

**IMPACT OF COVID - 19 ON PHYSICAL THERAPIST IN
THAILAND**



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IMPACT OF COVID - 19 ON PHYSICAL THERAPIST IN THAILAND

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ABSTRACT

COVID - 19 pandemic impacted various aspects of healthcare organizations and healthcare professionals. For example, the shortage of healthcare workers created workload pressure, increased work hours, fatigue, and the risk of infecting and contagious family members, even themselves, which caused distress and burnout among healthcare professionals. Physical therapists or physiotherapists (PTs) are essential participants in the healthcare profession who have the primary role in the rehabilitation and the impact of this pandemic.

In this study, the researcher aimed to indicate the impact of COVID-19 on physiotherapists in terms of differentiation and transformation before and after COVID - 19 pandemic and, describe how COVID - 19 influences physical therapists' s, perspectives, attitudes and provide insight into the experience and opinion of physiotherapists who work as a front - line during the COVID - 19 by using a qualitative method which allows the author to gather richer information, opinion, and experience from 5 physical therapists who worked in Thailand government hospitals.

Moreover, no study explores the perspective and experience of Thai physical therapists in their work during COVID - 19 pandemic and includes their suggestions that influence future challenges for healthcare professionals.

KEY WORDS: COVID-19 pandemic/ Physical therapist / Patient and personal safety

27 pages

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CHAPTER I

INTRODUCTION

COVID - 19 is a global coronavirus pandemic that was identified from the first outbreak in Wuhan, China, in december 2019, rapidly spreading around the world. As of May 30, 2021, approximately a total of 169 million cases and 3.5 million deaths have been reported worldwide since the start of the outbreak (ministry of public health [MOPH], 2021). This virus is transmitted from human to human through respiratory by droplets and small airborne particles containing the virus. People who get infected have a wide range of symptoms, from undetectable to deadly. Most people with mild illness can recover at home, but severe illness is more likely in the elderly and people with complicated conditions. This group of patients needs treatment from the healthcare profession, which can reduce the cause of hospitalization or death from disease. However, this disease is completely new, and no medicine exists. Thailand, the first case of COVID -19 was diagnosed in january 2020 among a female tourist from China. On january 31, 2020 (MOPH, 2021) followed with another outbreak, super-spreading events that created a huge number of patients in hospitals and overwhelmed the healthcare system.

Over the world, the number of healthcare workers infected with COVID-19 was 152,888, or 3.9% of the total number of patients with COVID-19 worldwide (Bandyopadhyay S, et al. BMJ global health, 2020). Thailand, from the first outbreak to july 29 2020, there were 108 healthcare workers infected with an estimated 3.58% of infected patients, most of them were nurse aid (41.67%), doctors (20.27%), nurse assistants (20.37%) including physiotherapist (1.85%) by 70.75% of them got infected in the hospital (outpatient department, in the patient department, emergency room) by working as front-line during the COVID-19 pandemic.

COVID -19 creates impacts on several aspects of Thailand's healthcare service system, including leadership and government, healthcare financing, health workforce, health information, and technology, which combine and deliver health

services to patients. Further, the shortage of healthcare workers created workload pressure, for example, increased work hours, fatigue, lack of sleep, and the risk of infecting and contagious to family members, even themselves. Moreover, the shortage of personal protective equipment (PPE), masks, and hand gloves to protect themselves, including the low-quality inability to protect the healthcare workers from being infected from COVID-19, created distress among healthcare professionals, including insufficient vaccination and vaccines not effective enough to protect the virus.

Physical therapists or physiotherapists (PTs) are essential participants in the healthcare profession who have the primary role in the rehabilitation, prevention, health, wellness, and fitness. They provide treatment that improves mobility and improves functional activities in patients' daily lives, including providing therapy for patients with respiratory diseases through breathing and airway clearance techniques to reduce symptoms, in this part of respiratory rehabilitation was directly involved in COVID - 19 patients. However, it is unclear whether they used physiotherapy services in the front-line management of the COVID-19 pandemic. Moreover, during the COVID -19 outbreak, there was an announcement from each hospital to prevent the spread of the virus, hospitals suspend the rehabilitation services or even limit the case number per day.

Consequently, who exigency for treatment to the patient in the critical stage? And what are they responsible for? Though, the main role of physical therapist was regular rehabilitation services and is not integrated into other units in the hospital such as management or patient service support.

In this study, the researcher aimed to indicate the impact of COVID-19 on physiotherapists in terms of differentiation and transformation before and after the COVID - 19 pandemic, describe how COVID - 19 influenced physical therapists' s, perspectives and attitudes and provide the insight of experience and opinions from physiotherapists who worked on the front-line during the COVID -19. Moreover, no study explores the perspective and experience of Thai physical therapists regarding their work during the COVID - 19 pandemic and includes their suggestions that influence future challenges for healthcare professionals.

CHAPTER II

LITERATURE REVIEW

2.1 Physical therapist (Physical therapy)

The world confederation for physical therapy (2019) clarify about the description of physical therapy, “ physical therapy is services provided by physical therapists (PTs) to individuals and populations to develop, maintain and restore the movement and functional ability throughout the lifespan” (description of physical therapy policy statement, 2019, page 3) to understand the role of physical therapists in the health care system and the unique services they provide. The American physical therapy association describes physical therapists as professionals involved in the examination, evaluation, treatment, and prevention of patient bodies that produce movement impairments, disabilities, and functional limitations or changes in physical function from injury, suffering illness, disease, or *other causes* (a guide to physical therapist practice. volume one : a description of patient management, Pphys ther, 1995)

Moreover, Gordon & Quinn (1999) clarify and describe physical therapists and standardize the terminology about their role. Five elements of patient management start when they interact with patients: examination, evaluation, diagnosis, prognosis, and intervention. However, the outcome is focused not only on limitations and disability but also on patient satisfaction and prevention.

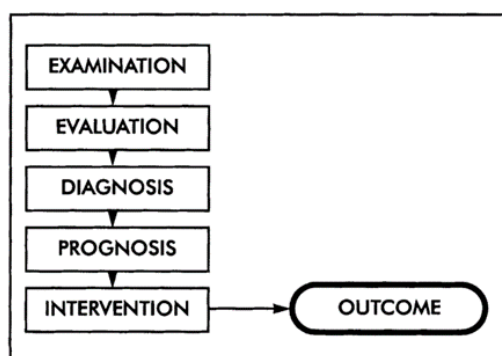


Figure 2.1 The elements of physical therapist patient management

Physical therapy involves interaction between patients, other health professionals, caregivers, families, other health professionals, and communities in the part of **intervention** mentioned in a guide to physical therapist practice (1995). Intervention is the determined and skilled interaction of the physical therapist and patients which combination of three components, First direct intervention, second patient-related instruction and third coordinated, communication and documentation which refer about responsibilities for documentation of all elements of patient management, communication through telephone, fax, etc. including additional professional activities like prevention and wellness, consulting, screening, education, critical inquiry and including administration.

During the COVID-19 pandemic, Palacios-Ceña et al. (2021) found that according to their study, participants (physical therapist) they volunteer to answered the call from their hospitals, and showed total willing to assisted at any place and any duties in the hospital even the rehabilitation service was closed, during the crisis situation did not mean that they could not contribute a service , as a physiotherapist and health care professionals their work is focus to in the people who needs help.

Besides, Pedersini, Corbellini, Villafañe, (2020) stated that in their study, physical therapists from Milan, and the surrounding area, were transferring themselves into a sort of “physical therapy task force” to support other professions to improve their skills and take action where necessary. In addition, many physical therapists prepare themselves and are available for various activities at all times depending on the emergency of the situation.

2.2 Patient and Personal safety

Every year, patients in low- and middle-income countries face a high risk of harm or death due to unsafe health care, creating a high death burden. World health organization (2021) concepted about patient safety as :

“A framework of organized activities that creates cultures, processes, procedures, behaviors, technologies, and environments in health care that consistently lower risks, reduce avoidable harm, make errors less, and reduce the impact of harm when it does occur.”

Another point of scholar Rangachari & Woods (2020) emphasizes that healthcare organization leaders need to consider workers' psychological safety. They recommend two things for the organization level or healthcare leader to preserve resilience, patient safety, and staff retention during and future the COVID-19 pandemic. First, create an environment of trust, psychological safety, and support for emotional distress during the pandemic, enabling healthcare workers to trust that their organization has their backs, and empowering encourage workers to communicate patient safety concerns to health care leaders. Second, develop communication structures to communicate safety concerns and problem-solving strategies to managers, enabling the organization to learn from healthcare workers.

In 2017, the minister of health (Thailand) announced patient and personnel safety, which expands and extensively covers patients and health care workers and sets safety goals for both. Thus the hospital adopted the previous patient's safety goal (SIMPLE) to develop and improve following the changes and used the letters SIMPLE to define it as the personnel safety goals too, easy to remember and transform patient safety goals to patient and personnel safety goals or 2P safety goals and change SIMPLE to SIMPLE2 (personnel safety goals: SIMPLE Thailand, 2018)

Thailand's patient and personnel (2P) safety policy focus on patient and personnel safety. This policy appears unique and plans to be implemented nationwide to improve Thailand's healthcare systems and provide trusted, high-quality care and protection accessible to everyone. (Pudponga, Kongchuma, Limpanyalert, 2017)

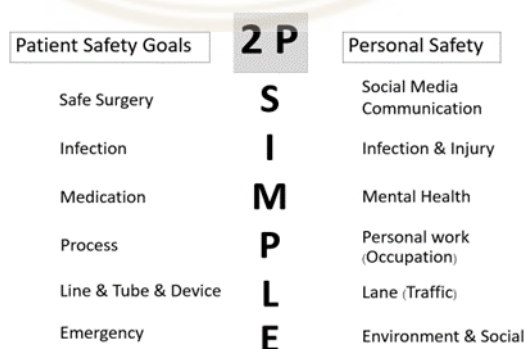


Figure 2.2 The element of patient and personal goal (SIMPLE)

This study adopted the concept of 2P safety culture as a study framework to reflect how each organization is coping with a pandemic crisis with appropriate strategies or management patterns by concerning healthcare professional safety. Concurrently, physical therapists are being faced to handle life and death situations as a frontline worker, like never before. The role and work of physical therapist in hospitals was change due to closure of the rehabilitation services or the suspension of the treatment (Palacios-Ceña et al. 2021)

However, Palacios-Ceña et al. (2021) explain the traditional treatment approach of physical therapists, which requires using a hands approach to facilitate the movement of patients. Caring for patients during COVID-19 requires constantly adapting to frequent donning and doffing of personal protective equipment (PPE), wearing masks including keeping social distance for personal safety.

Felten-Barentsz et al. (2020) provide recommendations for safety for physical therapists, for example, try to minimize contact with patients with COVID-19; always consider the risks of virus transmission, and optimal use of digital or/and writing information for patients.

2.3 External environment analysis

Strategic planning is a beneficial tool for all types of organizations, including healthcare organizations with complex services and different unit sizes at each level. Strategic planning can support the leader to provide a core responsibility and essential role for each staff including allowing healthcare organizations to be more programmable, holistic, rational, and systematic even during a crisis like COVID - 19, which we can focus on relevant transformations for the future (Rodríguez Perera & Peiró, 2012)

A PASTEL analysis is a framework that analyzes external environments and trends for healthcare organizations in six areas that commonly affect business operations and performance. This study would like to focus on the relevance of six areas after the pandemic; for example, technology change, we found that telehealth services were used as an alternative method of health care delivery during the COVID-19 pandemic, higher

volume of using telephone-based care (telemedicine) and increase in the use of video consultations since COVID-19 (Taylor A. et al. 2021).



CHAPTER III

RESEARCH METHODOLOGY

3.1 Research design

This study was conducted using a qualitative method that allows the author to gather richer information, opinion, and experience from interviewees by using open-ended questions from the semi-structured interviews. The research data was conducted by deep interviews with a small group of physical therapists working during COVID - 19 situations in a Thailand hospital. The purpose of this research is to indicate the impact of COVID - 19 to physical therapy in terms of the differentiation and changing (before - after) COVID-19.

However, due to the COVID - 19 pandemic outbreak, some interviewees prefer to interview by phone; each interview takes at least approximately 20 - 30 minutes, and the researcher will be asked the same question. Moreover, before the interview, each interviewee was asked for recording consent to ensure that the researcher would not miss any key point and ensure that the data would be kept confidential.

3.2 Population and sampling

This research paper aims to indicate the impact of COVID-19 in terms of differentiation and changing (before - after) of physiotherapists. The researcher randomly chose the sample sizes from 5 physiotherapists who had worked in different provinces in Thailand's hospital and had different demographic backgrounds.

This paper intends to focus on the small group of physiotherapists who had working experience on the front line through COVID - 19 pandemic. The name of the interviewees will be anonymous because some of the questionnaires were related to their opinion toward their careers and position.

3.3 Research tool

The qualitative research design used in-depth interviews as a data collection tool. The questionnaire is divided into four sections which include demographic data, working information, the impact of COVID-19 in terms of differentiation in responsibility between before and after COVID - 19 pandemic, and the opinions and recommendations toward to healthcare system in Thailand which were prepared and reviewed by the author and research advisor before starting the interview.

Demographic data

1. Age, education level and occupation

Working Information

2. Where do you work?, What is your current position?, How long have you been working for this position?

Impact of COVID – 19

Responsibilities changes in physical therapy during COVID - 19 pandemic

3. What is your responsibility on a regular basis before COVID - 19 pandemic?
4. What is the responsibility during the COVID - 19 pandemic
 - a. Work load (working hours / number of patients)
 - b. Procedure (patients screening / self screening)
 - c. Self- protection
5. What are the additional responsibilities or duties except physical therapist role during COVID -19 pandemic?

Personal safety, patient safety and patient management

6. During the COVID-19 have you or your colleague in the physical therapy department got an infection, if you got infected, how was the protocol?
7. How many vaccines do you get and what is the source of the vaccination? (the hospital provide, by yourself)
8. How do you monitor and manage patients who attend rehabilitation services?
9. How do you adjust yourself since COVID- 19 has been spreading until now ?

Opinion and recommendation

10. How was your opinion (emotional, experience, feeling) toward the healthcare system during COVID-19 pandemic in Thailand?



CHAPTER IV

FINDINGS ANALYSIS

In this section of this thematic paper, the researcher conducted a finding using a qualitative method by in-depth interview. The interviews were conducted on phone calls with approximately 20-30 minutes to complete with five physiotherapists of interviewees, and the researcher held the interviews from 7 to 19 June 2022.

The purpose of this research is to (1) indicate the impact of COVID -19 as differentiation and changing of physiotherapy's responsibilities (before - after) COVID-19 and provide insight of experience and opinion from physiotherapists who are working on the front - line during the COVID -19 pandemic.

The finding analysis was divided into 3 parts as follows;

Part I : demographic data / working information

Part II : interview result

Part III : recommendation

4.1 Demographic data / working informations

Five physical therapists (four females and one male, mean age: 27.6 ± 0.4 years) were asked for demographic information about their age, education level, workplace, and current position, five of them working at the rehabilitation department/physical therapy service of five government hospitals in Thailand. Only one of the participants has a family, which is the main factor affecting anxiety and mental health, as shown in Table 4.1.

Table 4.1 Demographic data of participants

participant	gender	age	status	education level	workplace / current position
P1	female	27	single	bachelor degree	Samchuk hospital / physiotherapist experience : 1 year 11 months
P2	female	27	single	bachelor degree	Ratchapipat hospital / physiotherapist experience : 3 years 4 months
P3	female	28	single	bachelor degree	Cha-oud hospital / physiotherapist experience : 5 years 1 month
P4	male	28	single	bachelor degree	Pakchong na na hospital / physiotherapist experience : 5 years 3 months
P5	female	28	married 1 kids	bachelor degree	Healt center 10 government clinic Ubon rachtani physiotherapist experience : 5 months

Each of them holds a bachelor's degree and got a physical therapy license granted by the physical therapy council of Thailand by national examination. To be legally permitted to assess patients, make a diagnosis, treat including provide telehealth services (world physiotherapy, 2022) with a mean of 3.2 ± 1.7 years of clinical experience, all of them working at the government hospital and province hospitals located in the province that has a high number of infected people from many clusters like factory clusters, educational institutions, family clusters, and party cluster which located in a large province like Bangkok, Suphanburi, Nakhon Ratchasima and Nakhon

Si Thammarat. Until the current situation, each hospital is open for registration of vaccine reservations in the general public and provides vaccination services to the Thai and migrant population, which creates an overwhelming number of people for healthcare services. This factor was related to the workload and responsibilities during the pandemic.

4.2 Interview result

4.2.1 What is the differentiation between before and after COVID -19 pandemic?

Responsibility

Five participants from different organizations got impacted by their responsibility and workload. However, they rather have a similar regular responsibility. Before the pandemic, all physical therapists' activities were focused on the rehabilitation service. Their responsibilities were divided for each physiotherapy in the department, the treatment will provide in a particular department, and each patient is different conditions, for example, musculoskeletal, neurological, cardiovascular, and respiratory conditions, which device to the outpatient department (OPD) and inpatient department (IPD) for each department OPD take approximately 5-20 patients/days, and IPD take approximately 5-10 patients/days, each patient does treatment for around 30 minutes to 1 hour up to the conditions.

All of them felt that their work was “**routine**” due to some participants working as physical therapists since graduating.

Question 3: What is your responsibility on a regular basis before COVID - 19 pandemic?

“I provide treatment for outpatient department about ten patients/day and IPD about 2-3 patients/day musculoskeletal condition takes 30-45 / person, and neurological condition take 1-2 hours/person” by participant 1

“For outpatient department, I take care off about 5-10 patients/day and IPD about 5-10 patients / day most of the conditions have to take care of are the surgical cases, fractures, stroke and bedridden“ by participant 2

“For outpatient department about 20 patients / day and inpatient department about 5 patients / day” by participant 3

“I provide the rehabilitation service total around 10-30 patients / day” by participant 4

“I have to visit only outpatient department (office syndrome, frozen shoulder condition) about 10 patients / day 30-45 minutes” by participant 5

From the interview, their work and responsibility before the COVID 19 pandemic were related to the framework as a regular basis of physical therapist duties, and their workload was dependent on the appointment and emergency case per day.

Participants describe how their work has changed during the pandemic and how they have been working during the COVID - 19 outbreak, Due to an overwhelming increase in the number of infected patients.

Due to an announcement from the royal college of rehabilitation medicine of Thailand (2020), All the participants refer in the same way that they must always be aware of the face-to-face examination and treatment, which is risky of contracting COVID-19 for both patients and treatment provider and the majority of patients who receive rehabilitation services were a patient with stroke, diabetes, high blood pressure, heart disease and the elderly. Therefore, we should considered on “indispensability” for treatment compares with the risk of contracting COVID-19/the risk of infection while providing treatment according to universal precautions and social distancing. Four of the participant’s hospitals announced the defensive measure to suspend the rehabilitation service, including restricting the number of patients per day and treatment times.

Question 4: What is the responsibility during the COVID - 19 pandemic

“My hospital didn’t suspend physiotherapist department, I still provide the rehabilitation services, but we restrict the number of patients and keep patient social distance,” by participant 1

“I was moved to help in other responsibilities” by participant 2

“My department was suspend about 3 monts during the COVID - 19 outbreak after that we back to provide a service again” by participant 3

“We suspend the outpatient rehabilitation department during the outbreak, I provide the treatment for IPD only the urgent case” by participant 4

“The first outbreak my department was close about 1 week and after that I provide the service only emergency case” by participant 5

Moreover, due to a lack of staff and the overwhelming number of patients to get a vaccination, they didn't hesitate to support the patients, assist COVID - 19 management service some of the hospital shift physiotherapists and assign other responsibilities about COVID - 19 management, for example, providing convenience to patients who acquire vaccinations and administer patients, some of the participants volunteered and were willing to assist their hospital.

Question 5: What are the additional responsibilities or duties except physical therapist role during COVID -19 pandemic?

“I do the PUI screening questionnaire and key information in the system, including issuing the appointment card for patients who came for vaccination, and I have to contact patients to follow up on their symptoms and make an appointment to do PCR and chest X-ray” by participant 1

“I do all the work that is related to COVID - 19 management. I understand that my hospital has a shortage of healthcare workers, and I work close to the patients. For example, I set a flow for patients to get the vaccination, make an appointment, check body temperature, key patient's history, check vaccination stock, screening patient who has a high risk in the hospital system, including cooperation for home isolation, follow up the patient symptom by phone call, make an appointment for a chest x-ray” by participant 2

“I work in public relations for registration of vaccination, recording patients' history, issuing the appointment card, and following up on who got the infection by phone” by participant 3

“I packed and provided the medical certificate and answered the phone about the vaccination. “ by participant 4

“A lot of workload for COVID - 19 management about paperwork. My role was to collect and check the document about registration for vaccination and be an administrator to answer the question at the local quarantine ” by participant 5

The study showed that not only in Thailand was rehabilitation service suspended due to the infection being so widespread, but also the hospital in Spain said, “hospitals were contaminated and overwhelmed from patients who were infected by

COVID-19, and all hospital floors converted into COVID-19 wards. In addition, all scheduled surgeries and medical consultations were canceled, and all rehabilitation services were closed and converted into COVID-19 wards. Moreover, they showed a total predisposition to help at any place and “do anything,” e.g., sterilization, pharmacy, and preventive services. (Palacios-Ceña et al., 2021)

Patient and personal safety

Although all the participants got a vaccination, most of them complained about the efficiency of the vaccination. They were still worried and concerned that vaccination couldn't protect them from COVID-19. Due to the hospital safety measure, they must follow the rules and regulations for their own and patients' safety. The basic measure will be to restrict the number of patients per day and decrease the treatment period. Screening with COVID -19 rapid antigen test (ATK) including their personal safety was wearing a glove, mask, PPE, and hair cover; apart from these, all of the equipment that contacts the patient must be clean and changed. Each participant is concerned about their own and family's safety, and some participants move to stay alone to prevent virus transmission to family. It seems to be a sensitive issue that greatly impacts mental health and emotional distress. All of them reply in the same way that despite not get an infection but if they are closer to or in contact with an infected and high-risk person, they must quarantine themselves for 14 days.

“I have one kid who is only five years old. I worried that I would transmit the virus to my family. He is too young and fragile. I don't want him to take a risk” by participant 5

“I taste ATK every day before I start my job. I feel anxious and worried every time that my result will get the positive “ by participant 2

Question 8: How do you monitor and manage patients who attend rehabilitation services?

“We restrict the number of patients, keep patient social distance and PUI screening (patient under investigations), temperature check and ask for the travel history.” by participant 1

“But I provide rehabilitation to inpatients who have to follow up on their symptoms and only have an appointment with a physician. I follow a guideline of droplet

precautions like wearing the mask, and PPE, cleaning the bed, floor, and pieces of equipment surface with alcohol” by participant 2

“We go back to provide service again, but we have to screen patients with ATK and physical therapists every two weeks and turn off the air conditioner and open the window instead. We postpone the appointment for high-risk patients like the elderly, and we suspend visiting home cases and diabetic clinics.” by participant 3

“I provide the treatment for the inpatient department only in urgent cases. We are concerned about PUI screening before providing treatment. I do a temperature check and ask for vaccination history. I am wearing all of the PPE masks and gloves.” by participant 4

“If I have to provide a rehabilitation service for more than 15 minutes, I must wear an N95 mask, gloves, face shield, hair cap, and PPE. I need to change my clothes before I go back home, clean contact equipment with 70% alcohol like bed surface, hot pack, and don't reuse it for other patients.” by participant 5

Even though their normal responsibilities decreased, the additional role was extended to support the healthcare service. Unavoidable with their working environment, which created a high risk of infection, even careful protection even got the vaccination, for most of them, the hospital provided the vaccination (Sinovac) by force. Unfortunately, 1 of the participants got COVID -19 infection from the duties.

Question 6: During the COVID-19 have you or your colleague in the physical therapy department got an infection, if you got infected, how was the protocol?

“During my duties, I got infected by patients and spread it to my colleagues. After I knew that I got infected, they moved me to receive treatment, and my colleagues who worked close to me were moved to a quarantine area and followed up with a protocol to test rapid antigen test every day 0, day 7, and day 14” by participant 2

“My college got infected, but I didn't get” by participant 1

“My colleagues in the department got a positive result, so he had to self-quarantine for 10 days, and after getting well, he went back to work” by participant 3

“I never got infected, but I spend most of my time in self-quarantine because I'm a person who has a high risk of being close to my colleague who got infected, which reduces my overtime shift, and I lose a lot of money” by participant 4

“I never got infected, but most of my colleagues in the department got infected. We had to close the department due to all of us in a stage of quarantine.” by participant 5

In Thailand, the minister of health approved the payment of subsidies to healthcare providers suffering from COVID-19 infection. They say that the subsidy payment is based on symptoms with varying degrees of severity from COVID-19 infection, with deaths healing for 400,000 baht usual symptoms, moderate to high, recover from 10,000 baht, 20,000 baht, 30,000 baht, and more than or equal to 40,000 baht, depending on the severity of the symptoms. (Hfocus, 2022) However, we didn't see the actual case evidence from this news.

After two years of pandemic life, the transformation occurred everywhere, including in the healthcare system, and various defensive measures had been announced handling the emergency. This is a big challenge for healthcare worldwide, and technology has become a tool for diagnostics. Digital solutions have been integrated with traditional methods, for example, telemedicine and telehealth.

Question 9: How do you adjust yourself since COVID- 19 has been spreading until now?

“I am more concerned about infection and safety. I will protect myself concisely and learn more about this virus.” by participant 1

“ It is good. I had a chance to learn about other parts of the hospital, and part of the physiotherapists adapted technology called tele rehab to consult and provide treatment for the patient.” by participant 2

“I wash my hand more than ten times per day, and I still keep a social distance during lunch; we concern more about our own safety and hygiene” by participant 2

“I have more sacrifice and willingness to help. I enjoy learning new job talents and enjoy working with new friends. I learned to do other tasks and not be stuck only with physiotherapist responsibility. I can assist the patient by providing the knowledge.” by participant 5

The “new normal” medical services are an innovation developed after COVID-19, as part of the model, patients were classified into three colors – green, red, and yellow – based on emergency and risk of COVID-19 infection. Patients that do not

need to visit the healthcare facility but are supported by remote consultation (telemedicine) and drugs delivered to them.

The new normal illustrates how Thailand adapts and innovates in response to COVID-19. We focus on the medical information technology to be adapted to the hospital's work system, such as telemedicine to facilitate the patients and health professionals to ensure the treatment is safe, reduce congestion and maintain equality in medical services.

4.2.2 Suggestion and opinion from physiotherapists who worked as front - line during the COVID -19 pandemic

Question 10: How was your opinion (emotion, experience, feeling) toward the healthcare system during COVID - 19 pandemic in Thailand?

“In my opinion, the incentive is less if compared with the workload.” by participant 1

“Money is not my problem because I work as a part-time staff which got a high rate, but if compared with the risk that I will get an infection and workload, It doesn't worth it, and my hospital is a big hospital that never suspends for COVID -19 service and people from other area came to my hospital that created the massive amount of workload” by participant 2

“Everyone has a risk, not only physicians and nurses, and everyone should get a fair incentive, not just one or two professionals.” by participant 3

“During the first outbreak, my hospital didn't have enough protective equipment.” by participant 4

“I feel so tired during this pandemic; in my opinion, the government didn't support us enough during the outbreak. As a healthcare professional, I should get the best option of vaccination for myself.” by participant 5

In the participant's opinion, Thailand's health system is facing a massive problem due to the rapidly increasing number of COVID-2019 cases. Making healthcare personnel is highly exhausting due to long-lasting working hours, stress, burnout, stigma, and physical violence, with imbalances in the number of patients and lack of medical personnel and equipment.

Governments should concern and urgently solve this situation and problems to ensure maximum safety and security for the healthcare worker. Therefore, the ministry of public health should be aware of incentives for healthcare professionals to encourage and be willing to perform duties.



CHAPTER V

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

According to the result, their role doesn't look different from the definition but is more flexible. The physical therapist's role concentrates on managing the COVID - situation to support other professionals and provide service to patients more than rehabilitation services. The COVID-19 outbreak presents unique challenges for physical therapists to work intensively with patients. . In my opinion, there are three conclusions from this study.

1. Prioritizing, during the pandemic, many hospitals immediately canceled the operation case, unnecessary treatment, and all rehabilitation services to prioritize and provide therapy to COVID - 19 patients. Because of this, a pandemic has never happened before, and no existing medicine. Physical therapists have shifted to support the COVID - 19 management and are restricted to providing rehabilitation services only for severe conditions. This emergency has to compete with limited health resources and health professions, making recommended treatments for every patient impossible. In these situations, prioritizing therapy for those with the most emergency becomes essential, and to control the epidemic's spread, reduces the risk of contagious disease and the death rate.

2. Safety culture is significant in the current situation, and as we face the COVID-19 crisis, medical personnel learn about behavioral changes in the healthcare system. From this study, Thailand raises awareness among the health profession and people by providing the following guidelines and educating how to prevent infection to people, e.g. primary self-care for people to prevent infection, such as washing hands, wearing masks implementing the innovations and management systems during COVID-19 to help keep them safe.

3. Adaptation, to be ready to adapt themselves after the outbreak and prepared to upgrade medical potential all the time. This crisis teaches us to learn and

adapt, and we establish the "new normal" healthcare services that need to transform and adapt to new challenges by implementing new technologies. Physical therapists can implement telemedicine to reduce the crowd management in the hospital and follow up and monitor symptoms via line/video call to reduce the coming hospital, including education and self-care to patients by VDO media or QR code scanning.

5.2 Recommendation

First: providing the best vaccines to prevent and reduce loss, a quality vaccination can significantly reduce health care workers' death rate. The government should urgently require the procedure of highly effective vaccines. Importing mRNA-type vaccines such as Pfizer and Moderna vaccines by reducing the process of operating concisely and promptly and considerate to use as the primary vaccine for all citizens and request to disseminate information on the procurement process and distribution of vaccines to be up-to-date, transparent, consistent and verifiable.

Second: allocating more budgets to a healthcare organization, including recruiting more medical volunteers to minimize the medical profession's work. The big problem in the Thai healthcare system today is the lack of funding and a shortage of an official workforce. The government should provide fair compensation, life insurance, a safe working environment, quality working support, opportunities to develop competence, progression, and stability, including opportunities to build knowledge, skills, and abilities, including security in position.

Third: decentralizing public health management power to the provincial level or local public health to reduce the workload from the central or big hospital and to be able to respond to people's problems promptly. The state should provide an opportunity to the local organization to provide health care to people by transferring power and distributing work, emphasizing exercise, health care for the elderly, childcare, and disease control.

Fourth: telemedicine, implement new technology to deliver medical treatment more efficiently and including raising the standard of healthcare service, optimize access to treatment for patients who are far away and reduce medical expenses, waiting time and including risk of contagious disease from the hospital.

5.3 Limitation

Due to the current situation, interviews were conducted with phone calls, reducing the personal interaction between participants and researchers. Also, the researcher finished this study with a small sample only of 5 physical therapists who worked on the front line during the pandemic in Thailand hospital; collecting the data was difficult during COVID-19 due to having to make an appointment and interview via phone and line, some interviewers weren't available for interviews resulting in a delay in research.

5.4 Future Research

The results of this study may encourage the government and top management to be concerned about current problems in healthcare services in Thailand. These problems were related to the pandemic crisis, which indicated the failure of the Thailand healthcare system in many aspects, for example, to handle unexpected situations and impact healthcare professionals. In the future, there might be other health crises occurring in this world, like the monkeypox outbreak (2022). Everyone should not be unestimated; it will benefit people and healthcare professionals to prepare themselves to cope with unexpected situations in the future.

Future studies may also study how physical therapists implement the technology and innovation to support the rehabilitation service, for example, telemedicine for online consultancy and online visiting case homes.

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