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Experiences and Perspectives of Filipino Patients with Stroke on Physical Therapy Telerehabilitation: A Phenomenological Study Protocol

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Abstract

Introduction: Stroke is the third leading cause of death in the Philippines, so these patients must continuously undergo rehabilitation for faster recovery. With the rise of COVID-19, physical therapy (PT) telerehabilitation (TR) has emerged, where services are provided outside the usual rehabilitation setting for patients with stroke to continue their treatment while reducing the risk of acquiring COVID-19. However, it is a relatively new service in the country; hence, further research is needed to identify the factors and needs of these patients during TR, which may help improve PT TR services.

Objective: This study aims to explore the experiences and perspectives of Filipino patients with stroke who have undergone PT TR in the Philippines since March 2020. Administrators of healthcare facilities, policy-makers, and other decision-makers involved in evaluating, implementing, and developing PT TR may benefit patients with stroke. This can expand the scope of rehabilitation to patients with stroke who have no access to face-to-face rehabilitation or improve the training or education of Physical Therapists who are providing TR to stroke patients.

Methods: This will be a qualitative phenomenological study design that will use purposive sampling to recruit participants. Semi-structured interviews (SSI) will be conducted online using Google Meetings®, Zoom®, or Facebook Messenger® to record their experiences and perspectives. The NVivo data analysis software will be used to create codes and identify themes from the data gathered. The data that will be obtained is about the experiences and perspectives of Filipino patients with stroke regarding PT TR. The insights of the participants will undergo Thematic Analysis until no new information will be discovered from the analyzed data.

Expected Results: This study will identify facilitators, barriers, recommendations for improvement, and the needs of these participants during TR.

Keywords: stroke, telerehabilitation, physical therapy

Introduction

Stroke is the third leading cause of death in the Philippines, accounting for about 10.4% of the reported deaths in 2020 (Mapa, 2021) and has been among the top five primary contributors to disability in the Philippines from 2009 to 2019 (Collantes et al., 2021). Patients with stroke develop muscle weakness, paralysis, stiffness, and sensory impairment in one side of the body (Stroke Association, 2013). These manifestations require patients to undergo intensive rehabilitation within six months after the onset of stroke or after being cleared by the physician (U.S. Department of Health and Human Services, 2020). Post-Stroke recovery is most significant in the first few weeks and becomes less effective after six months since most neurological recovery happens in this stage. A study has shown that 80% of functional recovery occurs in the first three (3) months after the onset of stroke (Veerbeek et al., 2014). Patients with stroke should immediately be given acute management to have a better prognosis and functional performance, reduce neurological deficits, and avoid stroke recurrence (Lee et al., 2015). However, due to the continuous rise of COVID-19 cases, patients now have limited hospital and clinic visits because of the heightened risk of infection (Byravan & Sunmboye, 2021). Thus, medical consultation and rehabilitation transitioned online, imposing problems for most Filipinos who are not technologically adept (Leochico et al., 2020).

COVID-19 is an infectious disease that spreads quickly and results in mild to severe symptoms. In September 2021, COVID-19 patients occupied 70.1% of the hospitals nationwide and other health facilities, leading to decreased non-COVID patients admitted to hospitals. Due to this, admission rates for patients with stroke decreased by about 40% compared with the data in 2019 (Department of Health, 2020). In 2022, the Department of Health reported that 41% of isolation and ward beds and 38% of intensive care unit beds nationwide were occupied (Corpuz, 2022). As healthcare professionals were transferred to care for patients with COVID-19, this resulted in limited periodic visits, planned treatment, and rehabilitation services for patients with stroke (Bersano et al., 2020). In addition, the implementation of lockdown, safety measures, risk of infection, and limited face-to-face rehabilitation resulted in limited hospital accommodations for non-COVID patients, which made patients with stroke more susceptible to physical inactivity (Leochico et al., 2020; Centers for Disease Control and Prevention, 2022; Bilinger et al., 2014). Thus, this led to the emergence of TR to avoid physical inactivity and provide continuous care for patients with stroke. An example of this was the ITAWAG Program of the University of the Philippines - Philippine General Hospital (UP-PGH). Launched in April 2020, the ITAWAG or Introducing Telerehab As a Way to Access General rehabilitation medicine services program is still being utilized as threats from the virus outbreak continue (Salud et al., 2022). This program has shown that continuing therapy through TR is a feasible alternative to onsite rehabilitation, especially during crises such as COVID-19. It has also shown

significant improvements among patients with stroke, as seen by increased capacities in performing tasks. Moreover, with only 15.8% of hospitals having rehabilitation units in the Philippines, TR is no longer only viewed as a response to the pandemic but also as a response to universal health coverage for Filipinos who require rehabilitation services (Collantes et al., 2021; Valera et al., 2022).

"Telerehab," "Telehealth," "Teletherapy," or "eHealth" focuses on delivering rehabilitative programs that include assessment, intervention, education, and counseling through information and communication technologies (Cramer, 2016). TR has provided benefits for the convenience of patients encountering difficulty attending face-to-face rehabilitation (Peretti et al., 2017). It aims to provide rehabilitation services to individuals remotely in their homes or other environments outside the typical rehabilitation setting (Cifu, 2020).

Several countries also utilize TR, as it allows the patients to continue their therapy, cuts down the cost and time for transportation, and reaches numerous people to combat the social effects of COVID-19 (Leochico et al., 2020). Moreover, TR has been used more frequently in the Philippines since the pandemic began in 2020. Nowadays, many Filipino healthcare providers utilize TR to provide rehabilitation services (Department of Health, 2020). Thus, determining the experiences and perspectives of patients with stroke on TR are needed to help improve the current state of these services in the country. On the other hand, there are disadvantages and challenges when implementing TR, especially in the Philippines. Slow internet connection, lack of security, time-consuming to use, and dependency on the internet and electricity are factors that challenge the emergence of TR in the Philippines (Leochico et al., 2020). These factors may also affect the overall experience of Filipino patients with stroke on TR.

Conceptual Framework

This study is rooted in the technology acceptance model, which describes and explores users' acceptance of using new technology based on their specific needs (Davis, 1989). It also evaluates how different factors could affect users' acceptance of technology. This model proposes two primary elements in predicting technological acceptance: perceived usefulness and ease of use. Perceived usefulness is how technology enhances or improves users' performance (Davis, 1989). On the other hand, perceived ease of use is how the user sees technology as unchallenging, convenient, or complex (Rogers, 2010). In a similar existing study, this model was also used to determine the perceived usefulness and ease of use of patients with stroke towards teleneurorehabilitation (Figure 1) (Klaic & Galea, 2020). Barriers and facilitators to TR will be identified and help predict the participant's likelihood of using TR. Thus, through this framework, the experiences and perspectives of patients with stroke regarding TR will be gathered.
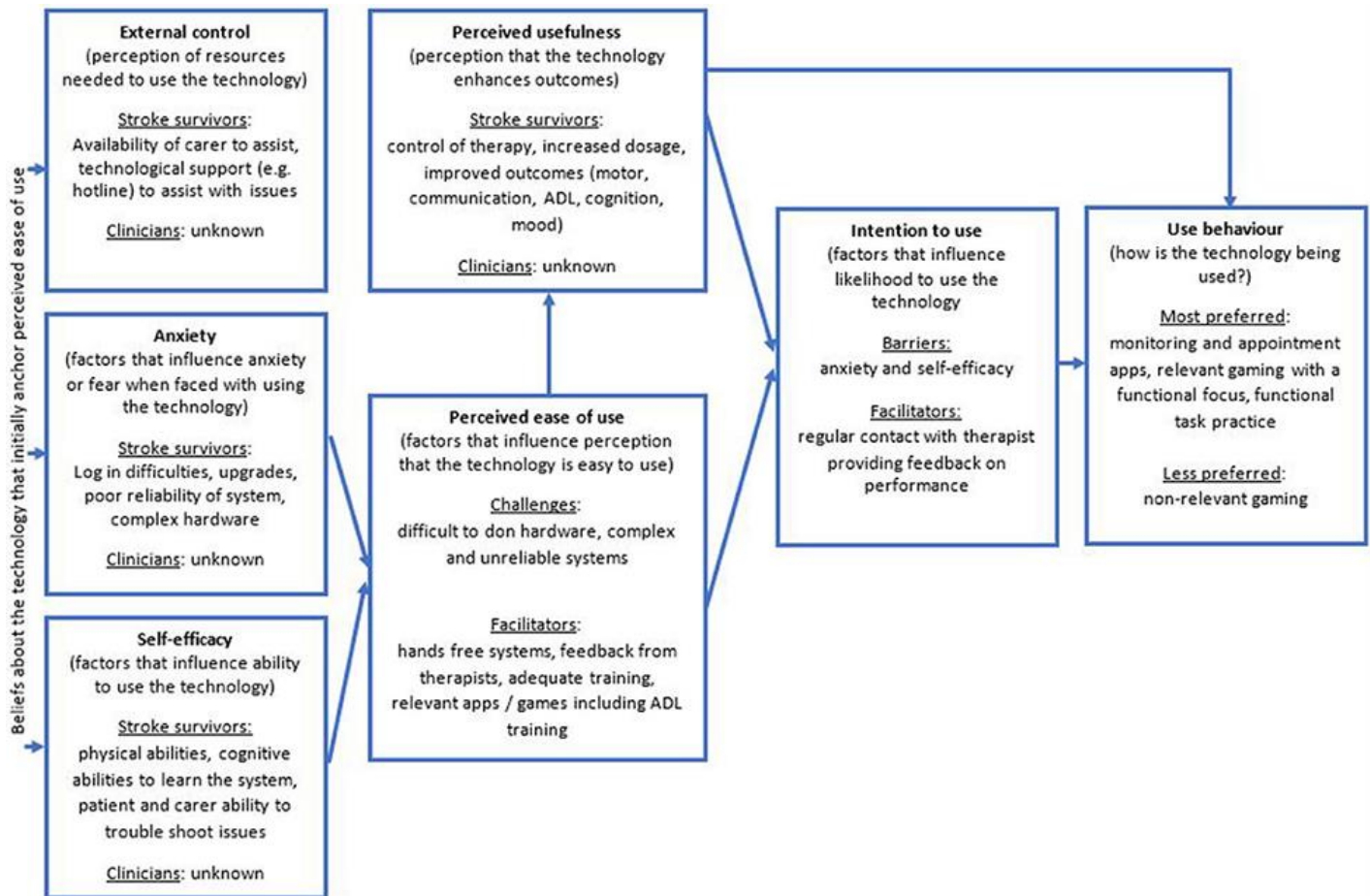
Figure 1. Technology Acceptance Model

Knowledge Gap

TR has emerged in the Philippines since numerous Filipinos undergoing rehabilitation currently cannot fulfill it face-to-face due to barriers such as time, distance, and increasing cases of COVID-19 (Leochico et al., 2020). A similar concern was observed in the United States, where people needing medical care have delayed treatment due to the pandemic. These patients have underlying medical conditions that increase their risk of acquiring severe COVID-19 (Czeisler et al., 2020). Due to these concerns, TR is utilized to reduce the barriers experienced by these patients. In Canada and Australia, TR programs became successful by minimizing the barriers like cost and travel and providing more access to the people (Leochico et al., 2020).

The unexpected shift to TR warrants the need for physical therapists to obtain the viewpoint and experiences of Filipino patients with stroke in rehabilitation during the pandemic to analyze the current practices done during the "new normal." A phenomenological study conducted by Chan et al. (2021) on senior patients with stroke in Canada focused on determining the experiences of geriatric patients with stroke towards home video visits (HVV). It concluded that HVV could be both time-saving and convenient (Chan et al., 2021). However, some of these geriatric patients felt more comfortable with in-person visits since

the device used appeared challenging. On the other hand, a systematic review by Stephenson et al. (2022) found that TR is an effective tool for stroke rehabilitation, provided that there is adequate training and equipment. However, the researchers noted that the review was done to consolidate existing data on stroke TR and not to provide any conclusion regarding its effectiveness in stroke rehabilitation. TR services are not yet fully utilized in developing countries like the Philippines because it is considered a resource-limited country compared to developed countries. Hence, telemedicine platforms and equipment for TR practices are not readily available to the public (Leochico et al., 2020). Moreover, there are no locally published studies regarding the perspectives and experiences of patients with stroke during TR. Most of the published research articles are for international settings, a specific type of stroke, and pre-pandemic settings (Chen et al., 2019 & Chan et al., 2021). A systematic review by Leochico et al. (2020) that focused on the general use of TR found that the most common barriers were slow internet connectivity, legality concerns, & patient skepticism. However, the barriers & facilitators specific to stroke patients deemed most important to consider during TR services were unidentified. It was only during the emergence of COVID-19 that most healthcare providers used TR (Leochico et al., 2022).

Research Question

Since TR was mostly used only during the emergence of COVID-19, the formulation of the study protocol and its implementation will be guided by the research question: What are the experiences of Filipino patients with stroke during PT examination and intervention in a TR setting?

Objective

This study aims to explore the experiences and perspectives of Filipino patients with stroke who have undergone PT TR in the Philippines since March 2020.

Significance

The data gathered from the SSI may provide insight into the experiences and perspectives of Filipino patients with stroke during TR. It will identify the facilitators & explore other barriers and challenges that these patients encounter, which can help improve the country's TR services, specifically the examination and intervention for patients with stroke. The study may benefit rehabilitation centers that offer TR services by determining what factors need improvement and encouraging patients to try TR. Also, this study may help physical therapists broaden their skills and knowledge in their practice. TR requires them to adapt to emerging trends by expanding their services to their patients by giving efficient and quality care outside the traditional rehabilitation setting. Through the study, physical therapists can better understand how patients with stroke view TR and improve treatment programs and other aspects such as rapport, protocols, and equipment. This can be achieved as data on the participants' experiences and perspectives on PT TR for patients with stroke will be made accessible for Filipino physical therapists to use to understand and improve such programs.

Methods

Research Design

The study will utilize a phenomenological research design to explore and understand the experiences and perspectives of Filipino patients with stroke during PT TR through SSI. A similar past study by Chen et al. also used this method to explore the lived experiences of 13 patients with subacute stroke toward home-based PT TR.

Participants

The emergence of TR in the Philippines started amid COVID-19 when disease cases were increasing. People were required to stay home due to the strict implementation of community lockdown beginning in March 2020 (Leochico et al., 2020). Thus, patients who underwent or are currently undergoing TR services since March 2020 will be included in the criteria, regardless of whether or not the participants have experienced face-to-face rehabilitation. The patient's socioeconomic status is also considered because, according to Ferreira & Menezes (2020) & Chan & Kaufman (2010), socioeconomic status can potentially

affect measuring a patient's perceptions and experiences. After all, technological interventions such as video-based therapy are more commonly explored and utilized in developed countries due mainly to their readiness and availability. It has also been discovered that if the cost of the technology is not proportional to the benefits obtained from its application, stroke survivors and their family members will face financial difficulties. As a result, there is a need to ensure that the interventions implemented for this purpose are cost-effective (Selamat, 2022). This is especially evident in low- and middle-income countries where rehabilitation technology is not widely used, despite attempts to apply it for therapeutic purposes because an overpriced technological aid will burden survivors' caregivers and family members, eventually demotivating them to continue the therapy sessions (Abaza & Marschollek, 2017) (Naslund et al., 2017). However, the authors opted to control this variable by having inclusion criteria of a caregiver who is knowledgeable in terms of video conferencing and social media applications to ease the delivery of TR services in terms of exposure, ease of use, and ready access to new technology to the participant with stroke.

Filipino patients aged 20 and above who are medically diagnosed with any type of stroke, regardless of their chronicity and number of diagnosed strokes, will be recruited for the study as long as they are referred to PT TR by their doctors and live in the Philippines. However, the level of their cognition based on the chronicity of stroke of the participants can affect the perception and utilization of TR. Patient characteristics like age, stroke severity, caregiver support, and cultural influence modified patient perceptions and choice of rehabilitation (Tyagi et al., 2018). Stroke severity can affect one or more cognitive domains, such as orientation, memory, attention, and language (Al-Qazzaz, 2014). This can alter how patients process simple commands during TR and understand complex instructions even more; thus, the recruitment of participants based on the severity of the stroke should be considered. Recent research determined an increase in the prevalence of stroke from ages 20-54 (Davis, 1989). Additionally, the preliminary questionnaire will require a picture of their doctor's referral slip to verify if the patient is referred for TR due to a stroke.

Moreover, participants who can understand and speak either Filipino or English will be included in the study. Some participants will be accompanied by a caregiver knowledgeable about video conferencing and social media applications which will assist them in setting up the interview and assessing the forms and other materials to be sent by the researchers. Additionally, a Mini-Mental State Examination (MMSE) score below 24 may indicate that the participant has a cognitive impairment and will be excluded from the study (Rogers, 2010). Participants with an MMSE score of 24 and above will be included, provided a caregiver will accompany them (Yeoh et al., 2019). Data credibility and dependability will also be considered during the conduction of the research (Chen et al., 2019). Patients with cognitive dysfunction could give inconsistent data that could affect the study results. Participants under the direct care of the authors will also be excluded to prevent biases.

Table 1. Inclusion and Exclusion Criteria for Study Eligibility

Inclusion	Exclusion
1. Filipino citizen	1. Patients who have language problems/deficits
2. 20 years old and above	
3. Underwent or undergoing TR services since March 2020	2. MMSE score of below 24
4. Medically diagnosed with any type of cerebrovascular disease	3. Impaired hearing
	4. Diagnosed with other neurologic conditions besides stroke and uncontrolled cardiac conditions
5. Referred by MD for stroke PT TR	
6. Able to speak and understand Filipino or English	5. Patients under the direct care of the authors
7. Should be accompanied by a caregiver who is knowledgeable in terms of video conferencing and social media applications	

This study will utilize purposive sampling as the research requires participants to have experience in the TR setting. A sample size of eight to twelve participants is recommended when conducting an SSI (DeJonckheere & Vaughn, 2019). A past study was undertaken to explore the perspectives of pregnant patients on weight gain. The study used ten (10) participants during the SSI and achieved data saturation (DeJonckheere & Vaughn, 2019).

Participants will be recruited by sending invitations to hospitals and rehabilitation centers offering TR, referrals from physical therapists, and posting publicity materials on various online platforms. The researchers will ensure that the participants are not under the direct care of the authors to eliminate bias. No relationship will be established between the participants and researchers before the commencement of the study. Moreover, one participant per hospital or rehabilitation center will be recruited to ensure a maximum variation of participants. Interested participants will be initially screened using the MMSE and preliminary questionnaire to determine if they will meet the inclusion criteria. The MMSE will be administered with professional supervision and by researchers who underwent proper training. The trainer of the researchers that will perform the MMSE is a university graduate with postgraduate studies specializing in neurorehabilitation and is currently an instructor and licensed physical therapist in the Philippines. Additionally, data gathered from the preliminary questionnaire will be analyzed and filtered to determine if participants are eligible for the study.

Setting

The SSI will be conducted online using Google Meetings, Zoom, or Facebook Messenger. Depending on availability, participants will be scheduled for at least an hour-long interview. Before the interview, participants will be contacted to orient them about the study's objectives and essential reminders. The study will be conducted from January 2022 to December 2022.

Research Instrument

A preliminary questionnaire (Appendix A) will be translated into English and Filipino to ensure all participants understand the items. The questionnaire consists of two parts with 16 questions to obtain the participant's demographic information and TR setup. Interview questions (Appendix B1-B2) that will be used in this study include self-made and adapted questions from other studies with the same objectives (Chen et al., 2019; Tyagi et al., 2017). Filipino and English interview questions will initially undergo content validation from one methodological expert to assess whether the questions constructed are appropriate and have the potential to answer the study's research question. The qualified methodological expert should be knowledgeable and specialized in qualitative studies, SSI, and fluent in English and Filipino (Tsang et al., 2017).

Data Gathering Procedure

Question Formulation and Recruitment of Participants. The data gathering process is presented in Figure 2. After formulating and validating the interview questions, the researchers will obtain ethical approval from an Ethics Review Committee of an institution. The researchers will send invitations via email or letter to hospitals and rehabilitation centers offering TR. In addition, the researchers will also send referrals from physical therapists (this excludes patients under the direct care of the authors) and post publicity materials on various online platforms such as Facebook, Instagram, and Twitter. Participants agreeing to participate in the study will receive an informed consent form sent through Google, Yahoo, or Facebook Messenger. It contains information about the whole research process, its risks, and benefits, and aims to obtain voluntary consent to join the study. A preliminary questionnaire in Google forms will be sent via the same online platforms. Participants will then be screened using the MMSE and assess their demographics to determine their eligibility for the study. Caregivers may assist the participants in answering the informed consent form, Participant Information Sheet, and during the MMSE and the SSI proper.

Consequently, a pilot interview will be conducted using the formulated questions by interviewing an eligible participant. This participant will not be included in the actual data gathering and will only provide feedback regarding the clarity of the question. Similar studies have also used this method to determine the need to revise and refine the questions and SSI procedures before using them in the research (Atun-Einy & Kafri, 2019; Hatry et al., 2015).

The interview proper will then be conducted after consideration of the feedback during the pilot interview. The entire research process will be documented through an audit trail to provide a clear connection between the data gathering procedure and the interpretation of data in the latter part of the study (De Kleijn & Van Leeuwen, 2018). The researchers will assign an auditee who will oversee the audit trail.

Semi-structured interview (SSI). SSI uses open-ended questions and is usually utilized in a qualitative phenomenological study

design to gather participants' experiences of a phenomenon (Palinkas et al., 2013). It collects data by conducting in-depth interviews to extract a range of topic responses, engage social interaction between participants, and clarify a process (Grossoehme, 2014). SSI allows the researchers to probe more into the participants' responses by asking follow-up questions than other qualitative procedures (Tsang et al., 2017). It is also used to know the independent thoughts of the participants and avoid the influence of ideas from other participants since the interview is done individually.

The interviews will take at least one hour and will be conducted between 8 AM and 5 PM since these are the most active times of the day for patients with stroke (Bernhardt et al., 2004). Five people will be present during the semi-structured interview, including the participant and the caregiver. A male physical therapist specializing in neurological and a female licensed physical therapist specializing in cardiopulmonary rehabilitation, currently an instructor at a university, will moderate the interview. The researchers have experience conducting qualitative research and SSI and underwent an online training course for Principles of Health Research Ethics and Good Research Practice. One (1) of the researchers will record the session upon getting the consent of the participants, and the other researcher will take notes during the interview.

The participants are required to turn on their cameras during the MMSE procedure, while it is optional during the SSI. The interview process will be done until data saturation is reached. Data saturation happens when no new emerging information or themes are observed in the data gathered from the interview. The researchers will recheck the data and generate codes and themes until they have narrowed it down and reached the stopping point or threshold (Saldaña, 2015). Moreover, if a technical interruption occurs, the researchers will message or call the participant to ask if they can continue or would prefer to reschedule the interview.

Transcription of Recorded Interviews. After SSI, five members will perform verbatim transcription and will be cross-checked by the remaining four to ensure that all data gathered are completely transcribed. The Filipino responses of the participants will be translated into English by the researchers. The researchers will validate the transcription through member checking by confirming the correctness and accuracy of the transcribed interview with the interviewees (Birt et al., 2016). All researchers underwent training and will be guided by professionals during the conduction of these processes. Additionally, the researchers will send a copy of the video and audio recordings plus the interview transcription to the participants for the participants to check the correctness and accuracy of the transcription.
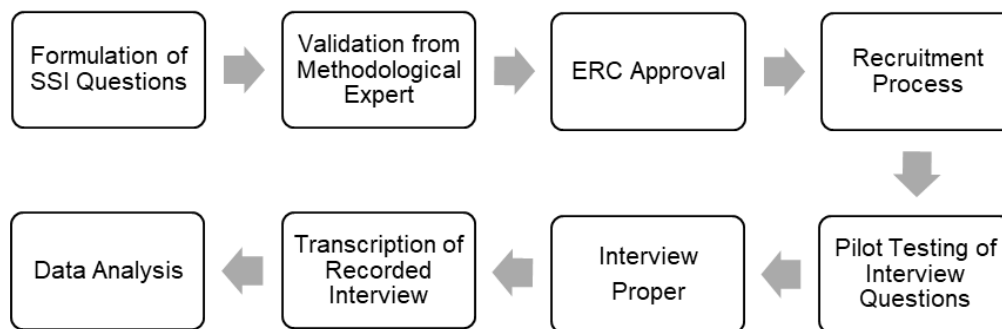

Figure 2. Data Gathering Procedure

Data Analysis

Results from the preliminary questionnaire will be summarized through a demographic table that will indicate the participants' personal information and TR setup. The table will be adapted and modified from similar studies to present the variability of the participants (Fugard & Potts, 2015; Östhols et al., 2018).

Validated transcripts will undergo peer debriefing through transcript evaluation and peer re-reading to enhance credibility (Devakirubai, 2020). Finalized transcription will undergo coding analysis using Computer Assisted Qualitative Data Analysis Software (CAQDAS), specifically the NVivo software. NVivo is highly compatible with research designs like phenomenological studies due to its features, such as rich text capabilities and character-based coding (Zamawe, 2015). The researchers will utilize the codes identified through the NVivo software and create

the coding tree using the codes-to-theory model (Figure 3) (Saldaña, 2015). A coding tree organizes the codes, creates the categories, and subsequently identifies the themes. All research members will countercheck the created codes, categories, and themes. In case disagreements arise, they will be resolved by weighing the pros & cons by consultation with the professionals of the research team. After identifying the themes, the researchers will interpret and analyze the data through thematic analysis (Figure 4) (Dunne et al., 2020; Guest et al.,2020; Braun & Clarke, 2013). Reflexivity will be used to evaluate the researcher during the research process to eliminate bias when analyzing data (Symon & Cassell, 2012). The researcher and findings of the study will be treated as separate entities to maintain an objective position. After the data analysis, the researchers will meet with the participants to report the study results. They will also be provided with a copy of the completed study.
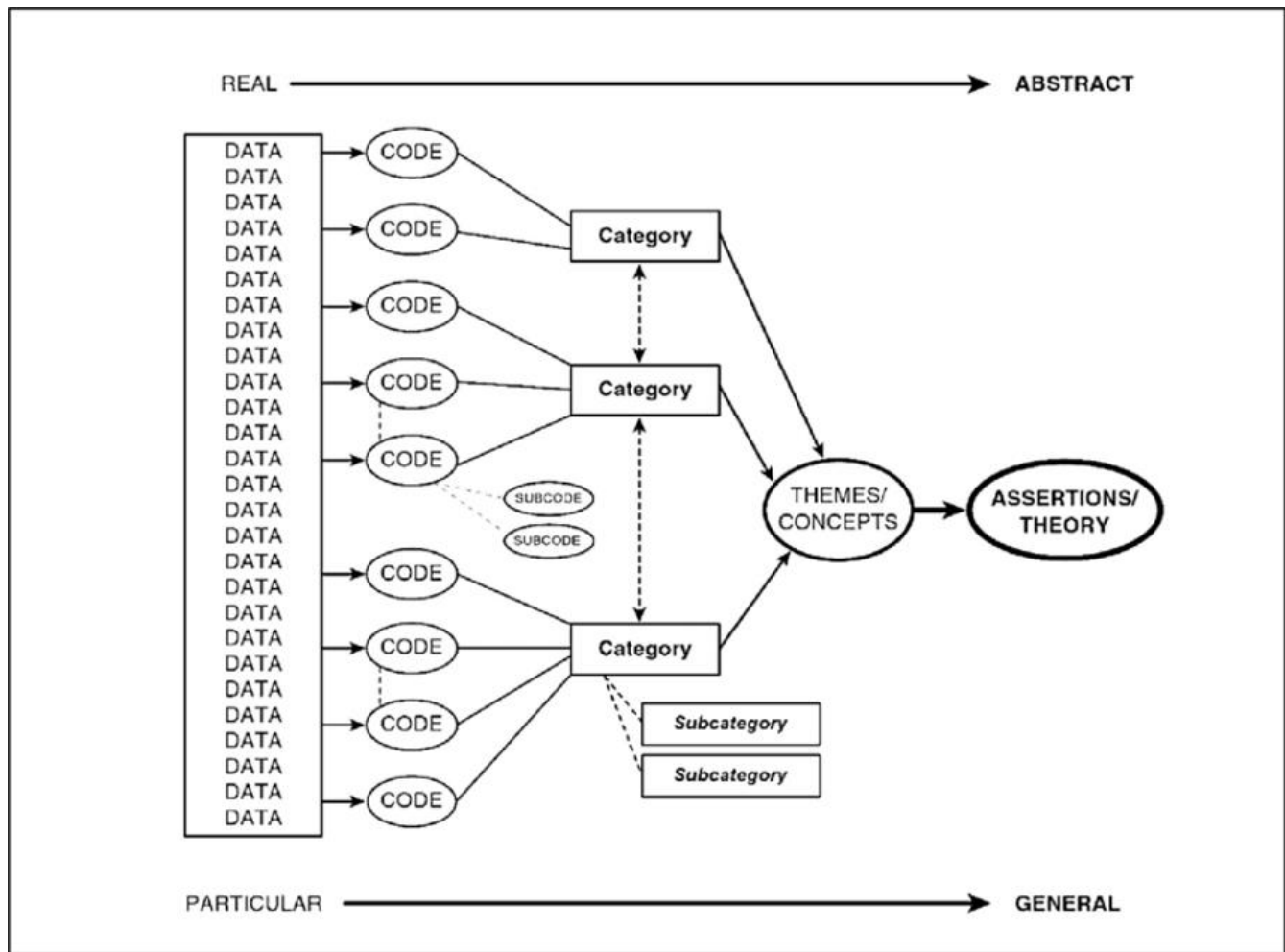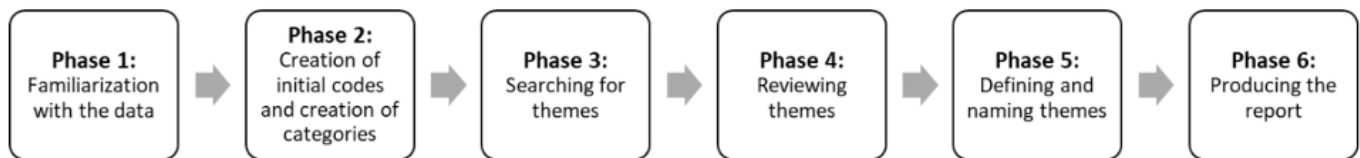
Figure 3. Coding Tree

Figure 4. Braun & Clarke Thematic Analysis

Scientific Rigor

Rigor will be ensured by applying the four strategies: credibility, dependability, transferability, and confirmability. Credibility will be achieved by employing a member-checking approach to confirm the accuracy of the transcribed data gathered from the SSI (Birt et al., 2016). Only one of the researchers will interview the participants for consistency in data gathering. Moreover, the researchers will use peer debriefing during the data analysis to evaluate the transcripts through peer re-reading, which includes identifying significant structures in the phenomenon (Devakirubai, 2020). Dependability will be done through an audit trail to discuss and describe the entire research process. In addition, a diagram for the data gathering procedure will be provided to ensure a systematic approach during the process. To achieve transferability, the researchers will thoroughly explain the study's methodology. Lastly, reflexivity can guarantee confirmability to reduce bias throughout the study. Consulting experts in qualitative methods will also be considered to check the transcription.

Ethical Consideration

The study will be implemented according to the Declaration of Helsinki and the Good Clinical Practice Guidelines of the Philippine Health Research Ethics Board (PHREB). It will be approved by the Ethics Review Committee. Data collected will solely be used to fulfill the research objectives and ensure the protection of human participants.

Before recruitment, a letter will be sent to hospitals and rehabilitation centers offering TR services. The letter will request

permission to recruit and invite patients with stroke who underwent or are undergoing TR to participate in the fulfillment of the study. The letter will include the inclusion criteria, the general procedure of the implementation, and the study's objectives. Recruitment will begin after the request has been approved. An informed consent form will be sent to the participants interested in participating in the study. The participants will then be informed of the study's risks and benefits to the participants, the researchers, and future studies. They will also be informed that they can refuse participation and withdraw at any time during the study's implementation.

The study will not involve any treatment, interventions, procedures, or possible physical risks, as interviews will only be conducted. Before the interview starts, the participants will be ensured to have stable vital signs to prevent unfavorable circumstances. Furthermore, it will also ensure that the participant is still under the care of their physician by having the physician's name and contact number on hand in case of an emergency. Some questions to be asked during the interview are sensitive and personal, which could trigger anxiousness or discomfort and could be the possible reason for the termination of the interview. Thus, the participants will be informed that they are free to decide whether or not to answer the questions if they are uncomfortable. Rest periods will also be provided between the interviews whenever the participants request. Some participants will be accompanied by their caregivers for the entire interview to minimize the risk and ensure safety. The caregiver will also help ensure the participant understands all the information in the informed consent form. In the event of any injury during the interview, the researchers will remind the participants to call the physician in charge immediately. It should also be informed that the caregiver should bring the participant to the nearest hospital's emergency room if necessary. Before the interview, the caregiver or participant will be asked to identify the nearest emergency hospital within their area. If there are, the whole expenses brought about by accident will be covered by the researchers. With that said, the study's benefits outweigh the risks. During the interview, safety measures will be in place if participants experience an adverse effect.

After the data analysis, the participants will gather for a meeting to report the study results. Participants will be provided with a copy of the study after its completion. All personal information, transcribed interview, video, and audio recordings gathered during the interview will be stored in a password-protected laptop and flash drive, which one of the researchers will keep for backup purposes. These data will be kept to a maximum of five years in the event of any publication. This method ensures that the raw data can be traced back in case of inquiries from journal editors or readers of the published study. Only the nine research team members, three faculty co-authors, and the ethics committee will have access to the stored data. Researchers will also assign name codes per participant to avoid disclosing identity. To dispose of the data gathered, all personal information of the participants, transcribed interviews, and video and audio recordings of the conducted interviews in the password-protected laptop and flash drive will be deleted. The deleted files will be deleted again in the recycle bin to prevent the recovery of these files.

The research team comprises nine members who are currently fourth-year university students in the PT program. Two faculty co-authors are university graduates with bachelor's and master's degrees in PT. One faculty co-author is a university graduate with a bachelor's and master's degree in PT and a doctoral degree in rehabilitation medicine. All three faculty co-authors are instructors and licensed physical therapists in the Philippines. Furthermore, all researchers underwent an online training course for the Principles of Health Research Ethics and Good Research Practice.

Conflict of interest statement

The authors report that there are no competing interests to declare.

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Appendix A

Semi-structured Interview Questions (English)

Title
Experiences and Perspectives of Filipino Patients with Stroke on Physical Therapy Telerehabilitation: A Phenomenological Study

Objective
This study aims to explore the experiences and perspectives of Filipino patients with stroke who are currently undergoing or have undergone PT TR in the Philippines since March 2020.

Interview Questions

GENERAL EXPERIENCE
1. Before physical therapy telerehabilitation:
    a. What are the things that you do to prepare yourself, house, and/or caregiver before each physical therapy session?
    b. How do you feel before each physical therapy session?

2. During physical therapy telerehabilitation:
    a. How do your physical therapy sessions go about?
    b. What are the things that you do during your physical therapy session?
    c. How long does your physical therapy session usually last?
    d. How do you feel during each physical therapy session?

3. After physical therapy telerehabilitation:
    a. What do you do after each physical therapy session?
    b. How do you feel after each physical therapy session?

4. Overall:
    a. Overall, how was your experience in undergoing physical therapy telerehabilitation?

REFLECTION ON EXPERIENCE WITH TELEREHABILITATION:
1. What are your reasons/motivations for attending physical therapy telerehabilitation sessions?
    a. Did you observe any changes in motivations in attending the physical therapy telerehabilitation sessions?

2. For patients who observed changes during their physical therapy telerehabilitation session:
    a. What changes did you observe about yourself while attending the physical therapy telerehabilitation sessions?
        ● What do you think contributed to these changes?

3. For patients who did not observe changes during their physical therapy telerehabilitation session:
    a. What do you think contributed to the absence of change?

SUGGESTIONS AND FURTHER INPUT

1. For patients who are still undergoing physical therapy telerehabilitation:
   a. Would you continue doing physical therapy telerehabilitation even after the pandemic?

2. For patients who are finished with their physical therapy telerehabilitation:
   a. Would you recommend using telerehabilitation for physical therapy services for other patients with stroke?

3. For patients who have experienced in-person physical therapy rehabilitation:
   a. What were your insights with regards to face-to-face physical therapy rehabilitation vs. physical therapy telerehabilitation?