Never. So, we had to adjust, embrace all the work, and sometimes take home the reports. I'm feeling bad. They provided other healthcare workers but never did they hire a pharmacist or any additional pharmacist in the hospital during the pandemic up until now." (Participant 020703, 29 years)

"We are hoping for the availability of the PPE [personal protective equipment]. Before, we were not given free so we had to buy." (Participant 030629, 48 years)

3.2.2. Personal challenges

Risk of transmission to family: Hospital pharmacists were most concerned about becoming infected, becoming virus vectors in their homes, and infecting their families. Hospital pharmacists took precautions such as disinfecting their possessions, avoiding personal contact, and not returning home entirely to protect their family members.

"It's just that I didn't get home very often then. Because I'm also afraid of infecting them, my mother and my family. So, I really avoid it at first, especially my parents, they are a bit old and my sibling is also asthmatic. Oh right? So, I won't go home for the time being." (Participant 030401, 28 years)

Work obligations: Despite their fears, some hospital pharmacists were nevertheless obligated to cover the posts of those who were infected by the virus. Even if they did not have any time off, they were still required to go to work.

"That's what we felt, fear, but since there are staff that were infected by COVID, we became obliged to fill their positions." (Participant 030401, 28 years)

"We are coming to work all throughout so we don't have any rest even during the pandemic." (Participant 030629, 48 years)

Prior to the pandemic, hospital pharmacists worked an average of 8 h each day; however, during the pandemic surge, they were needed to work $12\,h$ or more. The majority of hospital pharmacists were complaining about the implementation of the adjusted schedules during the COVID-19 outbreak.

"Schedule. Due to lack of personnel, the schedules are adjusted. We did straight duty. Actually, that was a problem even before the pre-pandemic because there weren't too many pharmacists, and no one was applying for a hospital position. The scheduling is one of the challenges I've encountered. (Participant 031201, 24 years)

Health challenges: During the COVID-19 outbreak, hospital pharmacists encountered a variety of health challenges. The first was the challenge of keeping healthy for work. One approach to treating COVID-19 is strengthening the immune system, which requires a healthy body.

"One of those challenges is how to make myself healthy because I will come to work and be at risk of having COVID even if I'm protected by sanitation or the cleanliness. (Participant 031201, 24 years)

The second health challenge was experiencing anxiety throughout the pandemic, which stemmed from wondering whether or not they would contract the virus and how severe its effects would be.

"Anxiety during the peak of the pandemic? Yes, because what is happening around is uncertain, of course you are personally afraid that you might contract COVID, because the effect of COVID on people is different. There are others who have recovered, there are others who had a severe impact on them when they contracted COVID. So of course, you're anxious, maybe later the effect on me is not mild." (Participant 031303, 24 years)

Since hospital pharmacists and other healthcare staff have been combating COVID-19 for years, their exhaustion is already evident. Despite enduring burnout or exhaustion to the point where most of them feel unwell, hospital workers continue to perform their duties to the best of their abilities.

"Burnout? Everyday. That's all I can say, because you're going home with burnout, until now since I came in and even. Others also experienced burnout as people are so tired sometimes when you talk to them, they are cranky then you really feel that they don't want to work anymore. Now I'm like that, now I don't want it anymore. I'm tired." (Participant 031201, 24 years)

Transportation problems: Public transportation was the most frequent method for Filipinos to commute to work; however, owing to the pandemic, jeepneys, trains, and tricycles have been halted since the government was strict about imposing the lockdown. As a result, hospital pharmacists had difficulty using limited public transportations to go to work and to return home.

"One of the most feared situations is having no public transportation. Of course, not all of us have a house near the hospital, so they have no other means of transportation other than public transportation." (Participant 020330, 26 years)

Stigma on healthcare workers: The stigma attached to hospital pharmacists made their job more difficult than usual. Some people were afraid of healthcare workers simply because they worked in hospitals. However, they are being undervalued by the public who were unaware that they were among the healthcare workers working tirelessly to combat the pandemic.

"Maybe we are underappreciated, personally for me that's all that's missing. The public lacks the idea that behind nurses there is a pharmacist there." (Participant 021429, 28 years)

"Besides knowing that we worked in the hospital, of course the people have the stigma during the pandemic like? 'They are working in a hospital; we can be infected when we interact with them' like that." (Participant 031303, 24 years)

3.3. Resilience of hospital pharmacists during the COVID-19 pandemic

Table 3 shows the analytical framework of resilience. This theme focuses on how the hospital pharmacist overcomes complex challenges in every section of the hospital. These include their positive coping

mechanisms, which include individual coping strategies, spiritual support, camaraderie, and family support. The positive outlook includes appreciation on pharmacists, returning to the old routine, adapting to changes, and acceptance of the situation.

3.3.1. Positive coping mechanisms

Individual coping strategies: Hospital pharmacists are in the first line on dealing with COVID-19 patients. One of the hospital pharmacists shared that their coping is not listening to the news to avoid negativity. Some mentioned they read books, watch movies, exercise regularly, and eat their favorite foods as a form of stress reliever.

"So, I turned to my hobbies. Listening to music, instrument playing and drawing. Also talking to my family and chatting with friends. My favorite music hypes me up and my day." (Participant 020629, 25 years)

"Food is most likely my coping mechanism especially in our workplace, if we are burnout during duty, we will encourage others to order food outside. Eating my favorite food gives me satisfaction." (Participant 031303, 24 years)

Spiritual support: Filipinos are regarded to be among the many religious people in the world. Despite their difficulties in dealing with COVID-19, the hospital pharmacists chose to strengthen their faith to deal with the situation.

"Honestly, my solution is prayer. Almost every duty, I always make time to pray in our chapel's institution. Personally, faith is very significant during the COVID pandemic. It is very helpful in every situation." (Participant 021608, 25 years)

Camaraderie: Pharmacists and other members of the institution's health care team spend valuable time together. Coworkers can be a source of energy to push things forward despite the adversities.

"My workmates are my source of energy since they are the ones who are always with me. After that, I always wanted to do duty. Sometimes I worked five days straight as a support to my workmates and colleagues." (Participant 021705, 36 years)

Family support: Few hospital pharmacists are suffering from mental illnesses due to increased stress and losing hope to continue working. To deal with the challenge, they look to their family for motivation and inspiration. They mentioned that their family is their support during the pandemic. Few hospital pharmacists include their family as a part of their growth.

"Somehow, I gained my strength to survive in this period, of course, also from my family, they are waiting for me to come home, and they are a part of my growth as a person." (Participant 021420, 24 years)

3.3.2. Positive Outlooks

Appreciation on pharmacists: Some pharmacists were provided with sufficient hospital assistance in their institution. They were delighted that management valued them and provided them with anything they needed.

Table 3The analytical framework of resilience.

Sub-Themes	Categories	Description
Positive coping mechanisms	Individual coping strategies	Personal coping mechanisms
	Spiritual support	Enhance connection with God
	Camaraderie	Engagement with coworkers
	Family support	Family members as source of inspiration and motivation
Positive outlooks	Appreciation on pharmacists	Support and appreciation to the hospital pharmacists for their service
	Returning to the old routine	Returning to being patient centered
	Adapting to changes	Flexible to new changes
	Acceptance of the situation	Acceptance of things that cannot be controlled

"We need support from the institution from which we are working to overcome the fear of exposure to the virus. Luckily, we are provided with PPEs. They also provide importance to us by means of meals and transportation." (Participant 010329, 40 years)

"The hospital provided us with everything, even the allowance." (Participant 021429, 28 years)

People outside and inside the hospital acknowledged the work of hospital pharmacists. Several pharmacists gave feedback on the donations they received.

"Sometimes I'm glad to see that someone is appreciating us by giving free drinks to the hospital, not only free drinks but others also serve us food." (Participant 020703, 29 years)

Returning to the old routine: As the COVID-19 caseload and associated pressure on the health system decrease, many services that were suspended would be reintroduced. Decisions on when and how to safely restore services may vary depending on the condition. Even in the current uncertain situation, hospital pharmacists had diligently completed their duties, with the thought of regaining daily life and work. They acknowledged the significance of routine work duties like warding and charting.

"But for us here, I prefer to go back to doing charting because it's better, because it's good that you were patient centered, patient care. Unlike now, it's like nothing, like these I don't have anything to do, later they will call to order in bulk, so I just need to wait for it." (Participant 030519, 31 years)

Adapting to changes: The hospital is undergoing new implementations due to increased COVID-19 cases. Hospital protocols and changes brought work-related and personal impact to hospital pharmacists and other healthcare workers. By understanding the solutions implemented, pharmacists were adaptable to any change.

"The changes that happen in the workplace are adapted by us pharmacists. We understand that changes are implemented by the institution where for the betterment of us and its patients, the best thing we need to do is follow." (Participant 020330, 26 years)

"It is not on how to bounce back to our normal [pre-pandemic] life but it is more on how to survive with these changes... that is our focus." (Participant 021608, 25 years)

Acceptance of the situation: In a world where no one has control, it is essential to be open to new experiences and able to accept changes. Hospital pharmacists must always be prepared to accept whatever is beyond their control. It is more important that they put out their best efforts to carry out their duties and responsibilities.

"It's like acknowledging whatever is in front of you now because you can't run away from it like this pandemic. We can no longer deny that the virus is really circulating around but all we can do is prepare ourselves not to be fearful, like that." (Participant 031303, 24 years)

4. Discussion

During the pandemic, hospital pharmacists are engaged in challenging situations in providing pharmaceutical care. Two types of challenges emerged, which are workplace and personal challenges. COVID-19 has weakened healthcare systems that are already under stress due to insufficient funding, a lack of human resources, and insufficient facilities and service delivery. Hospitals that aided pharmacists accepted the change and rapidly adopted new methods of operation. To cope with their challenging situations, hospital pharmacists in this study also practiced positive

coping mechanisms and positive outlooks to strengthen their resilience during this pandemic.

As shown in the results, hospital pharmacists in this study faced mounting challenges mainly due to increased number of patients and demand at the hospital. Hospital pharmacists mentioned the hindrance in communication between their colleagues that caused an unorganized and high-pressure environment leading to increase in their current workload. These results were in line with the previous studies related to the working condition of hospital pharmacists in the Philippines. An arrative review on pharmacists' roles during COVID-19 global pandemic stated that a good and healthy workplace is acquired by having efficient collaboration between the employees. Hence, efficient communication among healthcare workers is critical during a crisis.

Hospital pharmacists also expressed their exasperation towards longer working hours, lack of healthcare providers, and addition of other work obligations. Working in high-demand occupations, such as those with extreme workload or time pressure, is connected to new occurrences of depression and anxiety in adults without a history of psychiatric issues. Since hospital pharmacists provide direct patient interaction, they mentioned that this exposure brings anxiety and fear to them that their family might be infected. Also, they often experience heightened mental stress due to fear and the prospect of endangering their own lives. Also, because to fear and the prospect of endangering their own lives. The provided health can have more severe consequences down the line and may lead to turning over of hospital pharmacists and other healthcare workers.

Public transportation is the main source of transportation used by the hospital pharmacists in this study. As of 2022, the Philippine capital ranked as 58th in urban mobility readiness among 60 cities around the world.³⁷ Some of the hospital pharmacists mentioned that at the early stage of the pandemic they are struggling due to absence of transportation. During the COVID-19 pandemic the Philippine government halted public transportations.³⁸ Thus, different institutions provided scheduled private transportations and boarding near their residing hospital. Transport resilience planning must thus ensure equitable access to healthcare workers by reducing the disproportionate risks of such service outages to the most vulnerable members of a hospital community.³⁹ These disruptions can be withstood by affected individuals by adopting various strategies such as remoding (using a different form of transport for at least a main leg of the trip), retiming (modifying the time at which the trip starts) and rescheduling/canceling (canceling the activity on that day and potentially undertaking it on a different day).³⁹

To understand how the hospital pharmacists overcome their challenges, it is essential to determine their different positive coping mechanisms. They mentioned that to keep themselves motivated, they keep their day productive through music, exercise, and food. Additionally, strong relationships between their colleagues provided them relief and improved their quality of work. Most of them have the courage to occupy their day to gain knowledge and to be physically healthy. Other countries (such as Malaysia, Australia, and Lithuania) reported that self-care is a form of coping strategy to overcome stress. ^{40–43} Meanwhile, their religious involvement boosts them to work unconditionally.

Our findings stated that the hospital pharmacists, despite experiencing loneliness and burnout, figured out ways to overcome it in a productive way. As for the positive outlooks, some of the hospital pharmacists mentioned appreciation towards private donations and the support coming from their residing institution. Despite the changes due to COVID-19, the hospital pharmacists in this study mentioned that they are adaptable in every situation even during a crisis. This is in line with the retrospective study conducted in the United Arab Emirates and cross-sectional study in Italy that the hospital pharmacists play different crucial roles in filling the gaps of the institution. 44,45 Also, a meta-analysis and systematic review in Japan stated that the role of pharmacists had expanded and adapted public health activities as an intervention for COVID-19. 46

This study has several limitations. First, this study was conducted in urban cities in Metro Manila, Philippines, hence we only had limited

participants. Data collection from other tertiary hospitals and hospital pharmacists outside of Metro Manila will provide more insights for the study. Second, purposive sampling may introduce sampling bias as only those who had the time and were willing to participate can share their experiences. Third, recall bias can also be an issue since hospital pharmacists have to remember their work conditions before and during the peak of the pandemic. Notwithstanding the limitations, interpretative phenomenological analysis was conducted to ensure that the themes related to challenges and resilience come from the emic views of the hospital pharmacists.

5. Conclusions

Hospital pharmacists are essential in providing pharmaceutical care to COVID-19 patients. They are in charge of supplying patients with the necessary medication. However, personal and workplace challenges affect the hospital pharmacists' general health and work quality. In addition, fear of infection, stigmatization, and mismanagement exacerbated their situation. Clearly, hospital pharmacists expressed concern about restricted resources. It is critical to emphasize the provision of basic needs as it is deemed essential to hospital pharmacists. Hiring more healthcare personnel benefits hospital pharmacists and other healthcare members to avoid excessive duty hours and reduce workloads. Furthermore, hospital pharmacists are underappreciated healthcare team members. Society should recognize hospital pharmacists for their essential role in combating the COVID-19 pandemic.

Positive coping and outlooks are necessary for hospital pharmacists to overcome personal and workplace challenges. It is suggested to create interventions that can be used to improve hospital pharmacists' resilience and hence their overall health and well-being. For example, psychological first aid reduces burnout among those working in the healthcare system. Such intervention will help build more resilient hospital pharmacists.

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CRediT authorship contribution statement

Mark James Flotildes: Conceptualization, Methodology, Investigation, Formal analysis, Data curation, Visualization, Resources, Writing – original draft, Writing – review & editing. Ghiemelle Garcia: Conceptualization, Methodology, Investigation, Resources, Writing – original draft. Angelique Mae Piol: Conceptualization, Methodology, Investigation, Formal analysis, Data curation, Visualization, Resources, Writing – original draft, Writing – review & editing. Edward Niño John Simeon: Conceptualization, Methodology, Validation, Visualization, Writing – review & editing. Kevin Jace Miranda: Conceptualization, Methodology, Validation, Supervision, Project administration, Writing – review & editing. Rogie Royce Carandang: Conceptualization, Methodology, Visualization, Validation, Supervision, Project administration, Writing – review & editing.

Declaration of Competing Interest

There is no conflict of interest for this study.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.rcsop.2023.100299.

References

- Cucinotta D, Vanelli M. WHO Declares COVID-19 a Pandemic. Acta Biomed Mar 2020;91
 (1):157–160. https://doi.org/10.23750/abm.v91i1.9397. [PMID: 32191675; PMCID: PMC7569573].
- Cascella M, Rajnik M, Aleem A, et al. Features, Evaluation, and Treatment of Coronavirus (COVID-19). StatPearls. Treasure Island (FL): StatPearls Publishing; 2023. Jan. Available from: https://www.ncbi.nlm.nih.gov/books/NBK554776/.
- Hsiang S, Allen D, Annan-Phan S, et al. The effect of large-scale anti-contagion policies on the COVID-19 pandemic. Nature 2020;584:262–267. https://doi.org/10.1038/s41586-020-2404-8
- Hiscott J, Alexandridi M, Muscolini M, et al. The global impact of the coronavirus pandemic. Cytokine Growth Factor Rev 2020;53:1–9. https://doi.org/10.1016/j.cytogfr. 2020.05.010
- COVID 19 Coronavirus Pandemic. Retrieved from: worldometers.info/coronavirus/ #countries.
- Ocampo L, Yamagishic K. Modeling the lockdown relaxation protocols of the philippine government in response to the covid-19 pandemic: an intuitionistic fuzzy dematel analysis. Socioecon Plann Sci 2020:72. https://doi.org/10.1016/j.seps.2020.100911.
- Talabis D, Babierra A, Buhat C, Lutero D, Quindala K, Rabajante J. Local government responses for COVID-19 management in the Philippines. BMC Public Health 2021;21: 1711. https://doi.org/10.1186/s12889-021-11746-0.
- Lorig KR, Holman H. Self-management education: history, definition, outcomes, and mechanisms. Ann Behav Med 2003;26(1):1–7. https://doi.org/10.1207/ s15324796abm2601 01.
- Roter DL, Hall JA. Physician gender and patient-centered communication: a critical review of empirical research. Annu Rev Public Health 2004;25:497–519. https://doi.org/10.1146/annurev.publhealth.25.101802.123134.
- Elbeddini A, Prabaharan T, Almasalkhi S, Tran C. Pharmacists and COVID-19. J Pharm Policy Pract 2020;13:36. https://doi.org/10.1186/s40545-020-00241-3.
- Stevens MP, Patel PK, Nori P. Involving antimicrobial stewardship programs in COVID-19 response efforts: all hands on deck. Infect Control Hosp Epidemiol 2020;41(6):744– 745. https://doi.org/10.1017/ice.2020.69.
- Grimm C. Hospital experiences responding to the COVID-19 pandemic: results of a National Pulse Survey March 23–27, 2020. https://oig.hhs.gov/oei/reports/oei-06-20-00300 pdf 2020
- Chang EML, Bidewell JW, Huntington AD, et al. A survey of role stress, coping and health in Australian and New Zealand hospital nurses. Int J Nurs Stud 2007;44(8). https://doi. org/10.1016/j.ijnurstu.2006.06.003.
- Southwick SM, Bonanno GA, Masten AS, Panter-Brick C, Yehuda R. Resilience definitions, theory, and challenges: interdisciplinary perspectives. Eur J Psychotraumatol 2014;5. https://doi.org/10.3402/ejpt.v5.25338.
- Emanuel E, Persad G, Kern A. An ethical framework for global vaccine allocation. Science (80-) 2020;369(6509). https://doi.org/10.1126/SCIENCE.ABE2803.
- Stevens S, Pritchard A. Important for action second phase of NHS response to COVID19. Available online: https://www.england.nhs.uk/coronavirus/wp-content/ uploads/sites/52/2020/04/second-phase-of-nhs-response-to-covid-19-letter-to-chiefexecs-29-april-2020.pdf 2020.
- Sacgaca L, Gonzales A, Alkubati S, et al. The impact of mental well-being, stress, and coping strategies on resilience among staff nurses during COVID-19 in Saudi Arabia: A structural equational model. Healthcare 2023;11(3):368. MDPI AG. Retrieved from: https://doi.org/10.3390/healthcare11030368.
- Serafini G, Parmigiani B, Amerio A, Aguglia A, Sher L, Amore M. The psychological impact of COVID-19 on the mental health in the general population. QJM 2020;113(8): 531–537. Advance online publication.: https://doi.org/10.1093/qjmed/hcaa201.
- Williams H. The meaning of "phenomenology": qualitative and philosophical phenomenological research methods. Qual Rep 2021;26(2):366–385. https://doi.org/10.46743/2160-3715/2021.4587.
- Emanuel E, Persad G, Upshur R, et al. Fair allocation of scarce medical resources in the time of Covid-19. N Engl J Med 2020(Mar 23). https://doi.org/10.1056/NEJMsb2005114.
- Amit A, Pepito V, Dayrit M. Lessons learned during the early phase of the COVID-19 pandemic in the Philippines. 2023. https://ojs.wpro.who.int/ojs/public/journals/1/covid19/ wpsar.2020.11.5.020Amit.pdf.
- 22. Morse J. The significance of saturation. Qual Health Res 1995. https://doi.org/10.1177/104973239500500201.
- Palinkas L, Horwitz S, Green C, Wisdom J, Duan N, Hoagwood K. Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. https://doi.org/10.1007/s10488-013-0528-y.
- Smith JA, Osborn M. Interpretative phenomenological analysis. Doing Social Psychology Research. The British Psychological Society and Blackwell Publishing Ltd. 2008. p. 229– 254. https://doi.org/10.1002/9780470776278.ch10.
- Palinkas L, Horwitz S, Green C, Wisdom J, Duan N, Hoagwood K. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. 2016. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4012002/.
- Hadi MA, José Closs S. Ensuring rigour and trustworthiness of qualitative research in clinical pharmacy. Int J Clin Pharmacol 2016;38(3):641–646. https://doi.org/10.1007/ s11096-015-0237-6.
- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. International J Qual Health Care 2007;19(6). https://doi.org/10.1093/intqhc/mzm042.
- O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med 2014;89(9):1245–1251. https://doi.org/10.1097/ACM.000000000000388.

- Shrestha R, Shrestha S, Sapkota B, Khanal S, Bhuvan KC. Challenges faced by hospital pharmacists in low-income countries before COVID-19 vaccine roll-out: handling approaches and implications for future pandemic roles. Turkish J Pharmaceut Sci Turk Pharm Assoc 2022. April 1. https://doi.org/10.4274/tips.galenos.2021.37974.
- Langran C, Mantzourani E, Hughes L, Hall K, Willis S. "Tm at breaking point"; exploring pharmacists' resilience, coping and burnout during the COVID-19 pandemic. Explor Res Clin Soc Pharm 2022;5, 100104. https://doi.org/10.1016/j.rcsop.2022.100104.
- Yanesa J, Aunzo J, Bakal H, et al. Relationship between the working conditions and occupational stress of pharmacists from selected hospitals in Oriental Mindoro before and during COVID-19 pandemic: a correlational study. 2022. https://doi.org/10.30574/gscbps.2022.20.1.0271.
- İbrahim O, Ibrahim R, Ibrahim Y, Madawi E, Al Deri M. Shedding the light on Pharmacists' roles during COVID-19 global pandemic. Saudi Pharm J 2022;30(1):14–27. https://doi.org/10.1016/j.jsps.2021.12.003. (Epub 2021 Dec 22. PMID: 34961807; PMCID: PMC8694787).
- Khanal P, Devkota N, Dahal M, et al. Mental health impacts among health workers during COVID-19 in a low resource setting: a cross-sectional survey from Nepal. Glob Health 2020;16:89. https://doi.org/10.1186/s12992-020-00621-z.
- Biber J, Ranes B, Lawrence S, et al. Mental health impact on healthcare workers due to the COVID-19 pandemic: a U.S. cross-sectional survey study. J Pat Report Outcomes 2022;6(1):63. https://doi.org/10.1186/s41687-022-00467-6.
- Adams JG, Walls RM. Supporting the Health Care Workforce During the COVID-19 Global Epidemic. JAMA 2020;323(15):1439–1440. https://doi.org/10.1001/jama. 2020.3972.
- Elbeddini A, Wen CX, Tayefehchamani Y, et al. Mental health issues impacting pharmacists during COVID-19. J Pharm Policy Pract 2020;13:46. https://doi.org/10.1186/s40545-020-00252-0.
- Luna F. Metro Manila public transportation among the worst in the world: study. Philstarcom 2023. Retrieved from: https://www.philstar.com/headlines/2022/11/25/2226400/metro-manila-public-transportation-among-worst-world-study.

- Sunio V, Carlo Ugay J, Li CW, Joy Liwanag H, Santos J. Impact of public transport disruption on access to healthcare facility and well-being during the COVID-19 pandemic: a qualitative case study in metro Manila. Philippines Case Stud Transport Policy 2023;11, 100948. https://doi.org/10.1016/j.cstp.2023.100948.
- Marsden G, Anable J, Chatterton T, et al. Studying disruptive events: innovations in behaviour, opportunities for lower carbon transport policy? Transp Policy 2020;94: 89-101. Retrieved from: https://doi.org/10.1016/j.tranpol.2020.04.008.
- Smigelskas J, Sertvytiene L, Zailskiene G, et al. Wellbeing and Stress Coping among Healthcare and Pharmacy Workers: Experiences during the First COVID-19 Lockdown in Lithuania. 2022. https://doi.org/10.3390/healthcare10050787.
- Billings J, Ching B, Gkofa V, Greene T, Bloomfield M. Experiences of frontline healthcare workers and their views about support during COVID-19 and previous pandemics: a systematic review and qualitative meta-synthesis. 2021.Retrieved from: https://bmchealthservres. biomedcentral.com/articles/10.1186/s12913-021-06917-z.
- Kua K, Lee S. The Coping Strategies of Community Pharmacists and Pharmaceutical Services Provided during COVID-19 in Malaysia. 2021. https://doi.org/10.1111/ijcp.14992.
- Shahin W, Issa S, Jadooe M, et al. Coping Mechanisms Used by Pharmacists to Deal with Stress, What Is Helpful and What Is Harmful?. 2002. https://doi.org/10.1016/j.rcsop. 2022.100205.
- Hammad M, Tashtoush M, Faki El, et al. Hospital pharmacy response to the COVID-19 pandemic: experience from a regional referral center in the United Arab Emirates. J Pharm Policy Pract 2023;16:36. https://doi.org/10.1186/s40545-023-00542-3.
- Damuzzo V, Bertin R, Mengato D, Chiumente M, Rivano M, Palozzo A. Hospital pharmacy response to Covid-19 pandemic in Italy: what we learned from the first outbreak wave. J Pharm Pract 2023;36(1):87–95. https://doi.org/10.1177/08971900211023643.
- Kambayashi D, Manabe T, Hirohara M. Adaptations in the role of pharmacists under the conditions of the COVID-19 pandemic: a systematic review and meta-analysis. BMC Health Serv Res 2023;23:72. https://doi.org/10.1186/s12913-023-09071-w.