Self-care Practices of Hypertensive Adult Female Patients in the City of Marikina amidst the COVID-19 Lockdown: A Phenomenological Inquiry

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ABSTRACT

Background. Hypertension is one of the leading causes of morbidity in the Philippines owing to urbanization, population growth, and individual lifestyles. Upon the advent of COVID-19 in the Philippines, Enhanced Community Quarantine (ECQ) was imposed from March to May 2020, resulting in mobility restrictions and changing the overall focus of the health system.

Objective. This paper aims to understand and describe daily experiences, self-care practices (SCPs), and barriers and facilitators involved in the management of hypertension of selected female hypertensive patients in Marikina City during ECQ.

Methods. A descriptive phenomenological design complemented with purposeful sampling was employed to gather in-depth information regarding lived experiences and SCPs of female hypertensive patients aged 40-59 in the City of Marikina during ECQ.

Results. Inductive thematic analysis using NVivo12 Qualitative Data Analysis software following 13 in-depth inter-views revealed five themes: 'pagkakulong' or im-position, 'pagpapahalaga' or preservation, 'pakikibagay' or adaptation, 'palakasan' or inclination, and 'panawagan' or petition. Discontinuation and acquisition of SCPs were influenced by factors external to participants, while retention of practices was influenced mainly by individual factors, implying that a patient-centered approach is important in drafting interventions and creating policies for long periods of lockdown.

Conclusion. The imposed ECQ affected environmental and macro-level factors surrounding discontinuation, retention, and acquisition of SCPs related to hyper-tension. Inequities in resource distribution affected patient perception of health services and willingness to seek care. Recommendations include establishing an association between barriers, facilitators, and out-comes and broadening the study's coverage to wider demographics.

Keywords: pandemic preparedness, COVID-19, self-care, qualitative research, hypertension, health care reform

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INTRODUCTION

Hypertension remains one of the leading causes of morbidity and mortality worldwide due to its increased prevalence, particularly in low- and middle-income countries, despite global mean blood pressure being relatively constant for the past four decades.[1,2] The Department of Health (DOH) recorded a total of 446,383 cases of hypertension in the Philippines, making it the second leading cause of morbidity.[3] It was also noted that the prevalence of hypertension is higher among females than males.[3]

Common risk factors for hypertension have been classified into two: behavioral risk factors, which include tobacco and alcohol use, unhealthy dietary practices, and physical inactivity; and biomedical risk factors, which include increased blood sugar, blood lipids, and abnormal increments in an individual's body mass index.[4] Additionally, smoking and alcohol consumption are factors significantly associated with hypertension.[4]

The imposition of quarantine measures corona virus disease 2019 (COVID-19) pandemic resulted in a decline in physical activity and an increase in sedentary behaviors of individuals because the closure of fitness centers and outdoor recreational spaces fundamentally altered physical activities associated with work and transport of a significant proportion of the general population.[5,6] Moreover, a reduction in consumption of fresh and healthy food options was also observed since individuals are not able to easily purchase healthy food items.[7] Financial stress brought about by job losses also affected patients' medication compliance, forcing hypertensive individuals to resort to self-care practices (SCPs).[8] Overall, interventions introduced to limit negative impacts of the COVID-19 pandemic presented various consequences that increased susceptibility of hypertensive patients to health complications due to effects of mobility restrictions on modifiable risk factors for the disease; ironically, such complications are also predisposing factors for severe COVID-19 infection.

There remains a need to look into the specific situation of Filipinos that involves the Philippine healthcare system and the distinct challenges faced by hypertensive patients during the pandemic. There has been limited knowledge on daily experiences of hypertensive patients due to the pandemic, thereby emphasizing the need to describe these experiences, identify common themes among these, and determine relevant facilitators and barriers to health behaviors. There is also limited knowledge on daily experiences, adherence to self-care practices, and social determinants influencing management and control of hypertension among patients during the pandemic. This is because most research studies tackling hypertension in the Philippines have focused on epidemiology, biomedical aspects, and clinical outcomes.[9] Managing comorbidities during a pandemic is a special circumstance because care has been disrupted due to prioritization of COVID-19 cases in health facilities, thus needing further inquiry.

Cognizant of the need for a more patient-centered approach to management of hypertension during public health disruptions and emergencies, the study aimed to answer, "How did the Enhanced Community Quarantine (ECQ) during the COVID-19 pandemic affect the self-care practices of hypertensive adult female patients aged 40-59 years old in the City of Marikina?" The study aimed to describe the effects of the ECQ from March to May 2020 amidst the COVID-19 pandemic on SCPs of female adult hypertensive patients aged 40-59 years old in the City of Marikina according to clinical practice guidelines. Specifically, in-depth interviews were conducted to describe the following: (1) discontinued SCPs and barriers that led to their cessation, (2) retained SCPs and facilitators that led to their continuation, and (3) acquired SCPs and barriers and/or facilitators that led to their acquisition.

METHODS

Research Design

A descriptive phenomenological design was employed in this study to ascertain lived experience and perspectives of female hypertensive patients aged 40 to 59 residing in Brgy. Malanday in the city of Marikina during ECQ. This allowed for a more thorough understanding of factors and barriers leading to retention, discontinuation, and/or acquisition of SCPs during ECQ.

Study Area

Brgy. Malanday in Marikina City was selected as the site of interest. It was identified by the City Epidemiology and Surveillance Unit (CESU) of the Marikina City Health Office (CHO) as the barangay with the highest prevalence of hypertension from January to March 2020. This time period was used as the basis given that the study aims to identify SCPs that were observed before ECQ. Additionally, Brgy. Malanday is one of the larger and more densely populated barangays in Marikina and is home to one of the city's 'super health centers.'

Study Population

Marikina City leads the proportion of patients per 100,000 population with heart and cerebrovascular disease in the National Capital Region, which are known complications of uncontrolled hypertension. With this, the target population was narrowed down to females aged 40-59, where onset of disease is first observed, and interventions are more viable. Unique experiences of being managers of the household during an extended lockdown—a role traditionally assigned to mothers within this age group—and how this affected SCPs were also taken into consideration. Further inclusion criteria for this study include women who were diagnosed with hypertension by a licensed health professional and

have performed individual management practices or undergone treatment according to hypertension clinical practice guidelines.

Patients who were diagnosed during the pandemic, have not performed management practices or undergone treatment, and those unable or unwilling to produce proof of their diagnosis were excluded. Selection bias was prevented by adhering strictly to the inclusion and exclusion criteria. An initial list of hypertensive women was obtained from the local health center, and qualified participants meeting the specific criteria were identified and approached with the help of barangay health workers.

Purposeful sampling was used for selecting participants. Barangay health workers and other personnel in the barangay health center (e.g., barangay physician, midwife, nurse, etc.) were asked to identify possible respondents among the list of hypertensive patients in Barangay Malanday given by the Barangay Health Center through the City Health Office of Marikina City. Afterwards, the recommendations of the personnel in the barangay health center were obtained based on who they presumed would be able to provide meaningful insights into their experiences in managing their hypertension during the lockdowns brought about by the pandemic. Theoretical saturation had not been reached after interviewing 10 respondents; therefore, the same sampling technique was employed to recruit more participants in the study until data saturation was eventually achieved after 13 in-depth interviews.

Data Collection

Researchers underwent training in qualitative methods in health research, specifically for phenomenology and in-depth interviews, from the DOH Promotion and Education in the College of Public Health, University of the Philippines Manila. Proficiency in analysis of qualitative data was also obtained through training sessions under the DOH Policy and Administration in the College of Public Health, University of the Philippines Manila.

Pre-testing and validation of the data collection tool were also conducted upon approval of the University of the Philippines Manila Research Ethics Board prior to the start of actual data collection. Five participants were selected through proximity from any locality other than Barangay Malanday in the City of Marikina, and shared similar characteristics with the chosen population being females aged 40-59 years old with hypertension. The qualitative pretest interview (QPI) tool aided in the initial analysis for the refinement of the data collection tool.

Due to the population-based nature of the study, data were acquired through semi-structured in-depth interviews. The recruitment of participants occurred from the first week of October 2022 to ensure that the interviews would be conducted within three weeks in the same month preceding data processing and analysis.

Participants were interviewed by two to three researchers at a time through questions that tackle self-care practices employed by participants during the pandemic, practices discontinued during the pandemic, and practices acquired during the pandemic. Interviews were also conducted in Filipino, with researchers explaining any term, whether English or Filipino, that may cause confusion to participants.

Data Collection Tool

The tool consists of three main open-ended questions that represent discontinued, retained, and acquired self-care practices of participants. Questions regarding specific factors under the three categories are also present in the data collection tool. Probing questions were created based on Clinical Practice Guidelines to further aid the flow of the interview, which were composed of five major categories: nutrition, physical activity, pharmacological treatment, relaxation therapy, and cessation of alcohol intake and smoking.

For questions regarding factors behind discontinuation, retention, and acquisition of self-care practices, probing questions were centered around individual factors, social factors, physical factors, and macro-level factors based on the ecological model by Goffe, Penn, Adams, and Araüjo-Soares to explore deeper specificities of the responses.[10]

Data Processing and Analysis

Upon completion of data collection, the succeeding steps in the data processing and analysis phase were divided into 5 distinct parts, namely: data familiarization, generation of initial codes, data sorting, review of themes, and finalization of themes and sub-themes. These processes are also shown in Figure 1.

Interview transcripts were returned to interviewees for interviewee transcript review (ITR), wherein participants can validate and verify the content of each interview before analysis. From this point forward, non-traceable identifiers

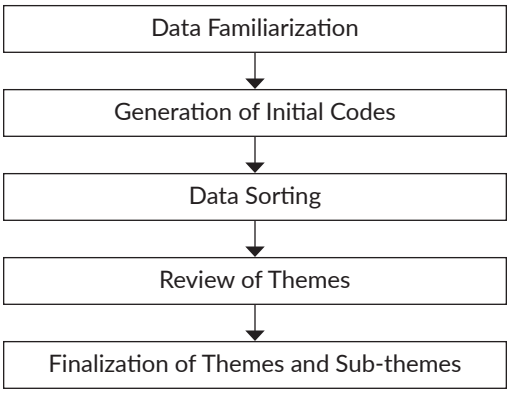

Figure 1. General flow of the data processing and analysis phase.

Note: The general process of data analysis starts from data familiarization and ends with finalization of themes and sub-themes.

(i.e., P1, P2, P3, etc.) were used for the transcripts and the rest of the data analysis.

Transcripts were processed and analyzed immediately after each interview. Data saturation was determined when researchers deemed that no additional information that significantly contributes to the analysis arises from further sampling and data collection based on the data familiarization phase.

Afterwards, NVivo 12 qualitative research analysis software was utilized to organize transcribed data and perform qualitative coding after individual primary coding through Microsoft Word employed by the researchers, eventually leading to a thematic analysis of data gathered.

Researchers utilized an inductive approach in coding wherein no initial set of subcodes, codes, and categories was used as a basis for the primary coding cycle. Primary codes, conceived inductively, were then organized according to whether excerpts pertain to: (1) practices discontinued, retained, or acquired; (2) practices under nutritional intake, physical activity, relaxation therapy, pharmacological treatment, or alcohol and smoking behaviors; and (3) barriers or facilitators primarily determined by individual, social, physical, or macro-level environments.

It had been foreseen by the researchers that the initial coding process could generate hundreds or thousands of codes based on the degree of variation of the responses collected. Therefore, data sorting was performed wherein the initial codes were narrowed down to an acceptable number of codes by finding commonalities between the initial codes generated. Since qualitative analysis requires meticulous processing of the data gathered, recoding and recategorization of individual sentences were also done. Codes were rearranged or reclassified into different or even new categories or were dropped altogether.

In order to help minimize investigator bias and diversify analytic perspectives, a principal researcher was tasked to primarily code the transcription, with two other researchers simultaneously and independently coding the same transcript. Afterwards, researchers compared generated codes and deliberated their respective rationale for choosing such codes. Collected transcribed data were transformed from individual codes to categories and further refined and clustered into themes. It can be observed in Figure 2 that from initial codes, data had already transcended observed reality and progressed towards a more abstract, conceptual, and theoretical presentation.[11] Codes, categories, and themes were also summarized for better visualization of the study's results and findings.

Ethical Considerations

The manuscript of the research proposal was technical validated and approved by the University of the Philippines Manila Research Ethics Board.

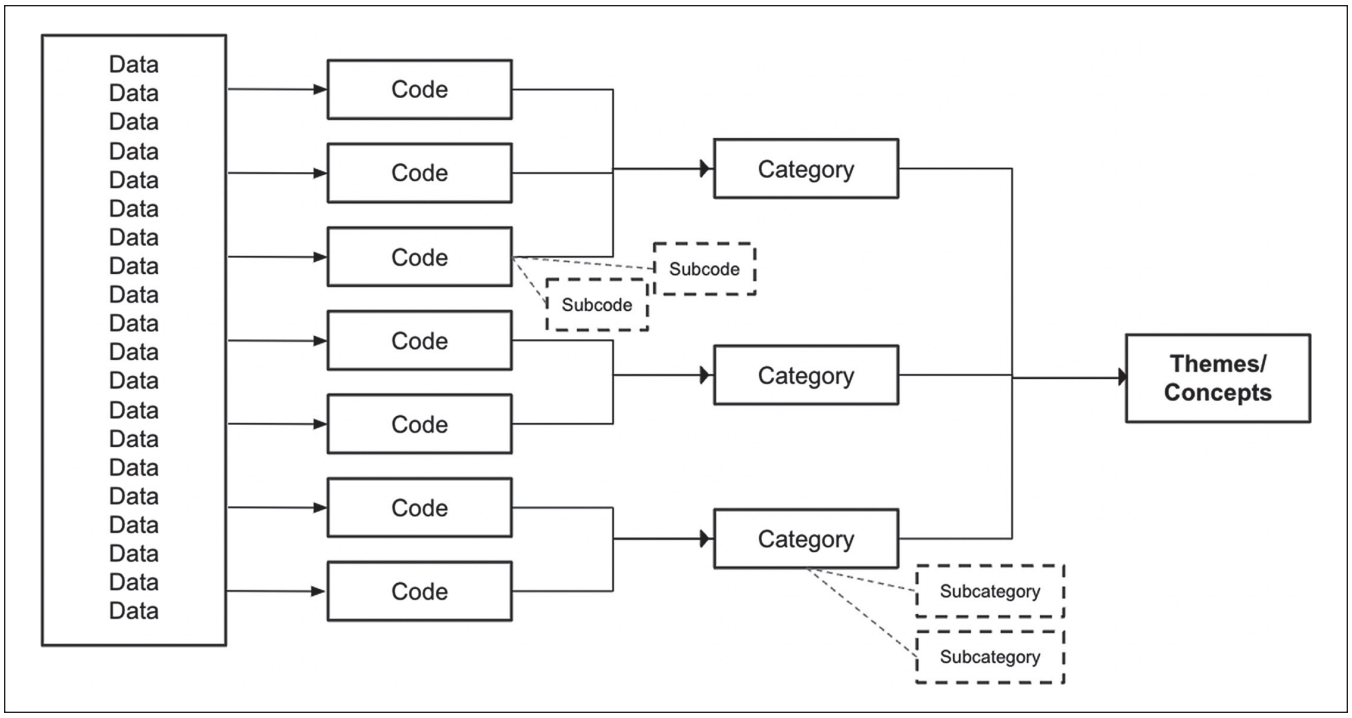

Figure 2. Streamlined Codes-to-Theme Model for qualitative analysis.

Note: Raw data from generated transcripts were coded, and generated codes were classified under categories, which were further classified into themes or concepts. From The Coding Manual for Qualitative Researchers (3rd ed.), by J. Saldaña, 2016, Copyrighted 2016 by SAGE.

Social Value

Participation in the data collection process would help bring about an in-depth understanding of lived experiences—particularly the barriers and facilitators—encountered by hypertensive patients during the COVID-19 pandemic. Learning their lived experiences could possibly help in framing policy objectives not only for hypertensive patients but also for patients with other non-communicable diseases when the time comes that mobility will be restricted again, either due to a public health emergency, national security concern, disaster and calamities, and other similar events.

Informed Consent

In-depth interviews were conducted in participants' place of residence to ensure comfort and convenience. An informed consent form detailing the study protocol—including privacy protection and confidentiality statement, risks and benefits, plan for data storage and proposal, contact information of researchers, etc.—was read by participants, with investigators also reading it aloud for them to further explain any point of clarification that may have arisen. Afterwards, participants were required to sign the certificate of consent provided in the same form prior to the interview.

Privacy, Confidentiality, and Data Protection Plan

Researchers adhered to the Data Privacy Act of 2012 regarding transparency, legitimate purpose, and proportionality in the collection, retention, and processing of personal information.

Various measures were in place to mitigate all pertinent risks to privacy and confidentiality of participants' information. First, blinding was done in all transcripts to be used in the data processing and analysis phase. Upon doing transcriptions of interviews, all personal information was omitted from documents, and each participant was assigned to a non-specific and non-traceable identifier (e.g., P1, P2, P3, etc.). Only principal investigators and their faculty advisers had access to all relevant sheets, drives, and documents, and all documents were password-protected. It was also made clear that all existing files and data would be permanently deleted after a period of no more than one year or until publication of results to the technical research panel for final validation and approval. Lastly, participants were made fully aware of the protocol for data collection, storage, and disposal prior to the interview.

Community Considerations

The barangay health center was requested to identify possible study participants; in turn, researchers will directly contact the barangay once the study has been published, so that the barangay can use the findings to craft policies and ordinances that may benefit hypertensive individuals or other patients with non-communicable diseases should mobility restrictions be reimposed.

RESULTS

Thirteen (13) participants were identified following the study's inclusion criteria. The mean age of the study participants was 49.08 years. Other sociodemographic factors are listed in Table 1.

Transcripts were initially coded individually, garnering a total of 1,257 codes generated from the transcripts. These codes were classified into discontinued, retained, or acquired practices; then were further sorted into types of practice classified in Clinical Practice Guidelines for hypertension, which served as categories. Nineteen categories were generated after triangulation, and the five main themes of the study were generated. Table 2 shows the summary of themes and their associated categories.

The first theme, "*Pagkakulong*: Imposition of lockdown measures as a barrier to self-care practices," was centered around practices that were discontinued during the COVID-19 pandemic. Categories under this theme explored effects of nutrition literacy, lockdown restrictions and quarantine measures, and perceived decline of overall health on participants' nutrition, physical activity, and relaxation techniques, which eventually contributed to discontinuation of practices. Table 3 shows excerpts from the patient interviews related to the first theme.

The second theme, "*Pagpapahalaga*: Preserving self-care practices through existing personal and social values," was centered on practices that were retained or continued

Table 1. Socio-demographic Characteristics of Study Participants (n=13)

Variable	Count	Percentage (%)
Age (years)		
40-49	6	46.2
50-59	7	53.8
Education		
Elementary	1	7.7
High School	9	69.2
College	3	23.1
Type of employment		
Professional	3	23.1
Non-professional	4	30.8
Unemployed	6	46.2
Monthly income (PhP)		
Poor (<9,520)	6	46.2
Low Income (8,520 - 19,040)	6	46.2
Lower Middle Income (19,040 - 38,080)	1	7.7
Marital status		
Single	1	7.7
Married	8	61.5
Widow	4	30.8
Presence of comorbidities		
With Comorbidities	6	46.2
Without Comorbidities	7	53.8

Table 2. Summary of Themes and Associated Categories

Themes	Categories
Pagkakulong: Imposition of lockdown measures as a barrier to self-care practices	• Nutritional content as an overlooked attribute • Lockdown restrictions as barrier to physical activity • Quarantine measures as barrier to outdoor relaxation • Perceived decline of overall health by hypertensive patients during the pandemic
Pagpapahalaga: Preserving self-care practices through existing personal values and social structures	• Eating a healthy diet as a disease-preventing practice • Nutraceuticals as an alternative that provides relief • Medication as an indispensable practice • Various activities as stress management practices • Social drinking as an exemption to abstinence • Doing household chores as sole physical activity
Pakikibagay: Adapting self-care practices to the COVID-19 pandemic	• Drinking herbal remedies and juices as an alternative to maintenance or emergency medication • Increased intake of fruits and vegetables due to fear of acquiring COVID-19 • Technology as a means for relaxation therapy and an alternative to formal medical professional advice • Seeking health services in barangay health center as a contrasting experience among participants
Palakasan: Factors affecting issues and experiences with local health service delivery	• Connections to authorities within the barangay health center • Proximity of patient to barangay health center
Panawagan: Expectations and recommendations on government support for hypertensive patients	• Consistent supply of maintenance medication • Accessibility of healthcare services • Community health promotion and education programs

during the COVID-19 pandemic. Practices and enabling factors surrounding their retention are evident in themes under this category—perception of eating a healthy diet as a disease-preventing practice, ingestion of nutraceuticals as alternatives that provide symptomatic relief, medication as a non-negotiable, indispensable practice, stress management activities, abstaining from vices other than social drinking, and adopting household chores as physical activity (Table 4).

The third theme, "*Pakikibagay*: Adapting self-care practices to the COVID-19 pandemic", shows that participants had to adapt and develop new self-care practices during the pandemic. Practices under this category include nutraceutical intake as medication alternatives in times of need, increased fruit and vegetable intake as a product of COVID-19 anxiety, technology as a means for maintaining their social networks and relaxation therapy, and seeking

Table 3. Categories under Pagkakulong and Related Excerpts

Categories	Excerpts
Nutritional content as an overlooked attribute	*"Nako, yung diet, nawala yung diet kasi nasa bahay lang, diba? Puro kain kain kasi nasa bahay, may stock ng pagkain. Puro kain nang kain kaya tumaba … Hindi ka na makapamili ng kakainin mo, diba? Kung ano lang yung nakastock sa bahay, yun lang yung kakainin mo. Syempre nasa bahay lang. Tumakaw kumain, lumakas kumain kasi nasa bahay lang." (P11, 56, Unemployed)*
Lockdown restrictions as barrier to physical activity	*"Ay syempre hindi na [natuloy ang pag-jojogging] kasi diba bawal lumabas nun. Hindi rin naman ako pwede mag-jogging dito sa bahay kasi [gestures rectangles] ganito lang yung espasyo diba saan ka magjo-jogging doon." (P8, 41, Political Staffer)*
Quarantine measures as barrier to relaxation	*"Kasi pag wala ka namang gagawing importante sa labas, bawal talaga [lumabas] kaya namuhay na lang kami dito talaga sa loob ng bahay." (P6, 55, Housewife)*
Perceived decline of overall health by hypertensive patients during the pandemic	*"Eh nung pandemic, bawal na lumabas, bawal na lahat, as in parang nakakulong na. Dun ulit ako naatake kasi wala na akong exercise, kain tulog na lang. Ganun. Dun ako inatake ng pangalawa [stroke]." (P6, 55, Housewife)*

Table 4. Categories under Pagpapahalaga and Related Excerpts

Categories	Excerpts
Eating a healthy diet as a disease-preventing practice	*"Hindi naman pwede laging magmanok ka, hindi ka naman pwede laging magkarne ka. Kasi, isipin mo, lalo na may high blood ako, natatakot ako. Baka mamaya, dahil doon sa kinain kong iyon, maging risk…" (P9, 45, Public Restroom Attendant)*
Nutraceuticals as an alternative providing relief	*"Umiinom ako [ng pineapple juice] kapag sumasakit yung batok ko kasi napapagaan naman nun yung nararamdaman ko." (P8, 41, Political Staffer)*
Medication as an indispensable practice	*"Mas malaki ang gastos pag nagwoworsen yung sakit. Tsaka mas malaki ang abala… The more na tuloy-tuloy yung episode ng high blood, ng hypertension, mas mahirap magtrabaho." (P1, 53, Midwife)*
Various activities as stress management	*"Meron kaming online simba. Kaya kahit nasa bahay nakakapag simba kami." (P11, 56, Unemployed)* *"Mga kamag-anak ko naman yung – diyan sa harap… Nakafacemask naman kami dito kapag nakikipagkwento." (P10, 52, Sari-sari Store Owner)*
Social drinking as an exemption to abstinence	*"Ano lang, pag nagkakayaya, upuan kami tig-iisang bote lang ng San Mig Light ganun lang. Pero bihirang bihira." (P12, 42, Teacher)*
Doing household chores as sole physical activity	*"Gawaing bahay ka lang naman magiging busy. Kasi yun lang naman ang gagawin dahil bawal nga lumabas. Maglalaba ka lang. Maglinis, magluto, upo, ganon." (P13, 44, Unemployed)*

Table 5. Categories under Pakikibagay and Related Excerpts

Categories	Excerpts
Nutraceutical intake as alternative to medication	*"Talagang marami lalo na dito sa lugar namin, maraming mga may sakit na nagtitiis na kung ano na lang yung dahon dahon diyan kasi nga walang pambiling gamot, sa totoo lang." (P6, 55, Housewife)*
Increased fruit and vegetable intake as affected by COVID-19 anxiety	*"Noong time na nagpandemic, COVID, iyon yung magiging panlaban mo eh. Yung prutas talaga. Kaya talagang pilit kami. Kailangan namin kumain non araw-araw hanggat maari. Kasi yun na nga, nakakatakot eh." (P13, 44, Unemployed)*
Technology as social network maintenance and relaxation therapy	*"Mas yun ang natututukan mong pagtuunan ng pansin kasi nasa bahay ka lang. Hindi katulad nung pwede ka lumabas, stop mo muna yung pag fa-facebook, bababa ka muna, parang nakakasawa naman. Pero nung pandemic syempre wala kang choice eh. Edi yun ang natututukan mo." (P11, 56, Unemployed)*
Contrasting experiences in seeking health services	*"Kasi kahit naman dito [sa health center], pag walang tao ayun ano BP muna tayo ganon." (P3, 57, Barangay Health Worker)* *"Nako, mas madalas kaming bumili kasi pag hihingi ka, out-of-stock, ganun. Parang ganyan, wala rin. Sinasabi lang na "Uy meron [gamot] dito sa ano, barangay natin." Pero pag pupunta kami, "Ay, wala na po, out-of-stock na po." Eh sabi ng mga anak ko, "Mama bili ka na lang, hayaan mo na"." (P6, 55, Housewife)*

health services in the barangay health center, which proved to be a contrasting experience for different participants (Table 5).

The fourth theme, "*Palakasan*: Factors affecting issues and experiences with local health service delivery centers around local health service delivery in the barangay and in the immediate environment of participants. Factors which resulted in both issues and positive experiences of participants included the existence of connections to authorities within the barangay health center, which enabled some participants to avail of health services more, with others having less access due to lack of connections. Another factor that came into play was the distance of participants' residences to the barangay health center, which consequently limited their access to the health center and its services (Table 6).

The last theme, "*Panawagan*: Expectations and recommendations on government support for hypertensive patients explores various expectations and recommendations for improvement that participants see as necessary for the improvement of their health as hypertensive patients (Table 7).

Table 6. Categories under Palakasan and Related Excerpts

Categories	Excerpts
Connections to authorities within the barangay health center	*"Dito kasi syempre pag kilala ka ng mga 'yan, mabibigyan ka. Pag hindi, hindi. [laughs]... Oo, kapag kunwari kilala ka ni [redacted], ayan eto makukuha mo na agad. Pero pag hindi, wala masyado. Pag pupunta ka rito tapos kilala mo oo, pero pag hindi, wala talaga." (P8, 41, Political Staffer)*
Proximity of patient to barangay health center	*"Minsan mahaba ang pila sa health center. Minsan walang available. Pero bumibili nalang ako kasi malayo ang [health] center namin. Nasa Bulelak pa nga." (P10, 52, Sari-sari Store Owner)*

Table 7. Categories under Panawagan and Related Excerpts

Categories	Excerpts
Consistent supply of maintenance medication	*"Unang-una syempre yung magbigay naman sila ng gamot talaga na makakatulong sa amin. Hindi naman namin afford talaga na bumili diba? Lalo kung syempre wala naman akong work. Para lang makatulong sa amin kahit papano na meron kaming makukuhang gamot galing sa center or sa munisipyo." (P13, 44, Unemployed)*
Accessibility of healthcare services	*"Gawin siyang accessible na hindi siya pahirapan yung tao. Hindi ka rin naman magtitiis kung may nararamdaman ka. Hindi ka magpacheck-up. Eh alam mo pag nagpunta ka sa private. Kaya yung iba kahit gumastos, nagtitiis na sila sa private dahil mabilis, tapos accessible." (P12, 42, Teacher)*
Community health promotion and education programs	*"Awareness. Kasi alam na seryosohin simula't sapul na-. Kaya yung anak ko, hindi siya masyado sa kanin. Hindi ko siya pinipilit... So parang ang nakikita ko dun, hangga't hindi binabago ng Filipino yung way of living niya lalo sa pagkain, tuloy-tuloy lang yan kahit anong gamot ang imbetuhin mo. Yun ang nakikita ko. Dapat aware ang tao na sa too much na kain mo talaga. Lalo sa kanin." (P12, 42, Teacher)*

DISCUSSION

A thematic map was created to aid the process of analyzing findings of the study (Figure 3). Factors, depicted by themes, lead to discontinuation, retention, and acquisition of self-care practices. These were largely affected by the state of local health service delivery, especially apparent inequities in terms of access to knowledge, resources, and support. Overall, these led to expectations and recommendations on national and local government support for hypertensive patients.

Pagkakulong: Imposition of lockdown measures as a barrier to self-care practices

Discontinuation of self-care practices of the hypertensive patients was mainly attributed to environmental and macro-level factors that served as a barrier for them to perform

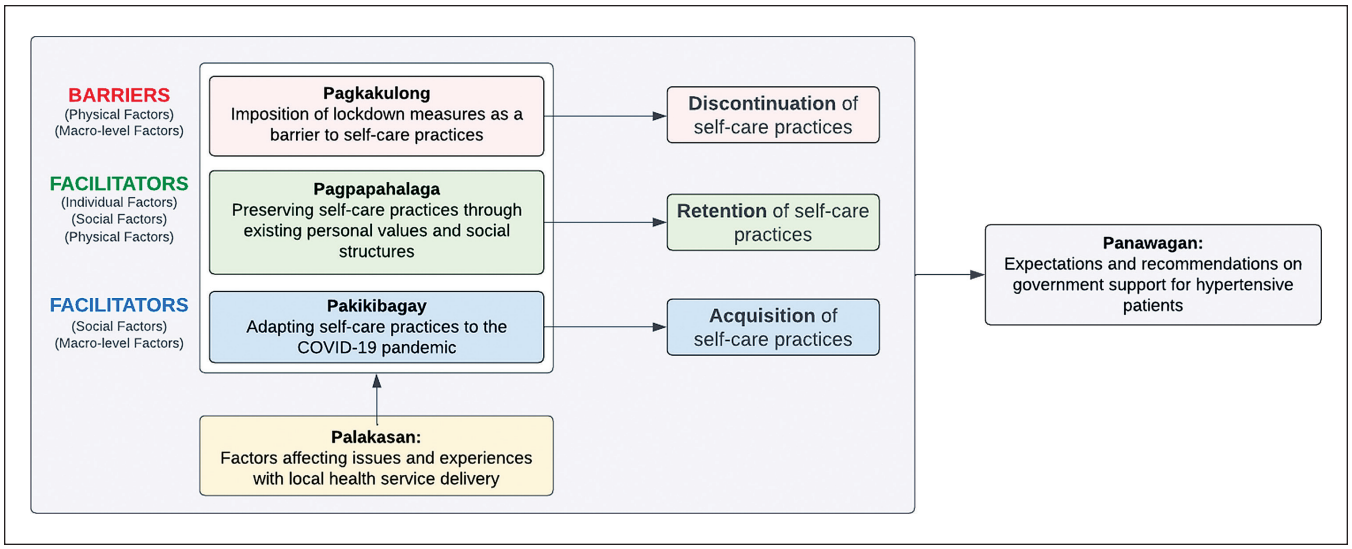

Figure 3. Thematic map for study findings.

such practices. Respondents reported that inaccessibility of markets and grocery stores secondary to strict lockdown measures was a barrier in following prescribed nutritional guidelines for their conditions. This particular finding is consistent with the study of Rubio-Tomás et al., where they found that lockdowns imposed due to the COVID-19 pandemic resulted more often in negative consequences, including increased junk food consumption, increased number of meals, increased number of snacks in between meals, and weight gain.[12] Overeating due to limitations on how participants can access fresh and healthy food items is contradictory to the conclusions of a study in the Philippines, which stated that 73% of Filipino households were food insecure at the early stages of implementation of community quarantine measures.[13] This could possibly be explained by many households having limited access to fresh food items (e.g., meat, vegetables, and eggs). Canned goods and processed meat products, which contain a lot of preservatives and high sodium and fat content, have become staples in a Filipino pantry—especially in urban poor centers—primarily due to perceived convenience in both preparation and storage.[14]

Similar to dietary behaviors, reduction in physical activity and increase in sedentary behaviors during the pandemic-induced community lockdown are trends seen consistently across the world.[12] In the Philippines, home containment secondary to COVID-19 mobility restrictions led to lower overall levels of physical activity because Filipino participants were not able to adjust their health behaviors to indoor physical activity due to limitations in availability of equipment and adequate space where exercise routines could be performed.[15] Another possible explanation is the significant contribution of outdoor leisure activities and transport-related active travel—both of which have been restricted during the lockdown—to the overall physical activity of Filipino older adults before the pandemic.[15] These findings highlight the importance of available spaces—both indoors and outdoors—where individuals could perform exercise routines as a significant predictor of behavior of hypertensive patients in terms of complying with recommended levels of physical activities and exercise for their conditions.

Disruption of daily routines and engagements necessary for the well-being of Filipino adults has led to symptoms of depression and anxiety.[16] Participants disclosed that loss of source of income and uncertainty brought about by the pandemic became significant stressors for their mental well-being. Coping mechanisms such as attending church and usual social interactions have also been halted due to physical distancing.

Since the lifestyles of these types of patients are highly sensitive to change, proper support and assistance must be provided in ways that are adequate and appropriate yet do not endanger their well-being. Strategies to maintain the well-being of the older and high-risk Filipino population must be implemented by pertinent stakeholders, taking into consideration emotional, spiritual, social, and physical components.

These findings ultimately point to the importance of ensuring availability and accessibility of healthy food options despite mobility restrictions in order to avoid discontinuation of healthy nutritional choices of hypertensive patients. In terms of physical activity, findings suggest that availability of space and resources to adjust one's exercise habits to indoor physical activities need to be addressed during periods of strict lockdowns due to public health emergencies and other similar events. Considerations should also be made in the amount of time people spend in isolation due to quarantine measures, and sufficient mental and physical support during these periods should be provided to promote overall health and well-being of individuals, especially those living with non-communicable diseases. Lastly, necessary

assistance and support in terms of financial resources and livelihood opportunities should be dispensed to individuals in future instances where mobility will be restricted, and multiple industries are expected to be hit by economic disruptions and challenges.

Pagpapahalaga: Preserving self-care practices through existing personal values and social structures

Retention of self-care practices during the first lockdown period was facilitated by individual, social, and physical factors. Such factors were centered on health being a priority for the participants, their families, and even society. There is a close association between the level of hypertension awareness and hypertension control, while health consciousness among female hypertensive patients contributed to good employment of self-care practices.[16,17] Participants' understanding of the importance of maintaining health led to prioritization of self-care practices, thus contributing to retention. Retained self-care practices were (1) eating a healthy diet, (2) consuming nutraceuticals, (3) taking medication, (4) managing stress, and (5) drinking alcohol in moderation. These practices reflect the value of health in the lives of participants, seeing that these were employed to alleviate symptoms and even to live longer.

Health consciousness is then supplemented by enabling social structures, such as family support, financial capacity, and lockdown policies, that perceive health as a priority. Family members were often active in helping participants with their adherence to self-care practices. Support was usually in the form of diet reminders and assistance in buying medicines from pharmacies. Studies worldwide identify family support as a patient-related factor for adherence to medication.[18-21] The role of family in practice adherence is also further suggested by the studies of Mahmood et al. and Ademe et al.[22,23] Additionally, participants expressed the importance they place on their role in the family, as being mothers was reason enough for them to adhere to the practices.

Allocation of resources needed for practices and classification of pharmacies as essential services were physical factors that enabled retention of practices during the lockdown. Antihypertensive medication was generally seen by participants as a vital aspect in their treatment process, with their adherence primarily influenced by their own supply of medication or their ability to obtain prescribed drugs. Some participants reported that they would buy pills enough for 3 days instead of buying in bulk because it would be less financially burdensome. When asked why medication was a priority in their budget, participants referred once again to the effectiveness of regular medication intake in controlling their blood pressure. Studies show that drug adherence was among the compromised self-care practices during the lockdown due to financial constraints.[24-26]

While participants were able to make financial adjustments, it does not take away the negative economic impact of the lockdown, which compromised participants' ability to purchase medication. Despite mobility restrictions during the lockdown, study participants reported that they were able to purchase medication because pharmacies were open and easily accessible. Another source of medicines during the lockdown was the barangay health center, which provides free antihypertensive medication. The association between access to free medication and adherence is confirmed by the study of Khudair et al.[27]

Furthermore, the present study found that patient preference, as influenced by the presence of side effects, is the primary factor that determines which type of drug is used. This is consistent with the findings of Beune et al. and Schmieder, citing side effects as a factor for preference in hypertensive therapy.[28,29] Availability of options that participants could choose from allowed them to explore which brand of medication was "hiyang" or suitable. A common indication that a brand was "hiyang" among patients is the absence of "pagmamanas" or swelling, which is a common side effect for antihypertensive drugs.[30] Adverse side effects are found to negatively influence patient adherence to medication.[31] Patients were able to explore their options with the wide range of antihypertensive medication available. Amlodipine and Losartan were drugs commonly mentioned by participants, usually preferring one over the other.

Interestingly, having limited access to alcohol during the lockdown period might have contributed to the retention of moderate alcohol consumption as a self-care practice. Despite having policies that banned alcohol during the lockdown, participants shared that they were still able to consume moderate amounts of alcohol when attending small parties or celebrations. The occasional drinking by the participants can be explained by the drinking culture in the Philippines, as rejecting drinking invites or offers from gatherings is frowned upon in Filipino drinking culture.[32]

Household chores as the sole means of physical activity is also an interesting finding that emerged. Most were able to disclose that there was an apparent increase in the amount of household chores such as cleaning, cooking, and doing laundry. This increase was mainly attributed to prolonged durations of staying at home and their roles as mothers and primary caretakers of their respective households. It is important to note, however, that respondents generally do not consider such activities as equivalent to or a substitute for actual exercise or workout sessions. The findings of the present study could provide supplementary information to earlier studies which showed a significant decrease in the physical activity levels of individuals as compared to pre-pandemic norms.[33,34] It should also be noted that prolonged confinement to homes and additional child-rearing responsibilities increased domestic physical activity levels—especially for those who take on roles as primary caretakers of their respective households.

Overall, participants were conscious of their health, particularly on the risks involved in not managing their high blood pressure. This indicates that ensuring a sufficient level of understanding of the disease and its control enables participants to make healthy choices regarding the management of their hypertension. Treatment options should also be presented to account for varying patient preferences. Having family members in close proximity may also be supportive of participants' self-care practices. Additionally, retention of practices is aided by ensuring access to establishments—markets, pharmacies, and health centers.

Pakikibagay: Adapting self-care practices to the COVID-19 pandemic

The general public considers nutraceuticals to be more "natural," as opposed to taking conventional medicine, which makes them more appealing to many, especially to patients with chronic diseases, despite the ongoing debate on their effectiveness and safety.[35]

The most common nutraceutical that was acquired was the intake of pineapple juice. Respondents reported relief after drinking pineapple juice, which aided in their adherence. Along with this, participants also believed that buying pineapple juice proved to be less expensive compared to buying maintenance medicine, as most of the participants who were not barangay health workers preferred and opted to buy from pharmacies instead of availing of free medicine from the barangay health center.

Participants also mentioned an increase in their intake of fruits and vegetables—a practice reinforced by the barangay health workers continuously reminding residents to eat healthy.

Participants reported that this was acquired following advice from the elderly or advice from immediate social circles such as friends or family members who have similar conditions. Participants shared that they adopted such practices due to the perception that it improves their immune system and prevents the contraction of COVID-19. They also shared that they got health advice from social media. They used technology to seek consultations with health practitioners.

Due to the deprioritization of non-COVID-19 cases in primary facilities, patients with non-communicable diseases were mostly left to manage their illnesses on their own. Differences in interpretation and implementation of the 2020 Clinical Practice Guidelines could affect clinical outcomes of hypertensive patients. This implies a potential gap in communicating the provisions of the 2020 Clinical Practice Guidelines, especially since these guidelines are created for health practitioners rather than patients. Hence, Clinical Practice Guidelines for management of hypertension should include provisions on what patients can do by themselves in resource-limited settings, especially in times when they do not have direct or ready access to health practitioners who can directly relay these clinical guidelines to them.

Palakasan: Factors affecting issues and experiences with local health service delivery

The barangay health center is a major public health service provider in the community. Even before the pandemic, the community relied on the health center for primary health care and for free services. However, several factors proved to be at play when determining patient experience and advantage in health service delivery, which resulted in inequities in the distribution of resources. One of the factors cited was having connections to the health center, which reportedly increased prioritization in queueing for maintenance medication.

Free healthcare services were mentioned to be available and accessible; however, most of the participants who cited this were either employed as barangay health workers or were acquainted with someone who worked there. Other participants felt differently, as they perceived that only those who had close ties or were employed at the health center had an advantage. Participants termed this phenomenon as palakasan.

Palakasan, a concept similar to nepotism, usually refers to the restriction of resources within a certain group of "clients" and is considered an informal cultural norm in the Philippines.[36] It has been observed in several settings in the Philippines that involve the distribution of financial and material resources, such as in social services and even politics.[36] In a study by Carandang et al., nepotism was also observed in social services programs for senior citizens, wherein unfair distribution of cash assistance left them financially vulnerable.[37] More recently, cases of palakasan have been revealed by Amit et al. during the pandemic amidst vaccination rollouts.[38] As a consequence, vaccination programs were perceived to be poorly implemented, which, in effect, contributed to vaccine hesitancy.[38] Here we can discern how one's experiences with the health system affect their trust and confidence in its programs. Similar to how the palakasan led to increased vaccine hesitancy in the country, perceptions of palakasan in the health center of Barangay Malanday had reduced trust among participants in its local health programs, thereby affecting their health-seeking behavior and utilization.[38] Ensuring quality of healthcare services in different aspects, especially that of equity, is important in increasing patient satisfaction and increasing the likelihood of seeking care at the barangay health center.[39]

Proximity to the barangay health center was also another factor said to affect utilization of the barangay health center. Because the health center was further away from some participants, they were reportedly unable to receive updates or announcements from health workers, let alone be compelled to visit the facility. On the other hand, those who lived nearer to the health center frequented it for its programs and services. According to Gabrani, Schindler, and Wyss in 2021, adult and elderly patients with non-communicable diseases usually chose their health service provider—usually public primary health care centers—because of their geographical proximity.[40] Anselmi, Lagarde, and Hanson affirmed these

findings as they discovered that living near a health facility increases the likelihood of seeking health services among individuals from resource-poor settings.[41]

Respondents who worked in the barangay health center (BHC) as a barangay health worker (BHW) reported that they could consistently avail of the services offered by the BHC. Free maintenance medication was readily available, as well as means that would allow them to regularly monitor their blood pressure. BHWs were also able to regularly consult with the doctor on duty during their free time in the BHC. Interestingly, respondents who did not work as BHWs in the BHC had a largely contrasting experience as opposed to the aforementioned participants. Despite acquiring the self-care practice of actively seeking health services when needed, the non-BHW participants did not experience the same consistency in health service delivery that the BHW participants received. Non-BHW participants reported that whenever they would go to the BHC for its service of free maintenance medication, the BHC would always be out of stock. Along with this, a non-BHW participant also reported that they did not receive pleasant treatment in the center even when they were imploring nicely to its staff. This goes to show that while the BHC does offer health services to the general public, problems with service delivery still exist, which could discourage patients from seeking health services in the BHC despite its accessibility and availability to them. The dismay that non-BHW participants feel towards seeking health services from the BHC could lead to detrimental long-term effects with regard to their internal relationship with the BHC and their health and their health as patient satisfaction largely affects their motivation for seeking external care.[42]

Thus, in Barangay Malanday, those who live in proximity to the health center or had personal and professional ties to the health center more frequently availed of the free maintenance medication being provided. In such communities where travel is necessary to arrive at a health facility, mobile services might be necessary to supplement the services being offered so that even the poor and vulnerable populations may be catered to despite the distance.[43]

Panawagan: Expectations and recommendations on government support for hypertensive patients

The majority of participants emphasized that having a consistent, sufficient, and just supply of maintenance medication is a necessity for them, as there previously have been issues with their supply and distribution. While there is already an existing program and many people receive medication from the barangay health center, patients hope that current efforts will not only be sustained, but also improved.

In 1991, the Philippines implemented the Local Government Code, effectively decentralizing government services. The health sector is one of, if not the most affected, sector among devolved services as responsibilities concerning but not limited to health personnel, financing, and facilities have transferred from the DOH to Local Government Units.[44] Barangay health centers now spearhead the implementation of health programs. While respondents are aware of these programs, not all were able to utilize and avail. Respondents expressed that access to health services has been difficult and limited, especially during the lockdown period. With that, there is a push for improvement of several concerns raised, including consistent supply of medication, accessibility of healthcare services, and community-based health promotion and education.

Limited supply of medications has been a long-standing issue in the Philippine healthcare system. Medicine procurement in public facilities undergoes a bureaucratic process, governed by several policies. Of these, the most significant are the Government Procurement Reform Act (GRPA), the Generics Act, and the Cheaper Medicines Act. The World Health Organization highlights system advantages like having transparent procedures and mandating competitive and standardized bidding of government procurement. However, some documented implementation gaps are attributed to inconsistencies in compliances to the GRPA, difficulties in the use of the electronic procurement system, and limitations in the monitoring and enforcement mechanisms.[45] Alongside this, the problem of inequity of health services also lies in the distribution of medication and resources. Without an adequate supply of maintenance medication provided by health centers, patients are forced to spend out-of-pocket, and thus allot less of their budget for their other needs.

In a similar sense, because of limitations in hospital or clinic capacity, consultations are a time-consuming process for a lot of patients. According to Mallari et al., ensuring an adequate supply of hypertension medication can support programs of barangay health centers through increasing trust and confidence of the community.[46] Moreover, it has been reported that having enough knowledge of and access to health care services is a known facilitator for improved health-seeking behavior. If the community were informed about services provided by barangay health centers and had means to a quick and hassle-free process of acquiring medication, they would be more inclined to seek health services from the health center before consulting private health care service providers. This emphasizes the need for better community-based, barangay-led initiatives that would address these concerns.

Study Limitations

The study has several internal and external limitations. Data quality may be affected by the capacity of the researchers to adequately synthesize the collected data from the participants due to the subjective and interpretive nature of the analysis. The researchers underwent comprehensive training in qualitative methods in health research and analysis of qualitative data under the DOH Promotion and Education and DOH Policy and Administration, College of Public

Health, University of the Philippines Manila. Furthermore, three researchers were assigned to code a single transcript, and deliberation through triangulation was done to finalize the codes to be used for specific transcripts.

Another limitation that may have affected the study is recall error. In order to minimize the effects, the researchers clearly identified the time period being investigated and the objectives of the study throughout the interview. Additionally, the researchers cross-referenced the consistency of responses with the actual events and restriction measures for the City of Marikina during March to May 2020.

The findings may not necessarily be generalizable for other localities due to significant differences in culture and the degree to which the stringent restrictions on mobility were implemented by the local government unit and the barangay. The results may also not be generalizable for the actual population of hypertensive patients, in the traditional sense, since the sample size is relatively small. However, generalizability is not necessarily the main objective of phenomenology; rather, its main concern is to understand the unique phenomenon from the perspectives of the people involved to describe the said phenomenon accurately. The data collection tool was crafted to comprehensively extract responses to gain an insightful set of findings regarding the experiences of hypertensive patients during the pandemic, particularly their self-care practices.

The data gathered from the study would be most beneficial to local government units, especially for areas with a high prevalence of hypertension. Shedding light on the circumstances and difficulties of the affected locals in managing hypertension reinforces the role of the LGU in the provision of essential services and resources through the primary healthcare facilities. Hypertensive patients may also use the information to prepare for the possible events that may hinder or help them in managing their condition in scenarios where their mobility will be restricted. The nuanced experiences of patients with hypertension could potentially be considered by program managers and implementers in crafting policy objectives with regard to service delivery and support for hypertensive patients. These considerations can then be vital in incorporating the access of patients with hypertension and other NCDs to the facilities, tools, and food options that allow them to practice self-care in policies for future health situations that would require community quarantines or similar public health interventions.

Ultimately, awareness about the lived experiences of hypertensives in crises that employ mobility restrictions is directed to the improvement of health service delivery from both the public and private sectors, which, consequently, will contribute to the improvement of the public health system.

Recommendations

Further studies regarding quantification of actual levels of discontinuation, retention, and acquisition of self-care practices for management of hypertension are encouraged. Along with this, the integration of participant observation into the study design is highly suggested, as this could give rise to more holistic inferences regarding the state of hypertension management. Interested researchers may also explore different associations and correlations between barriers and enabling factors, and the level of impact on discontinuation, retention, and acquisition of SCPs against hypertension. The model of the study can also be applied to bigger scales of location, such as in a city-wide study or employed in the observation of other non-communicable diseases.

CONCLUSION

The study described how the first lockdown period in the Philippines affected the SCPs of female hypertensive patients in an urban setting. Specifically, it was able to determine discontinued, retained, and acquired SCPs and their corresponding factors that acted as facilitators or barriers.

Environmental and macro-level factors brought by lockdown measures were found to be primary barriers for self-care practices during said period. Policies restricting mobility during the pandemic consequently limited access to markets, grocery stores, and outdoor spaces, which led to discontinuation of self-care practices. Meanwhile, individual factors were seen as the main reason for retention of self-care practices, which then translated to the high importance placed by participants on their health. Social and physical factors that prioritize health were found to support and enable continuation. Acquired practices, on the other hand, were primarily influenced by a different set of social and macro-level factors that are centered on convenience and accessibility as an adaptation to mobility restrictions. Inequities in terms of access to knowledge, resources, and support were also noted.

Overall, these findings imply that public health policies involving significant periods of restricted mobility should consider the continuity of self-care practices for lifestyle diseases, particularly for hypertension. There is a need for policies to be resilient in anticipation of events that disrupt normalcy on a large scale, responsive to consequences of sudden lifestyle changes, and multifactorial in addressing various aspects of self-care such as physical activity and nutrition. Meanwhile, adherence to self-care practices can be strengthened when awareness is supported by social structures that place health as a top priority. Enabling factors such as family support, financial resources, and policies are some aspects that can be considered in drafting health promotion strategies.

The study can serve as evidence for a more patient-centered approach in drafting interventions that are mindful of varying circumstances among hypertensive patients. Furthermore, existing social support from families and communities can be utilized to facilitate execution of self-care practices. Lastly, identification of cases of inequities can prompt the health system to address them, especially now that the country is transitioning into Universal Health Care.

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