

Return-to-Work among COVID-19 Survivors in the Philippines and the Role of Rehabilitation: A Mixed-method Design

Michael P. Sy, PhD,^{1,2} Roi Charles S. Pineda, PhD,³ Daryl Patrick G. Yao, MSOT,⁴
Hans D. Togonon, OTRP, NZROT^{5,6} and Eric Asaba, PhD^{7,8,9}

¹Zurich University of the Applied Sciences, Winterthur, Switzerland

²University of the Philippines Open University, Los Baños, Laguna, Philippines

³KU Leuven, Leuven, Belgium

⁴Department of Disability and Human Development, University of Illinois at Chicago, Chicago, Illinois, USA

⁵Therabilities South Inc., Muntinlupa, Philippines

⁶Kidscape Therapy Center, Biñan, Laguna, Philippines

⁷Division of Health and Rehabilitation Gothenburg, Gothenburg, Sweden

⁸Division of Occupational Therapy, Karolinska Institutet, NVS, Huddinge, Sweden

⁹Unit for Research, Education, Development, and Innovation, Stockholms Sjukhem, Stockholm, Sweden

ABSTRACT

Background. A substantial number of COVID-19 recoverees are working-aged individuals, which makes return-to-work (RTW) an essential part of rehabilitation. Many COVID-19 recoverees must deal with physical and mental symptoms of post-COVID conditions such as fatigue, dyspnea, difficulty concentrating, memory lapses, and anxiety. These symptoms coupled with often insufficient support from employers and the government can make the RTW process complicated. Although research related to RTW after COVID-19 has begun to emerge over the years, few primary studies have come out from developing countries.

Objectives. This exploratory study aims to describe perceived work ability and health-related quality of life, lived experiences of the RTW process, and role of rehabilitation in a limited sample of Filipino COVID-19 recoverees.

Methods. Using purposive sampling and a convergent parallel mixed-method design, the study draws on an online survey and group interviews to understand expectations, experiences, and self-rated work ability of working-age adults with post-COVID condition. We report the findings of the questionnaire data using descriptive statistics. From the questionnaire respondents, eight participants were interviewed to explore the RTW experiences from multiple perspectives. The group interview was conducted online, and narrative analysis was used to explore the data. This analytic process involved an iterative and inductive process between data gathering and data analysis.

Results. Findings from our narrative analysis are reported under four themes: 1) The period of liminality; 2) A 'positive' problem; 3) Health as a psychosocial and justice issue; and 4) The reimagination of paid work. The narratives gathered document an overview of how selected Filipinos overcame the COVID-19 infection and their recovery and RTW process.

Conclusion. Results call for a re-examination of the concept of health and paid work for individuals undergoing rehabilitation and recovery.

Keywords: pandemic, work rehabilitation, vocational rehabilitation, work ability, job resumption, occupational therapy



Paper presentation – 8th Asia Pacific Occupational Therapy Congress, November 7, 2024, Sapporo, Japan.

eISSN 2094-9278 (Online)
Published: December 18, 2025
<https://doi.org/10.47895/amp.vi0.12010>
Copyright: The Author(s) 2025

Corresponding author: Michael Sy, PhD
Institute of Occupational Therapy
School of Health Sciences
ZHAW Zurich University of Applied Sciences
Katharina-Sulzer-Platz 9, Postfach
CH-8401 Winterthur
Email: Michael.Sy@zhaw.ch
ORCID: <https://orcid.org/0000-0003-0849-2874>

INTRODUCTION

The majority of those who contracted COVID-19 present with only mild symptoms but as much as 20% of those infected have required hospitalization and intensive care.¹ When the World Health Organization (WHO) in May 2023 declared that COVID-19 was no longer a global public health emergency, the Philippines have reported 4.1 million and 66,444 cumulative cases of COVID-19 infection and related deaths, respectively.^{2,3} While the mortality rates are highest among individuals 65 years and older, individuals between 20 and 65 years constitute the largest number of COVID-19 survivors and recoverees who have since returned back to their usual lives.⁴

For working-age adults, return-to-work (RTW) is an essential part of rehabilitation after recovering from COVID-19. However, they may have to deal with common post-discharge symptoms such as fatigue, dyspnea, and myalgia.^{5,6} Besides these physical symptoms, many present with cognitive problems like difficulty concentrating and lapses in short-term memory, and mental health issues such as post-traumatic stress disorder, anxiety, and depression.^{5,7} The persistence of these symptoms along with many other multisystem symptoms beyond 4 to 12 weeks after initial infection is now being referred to as post-COVID condition (PCC).⁸ With a global estimated prevalence of 41%–43%, PCC can pose a challenge for the RTW process, especially in the absence or inadequate support and rehabilitation.^{9–14} Because of the risk for individuals with PCC to remain on sick leave for extended periods or become unemployed without relevant rehabilitation, it has been argued that there is a need for further work in this area and that occupational therapy is a well-positioned professional area to work with return to work rehabilitation after COVID-19.^{15,16}

The Philippine Health Care System, Health Culture, and Work Rehabilitation

Signed into law in 2019, the Universal Health Care Act (Republic Act No. 11223) stipulates that all Filipinos are automatically enrolled in, and thus entitled to the benefits of a national health security program. The law covers rehabilitative health services as part of the national insurance system.¹⁷ However, priorities other than rehabilitation such as communicable diseases, immunization, and vaccination often take precedence over rehabilitation. Due to the low priority given by the Philippine government to rehabilitation, there have been an estimated eight million people with disabilities in the Philippines with limited therapy options beyond private healthcare services.¹⁸ While the national insurance system introduced packages to support rehabilitation of indigent Filipinos, this health benefits package has reported low utilization mainly because of the limited number of providers, stringent eligibility criteria, and limited information campaign for eligible patients.¹⁹ In 2022, a function-based rehabilitation model was proposed by a group of

Filipino physiatrists in order to guide the development and implementation of insurance benefit packages for Filipinos with disabilities in preparation for the implementation of the Universal Health Care Act.²⁰

The health beliefs, behaviors, and practices of Filipinos may also be an explanation as to why they do not seek rehabilitation services even when necessary. While preventive health takes a back seat for many Filipinos, instead of going to a nearby clinic to seek consultation from a licensed health professional, they have the tendency to self-diagnose, self-medicate via home remedies, and seek alternative medicine such as *hilot*, a type of chiropractic manipulation and massage delivered by *masseuse*.²¹ Moreover, taking care of one's parents, children, or the sick is highly regarded as a Filipino value, which reinforces neglect to rehabilitation services as an essential part of recovery and improving health because availing such services would equate to offsetting budget allocated for others.²² Given these contexts, it can provide us a better understanding as to how RTW may be seen as an overlooked concern within the health and social care systems in the Philippines.

Impact of COVID-19 on Filipino Workers

The Stanford Hall consensus for post-COVID rehabilitation includes relieving symptoms of dyspnea, psychological distress, and improving participation in rehabilitation, physical function, and quality of life.²³ In a more recent scoping review regarding rehabilitation care models for PCC, RTW is recognized as one of the patient-level outcomes dependent in the broader rehabilitation process.²⁴

Current strategies to support RTW are providing advice on return to usual employment, advice on financial support, and advice on seeking new employment.²⁵ However, social stigma against COVID-19 recoverees, alongside PCC, complicates the RTW process.²⁶ This warrants additional support from health and social care professionals, including occupational therapists.^{27,28} Attending to an individual's successful RTW is imperative as work can affect national economy and development, crucial to counteract the economic depression brought about by the pandemic.^{29,30} Yet, access to such support is even lower for countries within Southeast Asia as rehabilitation is not yet part of nor a priority for the national strategy concerning the aftermath of the pandemic.³¹

Supporting RTW of Filipino Workers who had COVID-19

Due to the pandemic, the national unemployment rate rose to 17.7%, which is equivalent to 7.3 million unemployed Filipinos.³² A workplace handbook for the management and prevention of COVID-19 and the RTW of individuals who had COVID-19 was provided by the Department of Health.³³ Stipulated within said handbook, a person must first be asymptomatic prior to returning to a workplace. Hence, for individuals with post-discharge symptoms, more

support and rehabilitation may be needed warranting further financial assistance.

For employees who contracted COVID-19, some form of social amelioration was made available. The Employees' Compensation Commission (ECC) is the designated government agency that provides assistance for frontline workers who suffered from COVID-19 by reason of their employment.³⁴ While the ECC gives out a benefit package for affected employees and their families, the requirements are cumbersome and the eligibility for such benefits exclude self-employed individuals. To some extent, the ECC receives referrals from healthcare institutions that admit and take care of people who became unemployed due to a contracted disease, resulting in a disability. Employees who contracted COVID-19 in the workplace may benefit from private health insurance, sick leave, and other monetary assistance for health services. However, most Filipinos, including the unemployed and self-employed, rehabilitation is an out-of-pocket expense and may be perceived as a financial burden rather than a nexus between disability and work.^{19,35} The Return-to-Work Assistance Program (RTWAP) in the Region IV-A of the Philippines, was launched by the ECC last February 2023, which aims to pilot a pathway for Filipinos with disabilities towards work rehabilitation and reintegration.³⁶ In this meeting that was attended by one of the authors, it was revealed that "COVID-19 survivors" can ask for financial claims if persistent impairments are apparent and can be medically substantiated.

In systems where persons with disabilities are supported in RTW through comprehensive rehabilitation, including the individual, professionals, employers, government, and the social security system, it is expected to see relevance not only for the health and social welfare sectors but also to the economic sector.³⁷ In the Philippines, while there was a recent proposal for a rehabilitation framework, there remains no practice guidelines on the RTW process that encompasses the involvement of both the health and the social welfare sectors.²⁰ Locally, rehabilitation begins with a referral of the general physician to the physiatrist, who then provides a referral for physical therapy. Typically, the clinical side of rehabilitation ends after receiving several physical therapy sessions, with limited coordination with occupational therapy or relevant health services. If employed, the patient can be recommended to apply for employment assistance to return to previous employment, which commences the social welfare side of rehabilitation.

OBJECTIVES

The purpose of this study was to explore the RTW situation of COVID-19 recoverees recruited. More specifically, the present study's objectives are: 1) describe the perceived work ability and health-related quality of life of an online sample of Filipino COVID-19 recoverees; 2) recount their lived experiences of COVID-19 and RTW process;

and 3) elucidate the role of rehabilitation for persons with PCC within the Philippine context. As an exploratory study, the aim is not to provide a comprehensive analysis of the RTW process in PCC for the entire Philippines but rather to illustrate the RTW situation and experiences of a limited sample of Filipino COVID-19 recoverees. For this reason, subsample analysis based on factors that may influence the RTW process (e.g., age, sex, type of work) was not performed.

MATERIALS AND METHODS

Research Design

This study employed a convergent parallel mixed-method design.³⁸ This design provides a broad overview of the demographic information, work ability, and health-related quality of life of Filipino COVID-19 recoverees through descriptive quantitative data derived from an online survey. Concurrently, in-depth information about the lived experiences of select individuals were obtained through online interviews, which were gathered, analyzed, and interpreted following principles of narrative analyses.^{39,40} Quantitative and qualitative data were analyzed separately and were then converged to support and/or to refute each other to address our research objectives. Given the timeframe when the study was conducted, recruitment and data collection were restricted to online means. While an online approach circumvents physical distancing guidelines enforced during the pandemic, it is not without its flaws including limited reach to people of lower socio-economic background and survey fatigue, which has been on the rise with the surge of research activities during COVID-19.^{41,42} This University of the Philippines Manila Research Ethics Board reviewed and approved the study protocol (UPMREB 2021-0474-01).

Researchers' Positionality

The research team is comprised of licensed occupational therapists who work as clinician, research students, and academics in research and teaching. None of the authors have received rehabilitation services due to COVID-19. All of them (except one member who lives and works in Sweden) have lived and worked as occupational therapists in the Philippines. The team collectively brings an international experience to a critical interpretation on the situatedness of the RTW process for Filipinos with PCC.

Participants

A purposive sample of participants was recruited for the study. For the online survey, the inclusion criteria include: 1) working-age adults, 18–64 years; 2) had been hospitalized and received in-patient medical care due to COVID-19; 3) had been attempting to resume employment or had already resumed employment post-discharge; and 4) able to read and comprehend English or Filipino. Filipinos who reside and work abroad were excluded because their RTW experiences

may not be comparable to Filipinos residing and working in the Philippines.

Using the Work Ability Index (WAI) as a measure of work ability, the minimum sample size needed to determine the average WAI scores of Filipino COVID-19 recoverees was calculated using the formula for estimating means in survey research described by Daniel and Cross.^{43,44} As there are no published values for WAI scores in COVID-19 recoverees to inform an *a priori* power calculation, we adopted the upper range of the reported standard deviation for the general worker population.^{45,46} With a population standard deviation estimate of 6.5 WAI points and a margin of error of the estimate of ± 2 points, the target sample size for the survey was 41 respondents.

Respondents from the online survey were invited to also participate in an interview. In addition to meeting the inclusion criteria for the survey, interview participants had received rehabilitation during and/or after hospitalization for COVID-19. Data was gathered until saturation for the narrative analysis was met.⁴⁷ All participants (survey and interview) provided their informed consent via REDCap's e-consent framework.

Online Survey Questionnaire

The online survey, which was hosted in REDCap, consisted of four sections that could be completed within 15–20 minutes. It was available in English and in Filipino to accommodate the language preference of the respondents. The first section comprised of questions based on the study's inclusion criteria to filter out ineligible participants from becoming survey respondents. The second section asked about sociodemographic and COVID-19-related medical information. The WAI and EQ-5D-5L questionnaires comprised the third and four sections.

The WAI is an instrument used in clinical occupational health and research to assess not only the physical but also the cognitive and psychological aspects of work ability.⁴³ The index score ranges from 7 (worst work ability) to 49 (best work ability). WAI's strength as a tool is evidenced by its widespread use. It is considered the most commonly used tool for measuring work ability and has been translated to and validated for more than 24 languages from diverse cultures, including Spanish, Mandarin, Bahasa Indonesia, and Thai.^{48–52} Across its translations, WAI has demonstrated good to excellent reliability and validity.^{45,53,54} Because there is no available Filipino version of the WAI, it was translated following the WHO's four-stage translation process.⁵⁵

The EQ-5D-5L served as a standardized measure of health-related quality of life. The questionnaire, which has two parts. First, a descriptive system measures five different aspects or dimensions of health (i.e., mobility, self-care, usual activities, pain/discomfort, and anxiety/depression). Second, a visual analogue scale (VAS) identifies the participant's self-rated health on a vertical line, with the bottom and top endpoints indicating the best health and worst health one

can imagine, respectively. Following a formula that assigns weighted value to each level of health dimension, an EQ-5D-5L summary index ranging from 0 (worst health) to 1 (best health) is obtained. This index is calculated by deducting the appropriate weights from 1. The collection of weighted scores for all possible EQ-5D-5L health states is called a value set. A Filipino version of the EQ-5D-5L is available, including a validated value set obtained from a representative Filipino sample.⁵⁶

Procedure

Before the survey was officially launched, it was piloted with 20 individuals (10 for each available language) who had recovered from COVID-19. The pilot aimed to assess survey language comprehensibility, test whether the survey behaved as planned, and estimate survey completion time. Once feedback and comments from the pilot run were resolved, the link to the online survey was publicized through e-posters. These e-posters were disseminated through multiple channels including professional organizations, healthcare institutions, educational institutions, and government organizations, notably the ECC. These dissemination channels posted the e-posters in their social media platforms such as Facebook, Twitter, and LinkedIn, or direct email to their networks. The survey period ran from March 2022 to August 2022.

Respondents were asked to provide their contact information if they consent to be interviewed. The researchers then contacted these prospective participants to schedule the interview session. Due to the pandemic-related restrictions still in place at the time, interviews were conducted via teleconferencing. Interviewees were compensated with PhP 500 to cover potential cost of internet access for the online interview. All interviews were conducted between May 2022 to August 2022.

The interview lasted around 60 minutes. One of the research team members conducted the interviews, as guided by the following exploratory, semi-structured question guide:

1. Can you describe your work before and after you contracted COVID-19?
2. Can you tell us briefly what happened when you learned that you have contracted COVID-19 and the events thereafter?
3. What was your experience during the periods that you were in isolation, under observation, and/or undergoing treatment/rehabilitation?
4. What was your experience during your recovery period, i.e., from the time you were discharged from the hospital/health facility until the period that you were cleared to back to work?
5. What was your experience of being back to your old job?
6. At present, how do you describe your health in relation to your work performance?

The interviews were audio-recorded, which were then transcribed verbatim. Participants were invited for a follow-up interview 1–2 months to allow for member checking.

Because the study was conducted when people were transitioning from working at home to going back to on-site work, challenges in gathering participants online to join the scheduled group interviews were encountered. On several occasions, only one participant showed up. Instead of rescheduling or postponing the scheduled meeting, the researchers decided to continue the session as a one-on-one interview rather than a group interview. Dropping these individual interviews, which lacked the interaction dynamics of group interviews, was an option. However, the advantage of adhering to procedural consistency does not outweigh the variety of individual experiences shared through these individual interviews. It can be argued that, rather than losing data richness, the decision to include individual interviews enriched the qualitative data, especially in consideration with the recruitment challenges encountered at the time.

Data Analysis

Quantitative analysis

Survey results were summarized using descriptive statistics (frequencies, means, and standard deviations). WAI scores were interpreted as poor (7–27), moderate (28–36), good (37–43), and excellent (44–49), as described by Ilmarinen.⁵⁷ Index value was calculated for the EQ-5D-5L according to its user manual.⁵⁸

Qualitative analysis

In accordance with narrative analysis, the organized data from the interview sessions were transcribed (phase 1) and subsequently arranged chronologically as part of the “storying process” of the transcript (phase 2).^{39,40,59,60} A deductive approach was utilized in framing the story plots, namely: orientation (setting up the general scene), complicating action (central detail), evaluation, and afterword (reflection).⁶¹ As part of a triangulation process (phase 3), an initial story was provided to the participants during a follow-up interview to determine how much the story resonated with their experiences. Despite multiple attempts to contact the interviewed participants, only one person agreed to come for a follow-up interview. A series of iterative discussions among the researchers facilitated meaning attached to the overarching narrative (phase 4).

Merging of data sets

The integration of quantitative and qualitative entailed the separate, albeit simultaneous, collection of both survey and narrative data, which were subsequently merged for analysis. In other words, our results will be presented with descriptive statistical findings first, and qualitative themes (based on quotations) second. The analysis of the generated

statistics and themes were juxtaposed to produce a descriptive interpretation of the merged data sets.⁶²

Rigor and Trustworthiness

Strategies outlined by Elo and associates were employed to ensure research quality with flexibility.⁶³ Online interview data were obtained with utmost confidentiality and authenticity. These data were later transcribed manually before analysis. The iterative exchanges to formulate the story plots were done including translating the narrative texts from Filipino-English to standard English.

RESULTS

REDCap recorded 103 questionnaires, 57 of which were from ineligible participants. Four questionnaires were also excluded because its consent form was incomplete, leaving 42 valid questionnaires for analysis.

Survey respondents’ age ranged from 20–61 years, with a mean age of 39.6 years. The modal civil status and educational attainment were married/cohabitating (54.8%) and tertiary education (73.8%), respectively. More than 70% of the respondents reported being from one of the three middle class categories (based on the Philippine Institute for Development Studies’ household income classification) and working full-time.⁶⁴ Median COVID-19-related hospital stay lasted two weeks and ranged between 3 and 60 days. “Good” self-perceived work ability is the modal score for the WAI with 52.4% while “moderate” comes second with 26.2%. Table 1 presents the characteristics of the survey participants.

The eight participants who participated in the individual and group interviews were between 20 and 60 years and all had at least some tertiary education. At the time of active COVID-19 infection, symptoms reported include but not limited to fever, chills, cough, hypoxia, dyspnea, anosmia, ageusia, and insomnia. After experiencing these symptoms, they were tested via an antigen test and then a rapid polymerase chain reaction (PCR) test for confirmation. These tests were done at home (initially) or at the nearest testing center. It is important to note that two participants had family members who were health professionals—occupational therapist, pediatrician/physician—which allowed them to get immediate attention on their health status before confirming the COVID-19 infection.

Their current work abilities (based on WAI scores) were moderate-to-good, with five of them still experiencing residual symptoms (i.e., brain fog, memory lapse, persistent cough, myalgia, fatigability, and dyspnea). The participants had all returned to full-time employment in a range of occupations, including clerical (Niña), managerial (Joan, Sarah, and Gary), healthcare professional (Dan, Allan, Rodolfo), and sanitary (Ryan). Participant demographics are presented in aggregate to protect confidentiality. Moreover, pseudonyms are used for ease of reading.

Table 1. Survey Participants (N = 42)

Characteristics	Respondents
Mean age (SD)	39.6 (11.2) years
N sex (%)	
Female	22 (53.4)
Male	20 (47.6)
N civil status (%)	
Single	17 (40.5)
Married / cohabitating	23 (54.8)
Separated	2 (4.8)
N educational attainment (%)	
Primary education	1 (2.4)
Secondary education	11 (26.2)
Tertiary education	31 (73.8)
N current work status (%)	
Full-time	37 (88.1)
Part-time	5 (11.9)
N household income (%)	
Poor	3 (7.1)
Low income	6 (14.3)
Lower middle class	14 (33.3)
Middle class	10 (23.8)
Upper middle class	6 (14.3)
High income	2 (4.8)
Rich	1 (2.4)
Median hospital stay (IQR)	14 (9–19) days
N WAI category (%)	
Poor	4 (9.5)
Moderate	11 (26.2)
Good	22 (52.4)
Excellent	5 (11.9)
Mean EQ-5D-5L index score (SD)	0.92 (0.1)
Mean EQ-5D-5L VAS (SD)	77.6 (16.6)

SD - standard deviation, IQR - interquartile range, WAI - work ability index, VAS - visual analogue scale

Findings from our narrative analysis revealed four main plots: 1) The period of liminality (before contracting COVID-19); 2) a “positive” problem (after contracting COVID-19); 3) health as a psychosocial and justice issue (hospitalization and rehabilitation); and 4) the reimagination of paid work (discharge and resuming work). Arranged chronologically, the plots gathered from selected participants narrated how they recovered and overcame COVID-19 and their process of RTW.

The Period of Liminality

The COVID-19 pandemic brought rapid changes to workplace routines. Companies were encouraged to transition to remote work. For instance, Rodolfo, a youth counsellor at a parachurch, shifted to a work-from-home set-up. However, some jobs are not as conducive to carry out remotely, i.e. frontline workers—essential to the operation of initiatives to fight COVID-19 or maintaining essential social and community functions. Ryan, a cleaner, was required to go to

the workplace in order to carry out regular disinfection of the workplace.

On the other hand, even when remote working is theoretically possible, workers who had employers with rigid and restrictive remote work guidelines felt that they had no choice but to report to their workplace. Sarah, for instance, works as a medical administrator. Although her tasks could have been done from home, rules and regulations implemented by her workplace prevented workers from working-from-home even if it was the safer alternative to combat the spread of the infection. She revealed:

Since 2020, we have not been able to work from home, even though the guidelines provided by the Civil Service [Commission] allowed us to work from home. If you're not involved in patient care or lab services, say, for example, you are doing research or a desk job—administrative, coordination—then you can do them at home. So, for the longest time, that's what we were lobbying for—for management to allow work-from-home arrangements. At that time, the number of infected employees is rapidly increasing. I think it reached 200 [infected] over 2–3 weeks. That much. However, the work-from-home guidelines [of the management] were so rigid to the point wherein you wouldn't want to avail it anymore.

The COVID-19 pandemic evoked feelings of anxiety and stress, particularly in facing financial strains and concerns. In addition to the frustration of being deprived of availing to work remotely, Sarah further shared:

We have to go to work every day. I do not want to unknowingly expose my family [to COVID-19] whenever I go home. To eliminate that risk, I opted to rent a place near [my workplace]. Of course, there are financial considerations. A huge portion of my finances goes to our utilities and rent, especially when compared to commuting home.

Ryan, on the other hand, was worried about COVID-19-related safety measure's impact on his ability to provide for his family. Hence, despite experiencing symptoms but prior to testing positive for COVID-19, he still chose to go to work:

That time [while experiencing COVID-19-like symptoms], I still reported to work. What I was thinking was that if I did not go to work, I would lose my income for the day. Then I would not be able to support my family. At the same time, I was also studying, so it was very difficult.

A 'Positive' Problem

The work situation for some participants put them at high risk for exposure. They soon realized the problems of being “COVID-positive” goes beyond simply being sick. When a person was confirmed with COVID-19 infection, they reported their case to the local government unit and

were advised to self-isolate while waiting to be admitted to the hospital for observation. However, the time between self-isolation to admission could be long because hospitals and other institutions for quarantining and for hospitalization were filled to capacity. This delayed not only needed health services but also the RTW process. In one case, Ryan recalled the difficulties of finding a hospital for quarantining. He asked for help from the local government unit, but could not receive help. He recalled:

I felt like I was not going to get better. The government did not help. Was it my fault that I got COVID-19? Even if I am just an employee, even if I am just a janitor, I am still contributing to our society. We still contributed to the growth of our country's economy. So, I was thinking that, even if our salary is small, even if we are nobodies, we still have the right to be taken care of by the government.

It is important to note that participants working in the government or have family members who are healthcare professionals were able to get immediate medical attention and support through local contacts within their workplaces.

Health as a Psychosocial and Justice Issue

The period from getting sick to the eventual return to their previous employment highlighted the psychosocial and justice issues of health. Where you live, who your employer is, and how affluent you are can influence the financial burden of hospitalization and rehabilitation.

Private rooms versus public wards

When admitted for hospitalization, participants were assigned to either a private room or a public ward, depending on the facility and what they can afford. Joan, who stayed in a public ward with approximately 80 other people, observed how understaffed the hospital was. Because of her medical background, she ended up assisting the nurses on duty with tasks, such as changing sheets/diapers, even as she was a patient herself. Yet, engaging in that activity helped her cope during the process. Allan also recalled that interacting with the other people in the ward helped the situation become lighter. Unexpectedly, although more comfortable and spacious, participants in private rooms felt isolated and anxious.

Occupations as a means of coping

While subjected to quarantine, the participants mentioned some activities that they engaged in such as praying, interacting with some people within the ward, creating a chat group on social media, reading, writing/journaling, virtually calling family and friends over the phone, watching television, resting, and sleeping. To them, these activities helped them cope one way or another. One of the participants even mentioned that he was able to write an essay about his COVID-19 experience for their school paper. He also shared his experiences via social media to educate

people about COVID-19 and to help people in a similar situation. He expressed that, even in isolation, he sought a sense of belongingness through the people he was with in the quarantine facility. Another participant mentioned that he joins his family in doing activities online such as eating dinner together.

Expenses and benefits

The expenses during hospitalization and rehabilitation varied between participants. For some, it was free, while some needed to pay (e.g., PHP 30,000 for hospitalization). According to them, they received some free supplies such as hospital food, oxygen tanks, and medications (unless they were out of stock, then they had to buy it themselves). For one participant, Ryan, he mentioned feelings of helplessness because of the lack of financial aid from the government. Only through the collective effort of his colleagues to buy him groceries for his everyday needs got him through his hospital stay. In contrast, Allan shared how instrumental the government was in ensuring his needs during hospitalization. He recalled that “everything was free of charge. The local government took care of it. The mayor issued a directive to offer free hospitalization for all COVID-19 victims. I availed of that and took advantage of it.”

Benefits from the government included social amelioration fund (PHP 10,000), food packs, PhilHealth insurance, SSS or GSIS (for government employees) assistance, and ECC compensation fund (for employees). However, the participants recalled that the process for applying for these benefits was difficult due to the numerous requirements needed, long processing time, and general lack of information regarding the benefits that can be availed. Fortunately, the employed participants received their salary from the time they were hospitalized until they returned.

The Reimagination of Paid Work

Persisting symptoms

Upon discharge, the participants were requested to continue isolation at home for two weeks. At this point, they considered themselves as “COVID-19 survivors.” Most of the participants stayed at home and did not go back to work right away. They used several weeks to recuperate from lingering physical symptoms, as most of them still felt weak, easily fatigued, and short of breath post-discharge.

Aside from physical symptoms, cognitive and mental health issues interfered with their ability to work. Sarah recalled that she suffered from brain fog, where she was prone to forgetting tasks and had difficulty recalling words.

I do not know how to address it. I might need other sources of mental work or consult an expert. But it usually happens when I'm at work. I would suddenly space out. Initially, my train of thought was fine but then, after a while, I do not know where it is.

She mentioned that her boss is understanding whenever she forgets tasks or some details at work because her boss also experienced the same phenomenon. One participant, Allan, mentioned that he had to undergo some post-traumatic stress disorder debriefing as he transitioned back to work. In the process of returning to work, another participant disclosed that he mentally coped with his situation by joining a support group.

Changes in health attitudes and routines at workplaces

At home and at work, the participants reported that they started practicing more rigorous sanitation such as handwashing, using face masks, social distancing, continuously taking vitamins, eating healthier, using the mobile phone to communicate, and opening doors and windows for better ventilation.

Besides the adoption of more hygienic habits, the shared experience of COVID-19 between the participants and their colleagues fostered camaraderie, where everyone is willing to help each other out. For Joan, she shared that her colleagues have been supportive of her coming back to work. They have been helping her lift documents, as she easily became dyspneic post-COVID-19 infection. Similarly, Garry's PCC symptoms restricted him from lifting heavy loads and he has been receiving assistance from colleagues for physically strenuous tasks.

Another participant, Rodolfo, mentioned pacing to ensure productivity without compromising health. His strategy for pacing entailed reduced working hours, adoption of telework, and avoidance of work-related stress.

Ryan's workload, however, remained the same as before he was hospitalized, which is a source of stress for him.

It was very hard to go back to work [after COVID-19]. I had a lot of things to clean and fix. I had so many things to do.... There's someone who goes on my behalf, a reliever, but I am still the one doing most things.

Stigma

Ryan, recalled that he worried about the stigma of having COVID-19. However, his colleagues have all been supportive during his entire ordeal. Having experienced the same thing with her colleagues upon her return from isolation, Joan reflected that her colleagues were already well-informed about COVID-19. Hence, their attitudes towards COVID-19 recoverees were generally positive. Similarly, Sarah's colleagues have been willing to assist and reorient her with the status and tasks of their current project.

Merged Interpretation of Quantitative and Qualitative Data

The results indicate that participants have good work ability after COVID-19, suggesting good potential for resuming employment. However, the likelihood of returning to the same workplace is underpinned by the fact that most

of the participants are married, educated, and with a stable employment. In other words, they can afford rehabilitation cushioned by their double-income situation, coupled by the fact that they are somehow insured in their job positions. Likewise, they are knowledgeable about what to do and can optimize their social capital (i.e., family and friends who are health care professionals themselves) to go through rehabilitation and actuate health promotion strategies both at home and at work.

For this study, we did not find any data evidencing the presence of rehabilitation, at any level, during the recovery and return to work process of the participants. Rather, the support that they received were mainly monetary subsidies from the government, which they did not avail themselves of because they are disqualified from the amelioration program by the fact that they are classified as employed, and/or as middle-class.

DISCUSSION

Our results revealed that the study participants had generally good overall health outcomes after recovering from COVID-19 infection. Although it appears high, mean EQ-5D-5L scores of Filipino COVID-19 recoverees in this study are comparable to those from Vietnam (0.86–0.94; VAS = 0.79–0.84) and the United Kingdom (index score = 0.86; VAS = 80.0).⁶⁵⁻⁶⁷ The WAI scores also reveal that more than half of those who participated in the study are categorized to have “good” work ability. Modal WAI rating was also “good” in a Spanish sample of workers with PCC but they comprised a smaller proportion of total sample (32.0%).⁶⁸

Having good overall health after contracting COVID-19 and being able to recover and return back to work could be attributed to socioeconomic status, especially in the Philippines.^{69,70} Most of the participants in this study belong to the middle-class category, suggesting that they are likely to access health care through their knowledge about it as well as their social capital.^{70,71} Since most of the participants who were interviewed were employed full-time, it is assumed that their workplaces have work benefit packages that allow for some level of flexibility in work arrangements. To some who had the privilege of requesting fewer working hours or a remote work set-up, the temporary salary reduction is presumably not detrimental to severely affect their own or their family's life. While governmental subsidies in the form of cash benefits had been available, only a few of the participants availed of them. One reason is that these benefits would entail submitting numerous documents to prove the status of “indigency.” Another reason could be that these benefits are structured for low-income groups, rather than those from the middle-income groups. For a person who has a full-time job in the Philippines, this inconvenience would cost time and would resort to utilizing private and out-of-pocket expenses to access health and social care services in a timely and efficient manner.

A supportive social environment was also beneficial to the return to work of participants. Their colleagues were able to support the participants' return to work by having a positive attitude towards those who recovered from COVID-19, and also in one participant's case, through collective effort, they were able to extend financial help to alleviate financial burden of being hospitalized.

Although rehabilitation is considered important for recovery from PCC, it remains individualized and fragmented.⁷² Local rehabilitation programs for people recovering from COVID-19 are largely hospital-based which was confirmed by a review suggesting the need for family-centered and psychosocial interventions in PCC recovery.^{72,73} In the Philippines, occupational therapists are not integrated in PCC teams even in its biggest public hospitals, despite its recognized role in PCC rehabilitation globally.²⁷

Our results encourage the re-examination of the concept of health and paid work for individuals undergoing rehabilitation and recovery. Even though people who have full-time jobs are allowed to return to work, their rehabilitation and recovery process is not structurally supported within the health and social care systems. Moreover, there is an absence or limited work-related insurance in case people would need to modify working arrangements due to symptoms. Work policies, especially in traditional institutions, also reverted to pre-COVID-19 times. Despite policy efforts to make work more flexible for Filipinos, most workers had been asked to go back on-site to work 100% of the time.⁷⁴ Hence, the implementation of local frameworks, health delivery services, and social welfare services must then recognize that while some Filipinos with PCC may not present apparent health problems, they may still request for assistance and support for return-to-work processes including rehabilitation.

This study was completed with several limitations. Our sample sizes are small for both the quantitative survey and the qualitative interviews. As a result, our findings cannot be generalized but can provide initial data about the overall health of selected Filipino COVID-19 recoverees. Attributed to the small sample size is the lack of data from those in the low-income groups, which limits the interpretation of our qualitative data despite being able to interview one participant from the lower income bracket. Although measures such as participation compensation, partnering with the community (e.g., ECC) for recruitment, and flexible choosing of online platforms for interviews were provided, recruiting those from the lower social economic status groups remained difficult, which is exacerbated by the COVID-19 restrictions at the time of the study.⁴¹ With our limited resources and time, our capacity to do a member checking process with interview participants was restricted. However, the survey tool and interview guide are setup for use in future studies with a larger and more varied sample. Specifically, since this study involved the Filipino translation of the WAI, we intend to sustain its research utility through instrument development research using modern statistical tests as a follow-up study.

Given the interpretation of our results and the limitations that we encountered, we offer practical implications related to the RTW process of people with PCC in the Philippines:

1. Inclusive development and implementation of existing local rehabilitation model and return to work program by ensuring that pertinent stakeholders are part of the cocreation process including patient advocates, rehabilitation professionals, occupational health professionals, social welfare professionals, government agencies (e.g., Department of Labor and Employment, ECC), and employers. Doing so can ensure that the voices of the patients and involved parties are heard especially on the insurance packages, financing, and accessibility of services.
2. With the recognition of COVID-19 as an occupational and work-related condition, services for people with post-COVID condition must be provided by the health, social welfare, and labor sectors.⁷⁵ A collaborative effort by relevant government sectors can be crucial to ensuring that people with PCC can reintegrate back to work, regardless of any evident or overt disabilities.
3. Establishment of a legislative framework for ECC's RTWAP, under the Work Protect Act of 2022, which has yet to be passed. During the pilot launch of the RTWAP in Region IV-A, it was recommended that a designated one stop rehabilitation center help employees to return to work, as well as designation of a return to work coordinator in all establishments.³⁵ The current benefits of the ECC's RTWAP, which include rehabilitation performed by a physical therapist, occupational therapist, and/or psychological support, should also accommodate people with PCC. Nationwide implementation of the RTWAP should also be implemented.
4. The mainstreaming of telerehabilitation, which has shown good outcomes as a service delivery model during the pandemic, can be further maximized in providing support to people with PCC who are going back to work.⁷⁶ For people with PCC, we must recognize that they need to conserve their energy; thereby it is important to consider 30- to 45-minute consultations with appropriate professionals. Moreover, we must also recognize that people with PCC still do not have any financial security when they have work-related absences. Hence, it is vital that professionals communicate the need for a partnership meeting with patients and employers to identify gaps and address solutions on work-related concerns.
5. In recognizing a person's right to health and safety (Article 25 of the Universal Declaration of Human Rights), employers should offer accessible and flexible options to rendering work—including remote work, should an employee perceive that they can pose a threat to others or the environment may pose a threat to their health and wellbeing.⁷⁷

- Conduct a study using a similar method and instruments with a larger sample size, which can potentially allow for analysis on gender, socio-economic differentials, and health policies related to PCC and RTW.

CONCLUSION

Post-COVID condition can have an impact on the return-to-work process and rehabilitation of people affected by it. Findings from this exploratory study described the perceived work ability, health-related quality of life, and lived experiences among Filipinos living in the Philippines who were returning to work amid having PCC. Consequently, our findings shed light to the current role of rehabilitation in the country, allowing us to carefully outline practical implications to guide rehabilitation practices, education, research and policy development, and implementation. The study authors call for a re-examination and conceptualization of health and paid work for adult Filipino workers who are undergoing rehabilitation and recovery due to PCC.

Statement of Authorship

All authors certified fulfillment of ICMJE authorship criteria.

Author Disclosure

All authors declared no conflicts of interest.

Funding Source

None.

REFERENCES

- Wu Z, McGoogan JM. Characteristics of and important lessons from the coronavirus disease 2019 (COVID-19) outbreak in China: Summary of a report of 72 314 cases from the Chinese Center for Disease Control and Prevention. *JAMA*. 2020 Feb;323(13):1239-1242. doi: 10.1001/jama.2020.2648. PMID: 32091533
- World Health Organization. Statement on the fifteenth meeting of the International Health Regulations (2005) Emergency Committee on the coronavirus disease (COVID-19) pandemic [Internet]. 2023 [cited 2024 Sep] Available from: [https://www.who.int/es/news/item/05-05-2023-statement-on-the-fifteenth-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-coronavirus-disease-\(covid-19\)-pandemic](https://www.who.int/es/news/item/05-05-2023-statement-on-the-fifteenth-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-coronavirus-disease-(covid-19)-pandemic).
- World Health Organization. Daily COVID-19 cases and deaths by date reported to WHO [Internet]. 2024 [cited 2024 Sep] Available from: <https://data.who.int/dashboards/covid19/cases?m49=608>
- Department of Health. COVID-19 tracker: Philippines [Internet]. 2021 [cited 2021 Mar] Available from: <https://ncovtracker.doh.gov.ph>.
- Alkodaymi MS, Omrani OA, Fawzy NA, Berbari EF, Alkattan K, Tleyjeh IM, et al. Prevalence of post-acute COVID-19 syndrome symptoms at different follow-up periods: A systematic review and meta-analysis. *Clin Microbiol Infect*. 2022 May;28(5):657-666. doi: 10.1016/j.cmi.2022.01.014. PMID: 35124265. PMCID: PMC8812092
- Halpin SJ, McIvor C, Whyatt G, Adams A, Harvey O, McLean L, et al. Postdischarge symptoms and rehabilitation needs in survivors of COVID-19 infection: A cross-sectional evaluation. *J Med Virol*. 2021 Feb;93(2):1013-1022. doi: 10.1002/jmv.26368. PMID: 32729939
- Schou TM, Joca S, Wegener G, Bay-Richter C. Psychiatric and neuropsychiatric sequelae of COVID-19 – A systematic review. *Brain Behav Immun*. 2021 Oct;97:328-348. doi: 10.1016/j.bbi.2021.07.018. PMID: 34339806. PMCID: PMC8363196
- Soriano JB, Murthy S, Marshall JC, Relan P, Diaz JV, on behalf of the WHO Clinical Case Definition Working Group on Post-COVID-19 Condition. A clinical case definition of post-COVID-19 condition by a Delphi consensus. *Lancet Infect Dis*. 2022 Apr;22(4):e102-e107. doi: 10.1016/S1473-3099(21)00703-9. PMID: 34951953. PMCID: PMC8691845
- Chen C, Hauptert SR, Zimmermann L, Shi X, Fritsche LG, Mukherjee B. Global prevalence of post-coronavirus disease 2019 (COVID-19) condition or long COVID: A meta-analysis and systematic review. *J Infect Dis*. 2022 Nov;226(9):1593-1607. doi: 10.1093/infdis/jiac136. PMID: 35429399. PMCID: PMC9047189.
- Sk Abd Razak R, Ismail A, Abdul Aziz AF, Suddin LS, Azzeri A, Sha'ari NI. Post-COVID syndrome prevalence: A systematic review and meta-analysis. *BMC Public Health*. 2024 Jul;24(1):1785. doi: 10.1186/s12889-024-19264-5. PMID: 38965510. PMCID: PMC11223303.
- Asaba E, Farias L, Åkesson E. Return to work after COVID-19: Experiences and expectations from the first wave of COVID-19 in Stockholm. *PLoS One*. 2022 Dec;17(12):e0279000. doi: 10.1371/journal.pone.0279000. PMID: 36525431. PMCID: PMC9757560.
- Bratun U, Švajger A, Domajnko B, Kavčič M, Asaba E. Return to work among workers recovering from severe COVID-19 in Slovenia: A focus group study. *Disabil Rehabil*. 2023 Nov;45(23):3883-3892. doi: 10.1080/09638288.2022.2142680. PMID: 36346003.
- Ottiger M, Poppele I, Sperling N, Schlesinger T, Müller K. Work ability and return-to-work of patients with post-COVID-19: A systematic review and meta-analysis. *BMC Public Health*. 2024 Jul;24(1):1811. doi: 10.1186/s12889-024-19328-6. PMID: 38973011. PMCID: PMC11229229.
- Palstam A, Westerlind E, Sunnerhagen KS, Persson HC. Recurrent sick leave after COVID-19: Investigating the first wave of the pandemic in a comprehensive Swedish registry-based study. *BMC Public Health*. 2021 Oct;21(1):1914. doi: 10.1186/s12889-021-11918-y. PMID: 34674673. PMCID: PMC8530010.
- Perlis RH, Lunz Trujillo K, Safarpour A, Santillana M, Ognyanova K, Druckman J, et al. Association of post-COVID-19 condition symptoms and employment status. *JAMA Netw Open*. 2023 Feb;6(2):e2256152-e2256152. doi: 10.1001/jamanetworkopen.2022.56152. PMID: 36790806. PMCID: PMC9932847.
- Asaba E, Sy M, Pineda RC, Aldrich R, Anzai T, Bontje P, et al. Return to work after COVID-19: an international perspective. *World Fed of Occup Therapists Bull*. 2023 Jan;79(1):42-52. doi: 10.1080/14473828.2022.2045819.
- Philippine Health Insurance Corporation. Implementing rules and regulations of the Universal Universal Healthcare Act (Republic Act No. 112233). 2019 [cited 2025 Mar]. Available from: https://www.philhealth.gov.ph/about_us/UHC-IRR_Signed.pdf.
- Olavides-Soriano ME, Ampo E, Escorpizo R. Occupational rehabilitation policy and practice in the Philippines: Initiatives and challenges. *J Occup Rehabil*. 2011 Jan;21(1):62-68. doi: 10.1007/s10926-010-9284-y. PMID: 21279426.
- Dayrit MM, Lagrada LP, Picazo OF, Pons MC, Villaverde MC. The Philippines health system review (Vol. 8, no. 2). New Delhi: World Health Organization, Regional Office for Southeast Asia; 2018 [cited 2024 Sep]. Available from: <https://iris.who.int/handle/10665/274579>.
- Bundoc JR, Jiao PM, Ang-Muñoz CD, Geroy LSA, Mauricio, MU III, delos Trinos JPCR, et al. Function-based rehabilitation model: An initial step towards universal health coverage. *Acta Med Philipp*. 2022 Mar;56(4):10-19. Available from: <https://actamedicaphilippina.upm.edu.ph/index.php/acta/article/view/4384>.
- Ordonez RV, Gandeza N. Integrating traditional beliefs and modern medicine: Filipino nurses' health beliefs, behaviors, and practices. *Home Health Care Manage Pract*. 2004 Dec;17(1):22-27. doi: 10.1177/1084822304268152.

22. Dominguez ML. Filipino Americans' perspectives on caregiving [dissertation]. Minneapolis, (MN), Walden University; 2017.
23. Barker-Davies RM, Sullivan O, Senaratne KPP, Baker P, Cranley M, Dharm-Datta S, et al. The Stanford Hall consensus statement for post-COVID-19 rehabilitation. *Br J of Sports Med.* 2020 Aug;54(16): 949. doi: 10.1136/bjsports-2020-102596. PMID: 32475821. PMCID: PMC7418628.
24. Décarý S, De Groote W, Arienti C, Kiekens C, Boldrini P, Lazzarini SG, et al. Scoping review of rehabilitation care models for post COVID-19 condition. *Bull World Health Organ.* 2022 Oct;100(11): 676-688. doi: 10.2471/BLT.22.288105. PMID: 36324552. PMCID: PMC9589389.
25. Singh SJ, Barradell AC, Greening NJ, Bolton C, Jenkins G, Preston L, et al. British Thoracic Society survey of rehabilitation to support recovery of the post-COVID-19 population. *BMJ Open.* 2020 Dec;10(12):e040213. doi: 10.1136/bmjopen-2020-040213. PMID: 33268418. PMCID: PMC7712930.
26. World Health Organization. Social stigma associated with COVID-19 [Internet]. <https://www.who.int/docs/default-source/coronaviruse/covid19-stigma-guide.pdf>. 2020 [cited 2024 Sep]. Available from: <https://www.who.int/docs/default-source/coronaviruse/covid19-stigma-guide.pdf>.
27. Sy MP, Frey S, Baldissera A, Pineda RC, Toribio FNRB. The role of occupational therapists in return-to-work practice for people with post-COVID condition: A scoping review. *Work.* 2024 Dec;0(0). doi: 10.1177/10519815241289658.
28. von Zweck C, Naidoo D, Govender P, Ledgerd R. Current practice in occupational therapy for COVID-19 and post-COVID-19 conditions. *Occup Ther Int.* 2023 May;2023(1):5886581. doi: 10.1155/2023/5886581. PMID: 37250066. PMCID: PMC10219768.
29. Blas AJT, Beltran KMB, Martinez PGV, Yao DPG. Enabling work: Occupational therapy interventions for persons with occupational injuries and diseases: A scoping review. *J Occup Rehabil.* 2018 Sep; 28(2):201-214. doi: 10.1007/s10926-017-9732-z. PMID: 28887796.
30. World Bank. COVID-19 to plunge global economy into worst recession since World War II [Internet]. 2020 [cited 2024 Sep]. Available from: <https://www.worldbank.org/en/news/press-release/2020/06/08/covid-19-to-plunge-global-economy-into-worst-recession-since-world-war-ii>.
31. Nugraha B, Wahyuni LK, Laswati H, Kusumastuti P, Tulaar AB, Gutenbrunner C. COVID-19 pandemic in Indonesia: Situation and challenges of rehabilitation medicine in Indonesia. *Acta Med Indones [Internet].* 2020 [cited 2024 Sep]. 2020 Jul;52(3):299-305. PMID: 33020342. Available from: <https://www.actamedindones.org/index.php/ijim/article/view/1557/pdf>.
32. Philippine Statistics Authority. Employment situation in April 2020 (Reference No. 2020-344) [Internet]. 2020 [cited 2020 Mar]. Available from: <https://psa.gov.ph/statistics/survey/labor-and-employment/labor-force-survey/title/Employment%20Situation%20in%20April%202020>.
33. Department of Health. Workplace handbook on COVID-19 management and prevention [Internet]. 1st ed. Manila, (PH): Department of Health; 2020 [cited 2021 Mar]. Available from: <https://uplb.edu.ph/wp-content/uploads/2020/10/Workplace-Handbook-on-COVID-19-Management-and-Prevention.pdf>.
34. Employees' Compensation Commission. ECC assures assistance for employees with COVID-19 [Internet]. 2020 [cited 2021 Mar]. Available from: <http://ecc.gov.ph/ecc-assures-assistance-for-employees-with-covid-19/#:~:text=The%20Employees'%20Compensation%20Commission%20ensures,by%20reason%20of%20their%20employment.&text=On%20the%20same%20date%2C%20the,1%2C003%20deaths%20and%204%2C530%20recoveries>.
35. Boyle P, Bhanbhro S, De Guzman JE. Universal healthcare in the Philippines and the scope for therapy and rehabilitation. *Int J Ther Rehabil.* 2017 Sep;24(9):403-408. doi: 10.12968/ijtr.2017.24.9.403.
36. Employees' Compensation Commission. ECC launches Return to Work Assistance Program in Region IV-A [Internet]. 2023 [cited 2024 Dec]. Available from: <https://ecc.gov.ph/ecc-launches-return-to-work-assistance-program-in-region-iv-a>.
37. Olivier M, Govindjee A, bin Dato' Aziz Mohammed MA, et al. Social Security Organisation Malaysia (SOCO) return to work programme in Malaysia: A journey through a decade. Vol 2021. Kuala Lumpur: International Institute for Social Law and Policy / Social Security Organisation Malaysia; 2016.
38. Creswell JW. A concise introduction to mixed methods research. Thousand Oaks, CA: SAGE; 2021.
39. Josephsson S, Alsaker S. Narrative methodology: A tool to access unfolding and situated meaning in occupation. In: Nayar S, Stanley M, eds. *Qualitative research methodologies for occupational science and therapy.* New York, NY: Routledge; 2014:70-83.
40. Josephsson S, Asaba E, Jonsson H, Alsaker S. Creativity and order in communication: Implications from philosophy to narrative research concerning human occupation. *Scand J Occup Ther.* 2006 Jun; 13(2):86-93. doi: 10.1080/11038120600691116. PMID: 16856465
41. Emery LF, Silverman DM, Carey RM. Conducting research with people in lower-socioeconomic-status contexts. *Adv Meth Pract Psychol Sci.* 2023 Oct;6(4):25152459231193044. doi: 10.1177/25152459231193044.
42. de Koning R, Egiz A, Kotecha J, Ciuculete AC, Ooi SZY, Bankole NDA, et al. Survey fatigue during the COVID-19 pandemic: An analysis of neurosurgery survey response rates. *Front Surg.* 2021 Aug;8:690680. doi: 10.3389/fsurg.2021.690680. PMID: 34458314. PMCID: PMC8388838.
43. Tuomi K, Ilmarinen J, Jahkola A, Katajarinne L, Tulkki A. *Work Ability Index.* 2nd ed. Helsinki (FI): Finnish Institute of Occupational Health; 1998.
44. Daniel WW, Cross CL. *Biostatistics: A foundation for analysis in the health sciences.* 10th ed. Hoboken, (NJ): Wiley; 2013.
45. de Zwart BCH, Frings-Dresen MHW, van Duivenbooden JC. Test-retest reliability of the Work Ability Index questionnaire. *Occup Med.* 2002 Jun;52(4):177-181. doi: 10.1093/occmed/52.4.177. PMID: 12091582
46. El Fassi M, Bocquet V, Majery N, Lair ML, Couffignal S, Mairiaux P. Work ability assessment in a worker population: comparison and determinants of Work Ability Index and Work Ability score. *BMC Public Health.* 2013 Apr;13(1):305. doi: 10.1186/1471-2458-13-305. PMID: 23565883. PMCID: PMC3637198.
47. Guest G, Bunce A, Johnson L. How many interviews are enough? An experiment with data saturation and variability. *Field Methods.* 2006 Feb;18(1):59-82. doi: 10.1177/1525822X05279903.
48. Ebener M, Hasselhorn HM. Validation of short measures of work ability for research and employee surveys. *Int J Environ Res Public Health.* 2019 Sep;16(18). doi: 10.3390/ijerph16183386. PMID: 31547466. PMCID: PMC6765804.
49. Peralta N, Godoi Vasconcelos AG, Härter Griep R, Miller L. Validity and reliability of the Work Ability Index in primary care workers in Argentina. *Salud Colect.* 2012 Aug;8(2):163-173. doi: 10.18294/sc.2012.156. PMID: 23995544.
50. Ma L, Zhou T, Jin T, Shen G, Jin X, Zhang Q. Reliability and validity of work ability index in Chinese version. *J Labour Med.* 2000; 17(2):70-72.
51. Lavasani S, Wahat NWA. Work Ability Index: Validation and model comparison of the Malaysian Work Ability Index (WAI). *Disabil CBR Inclusive Dev.* 2016 Sep;27(2):37-56. doi: 10.5463/dcid.v27i2.427.
52. Kaewboonchoo O, Ratanasiripong P. Psychometric properties of the Thai version of the work ability index (Thai WAI). *J Occup Health.* 2015 Oct;57(4):371-377. doi: 10.1539/joh.14-0173-OA. PMID: 26084917.
53. Adel M, Akbar R, Ehsan G. Validity and reliability of Work Ability Index (WAI) questionnaire among Iranian workers; a study in petrochemical and car manufacturing industries. *J Occupa Health.* 2019 Mar;61(2):165-174. doi: 10.1002/1348-9585.12028. PMID: 30866128. PMCID: PMC6499439.
54. Lundin A, Leijon O, Vaez M, Hallgren M, Torgén M. Predictive validity of the Work Ability Index and its individual items in the general population. *Scand J Public Health.* 2017 Jun;45(4):350-356. doi: 10.1177/1403494817702759. PMID: 28385066.

55. World Health Organization. Process of translation and adaptation of instruments [Internet]. 2016 [cited 2016 Dec]. Available from: http://www.who.int/substance_abuse/research_tools/translation/en/.
56. Miguel RTD, Rivera AS, Cheng KJG, Rand K, Purba FD, Luo N, et al. Estimating the EQ-5D-5L value set for the Philippines. *Qual Life Res.* 2022 Sep;31(9):2763-2774. doi: 10.1007/s11136-022-03143-w. PMID: 35532835. PMCID: PMC9356948.
57. Ilmarinen J. The Work Ability Index (WAI). *Occup Med.* 2007 Mar;57(2):160-160. doi: 10.1093/occmed/kqm008.
58. EuroQol Research Foundation. EQ-5D-5L user guide: Basic information on how to use the EQ-5D-5L instrument (version 3.0) [Internet]. 2019 [cited 2021 May]. Available from: <https://euroqol.org/wp-content/uploads/2023/11/EQ-5D-5LUserguide-23-07.pdf>.
59. Nasheeda A, Abdullah HB, Krauss SE, Ahmed NB. Transforming transcripts into stories: A multimethod approach to narrative analysis. *Int J Qual Method.* 2019 Jun;18:1609406919856797. doi: 10.1177/1609406919856797.
60. Josephsson S. To act in front of the stories: Narrative interpretation as a resource to move from what to how. *J Occup Sci.* 2023 Sep;30(4): 539-545. doi: 10.1080/14427591.2023.2247850.
61. Murray M. Narrative psychology and narrative analysis. In: *Qualitative research in psychology: Expanding perspectives in methodology and design.* Washington, DC: American Psychological Association; 2003:95-112. doi: <https://doi.org/10.1037/10595-006>.
62. Creswell JW, Klassen AC, Plano Clark VL, Smith KC. *Best practices for mixed methods research in the health sciences.* Bethesda, MD: National Institutes of Health; 2011.
63. Elo S, Kääriäinen M, Kanste O, Pölkki T, Utriainen K, Kyngäs H. *Qualitative content analysis: A focus on trustworthiness.* Sage Open. 2014 Feb;4(1):2158244014522633. doi: 10.1177/2158244014522633.
64. Ta-asan KB. Who are the middle class in the Philippines? Philippine Institute for Developmental Studies [Internet]. 2022 [cited 2024 Sep]. Available from: <https://www.pids.gov.ph/details/news/in-the-news/who-are-the-middle-class-in-the-philippines>.
65. Huynh G, Nguyen BT, Nguyen HTN, Le NT, An PL, Tran TD. Health-related quality of life among patients recovered from COVID-19. *Inquiry.* 2022 Dec;59:00469580221143630. doi: 10.1177/00469580221143630. PMID: 36527371. PMCID: PMC9760520.
66. Thanh HN, Minh DC, Thu HH, Quang DN. Symptoms, mental health, and quality of life among patients after COVID-19 infection: A cross-sectional study in Vietnam. *J Prev Med Public Health.* 2024 Mar; 57(2):128-137. doi: 10.3961/jpmph.23.511. PMID: 38419549. PMCID: PMC10999303.
67. Soare I-A, Ansari W, Nguyen JL, Mendes D, Ahmed W, Atkinson J, et al. Health-related quality of life in mild-to-moderate COVID-19 in the UK: a cross-sectional study from pre- to post-infection. *Health Qual Life Outcomes.* 2024 Jan;22(1):12. doi: 10.1186/s12955-024-02230-5. PMID: 38287294. PMCID: PMC10826014.
68. Muñoz-Ruiperez C, Rodrigo D, Arroyo-Sánchez D, Zarallo JF, Conejo I, Grande JL. Work Ability Index and Work Ability Score: A comparison between both scores in a persistent COVID-19 cohort. *Occup Dis Environ Med.* 2024 Feb;12(1):49-57. doi: 10.4236/odem.2024.121006.
69. Stepanikova I, Oates GR. Perceived discrimination and privilege in health care: The role of socioeconomic status and race. *Am J Prev Med.* 2017 Jan;52(1):S86-S94. doi: 10.1016/j.amepre.2016.09.024. PMID: 27989297. PMCID: PMC5172593.
70. Estrada JAG. Unraveling socioeconomic determinants of health-related behavior, reception of information, and perceptions on disease disclosure at the time of the COVID-19 pandemic: Did health insurance curb the disparities in the Philippines? *BMC Public Health.* 2024 Mar;24(1):767. doi: 10.1186/s12889-024-18264-9. PMID: 38475807. PMCID: PMC10935915.
71. Nieminen T, Prättälä R, Martelin T, Härkänen T, Hyyppä MT, Alanen E, et al. Social capital, health behaviours and health: a population-based associational study. *BMC Public Health.* 2013 Jun;13(1): 613. doi: 10.1186/1471-2458-13-613; PMID: 23805881. PMCID: PMC3722011.
72. Wasilewski MB, Cimino SR, Kokorelias KM, Simpson R, Hitzig SL, Robinson L. Providing rehabilitation to patients recovering from COVID-19: A scoping review. *PM R.* 2022 Feb;14(2):239-258. doi: 10.1002/pmrj.12669. PMID: 34240576. PMCID: PMC8441670.
73. Ignacio SD, Supnet IE, Estrada TDB, Dy Ching Bing-Agsaoay DD, de Leon KP. Rehabilitation for COVID-19 Early Functional Return (RECOVER): Ensuring Delivery of Inpatient Rehabilitation Services for Patients with COVID-19 in a Low Resource Setting. *Acta Med Philipp.* 2022 Mar;56(4):7-9. doi: 10.47895/amp.v56i4.4885.
74. Department of Labor and Employment. Revised implementing rules and regulations of Republic Act No. 11165, otherwise known as the "Telecommuting Act" (Department Order No. 237) [Internet]. 2022 [cited 2023 Jul]. Available from: https://insightplus.bakermckenzie.com/bm/attachment_dw.action?at-key=FRbANEucS95NMLRN47z%2BeeOgEFCt8EGQ-JsWJiCH2WAUuQVQjpl3o%2BRddURFS67C7&nav=FR-bANEucS95NMLRN47z%2BeeOgEFCt8EGQbuwypnpZ-jc4%3D&attidocparam=pB7HEsg%2FZ312Bk8OIuOIH-1c%2BY4beLEAeOdGGN8MNdss%3D&fromContentView=1.
75. Employees' Compensation Commission. Conditions for the compensability of COVID-19 under the ECC List of Occupational and Work-Related Disease or Annex A of the Amended Rules on Employees' Compensation (EC) [Board Resolution No. 21-04-14] [Internet]. 2021 [cited 2024 Dec]. Available from: <https://ecc.gov.ph/wp-content/uploads/2021/05/BR-21-04-14-Compensability-of-COVID-19.pdf>.
76. Salud RAP, Leochico CFD, Ignacio SD, Mojica JAP, Ang-Muñoz CD. Continuing care through telerehabilitation for patients in a COVID-19 referral center in the Philippines: A case series. *Acta Med Philipp.* 2022 Mar;56(4):89-93. doi: 10.47895/amp.v56i4.4102.
77. United Nations. Universal declaration of human rights [Internet]. 2021 [cited 2025 Jan]. Available from: <https://www.un.org/sites/un2.un.org/files/2021/03/udhr.pdf>.