

**Lived Experiences of COVID 19 Survivors Using Steam Inhalation in the  
Management of Infection**

A Research Study

Presented to

The Faculty of the College of Nursing

Central Philippine University

Jaro, Iloilo City

In Partial Fulfillment

of the Requirements for the Course

Bachelor of Nursing

by:

Gallardo, Rezza Gift K.

Ganuelas, Christine Denise R.

Garbosa, Reje Mae F.

Garzon, Aliyah Kris P.

Gascon, Benedicto Jr. M.

Geralo, Ana Cristine N.

May 2024

## **ACKNOWLEDGMENT**

The researchers, would like to express their profound thanks and appreciation to the individuals who have generously supported and contributed to the successful completion of this study:

The Central Philippine University - College of Nursing who approved to conduct this research;

Professor Alvin John Gustilo, the research mentor, for his patience and dedication in meticulously reviewing the manuscripts, for generously imparting his expertise, offering insightful suggestions, providing constructive feedback, and instilling motivation, all of which were indispensable in the fulfillment of this study.

Melba C. Sale, OIC Dean of the College of Nursing at Central Philippine University, for her unwavering support and encouragement throughout this endeavor.

To the distinguished members of the panel, Sarla F. Duller, PhD, MN, NP; Betty T. Polido, MAN, M.Ed., Ed. D.; and an outside expert Ma'am Janette E. Yap, MAN, RN for providing the researchers their invaluable suggestions, corrections, and recommendations that made the successful conduct of this study.

The Central Philippine University - Review, Continuing Education And Consultancy Center, and Ethics Review Committee, for the considerate endorsement; which facilitated the ethical review process and ensured the integrity of the research.

Each of the researchers' respective families who have provided unwavering support as they embarked on this journey, understanding, motivating, and standing behind their pursuit and through the entirety of this endeavor.

To the COVID-19 survivors who generously participated and shared their lived experiences and insights regarding the use of steam inhalation in the management of

infection. Their willingness to participate and candidly recount their journey has been invaluable to this research endeavor.

Above all, the God Almighty, for His grace and guidance throughout the journey for this research. His divine wisdom has illuminated the path and His boundless love that has sustained in every step of the process.

The Researchers

## List of Figures

<b>FIGURE</b>		<b>PAGE</b>
<b>1</b>	Illustration of the steps in the data analysis procedure .....	43
<b>2</b>	Lived Experiences of a Covid-19 Survivor in the Management of Infection.....	78

## List of Tables

TABLE		PAGE
1	Summary of Subthemes and Major Themes .....	72

**LIVED EXPERIENCES OF COVID-19 SURVIVORS USING STEAM INHALATION IN  
THE MANAGEMENT OF INFECTION**

GALLARDO, REZZA GIFT K., GANUELAS, CHRISTINE DENISE R., GARBOSA, REJE  
MAE F., GARZON, ALIYAH KRIS P., GASCON, BENEDICTO JR. M., GERALO, ANA  
CRISTINE.

**ABSTRACT**

During the peak of COVID-19, people are turning to home remedies, such as steam inhalation, to treat their ailments since it is a feasible, self-sufficient, inexpensive and sustainable approach. Inhaling steam has been shown to alleviate clinical symptoms in individuals who are afflicted with an infection, as was seen in clinical trials. This qualitative research explores the lived experiences of COVID-19 survivors who utilized steam inhalation as a self-management strategy during their illness. Amidst the global pandemic, steam inhalation gained popularity as a potential adjunctive therapy for respiratory symptoms associated with COVID-19. The purpose of this phenomenological study will explore the lived experiences of an infected patient who has survived using steam therapy as their adjuvant management for COVID-19 infection. The selections of participants will follow certain criteria and they will be chosen conveniently to meet the inclusion and exclusion criteria. The data was gathered through an in-depth-interview. The researcher then audiotaped, video recorded and transcribed all the interviews. Colaizzi's thematic analysis was utilized to categorize and discern patterns. The study was approved by the Research Ethics Committee (REC). Based on the experiences shared by the participants, the lived experiences of covid 19 survivors using steam inhalation in the management of infection were embodied in these themes: (1)Inhalation Fusion: Combining Additives and Oral Medication for Respiratory Relief; (2) Participants' Symptoms

Severity; (3) Impacts of steam inhalation in symptom management and recovery to COVID-19 as observed within the first 24 hours, 48 hours, and 72 hours.

These experiences are true for those who have experienced such phenomena.

These findings cannot be applied to all Covid-19 survivors. The identified themes served as the foundation for the development of recommendation guidelines on the lived experiences of covid 19 survivors using steam inhalation in the management of infection.

## Table of Contents

Title Page.....	i
Approval Sheet.....	ii
Acknowledgement.....	iii
List of Figures.....	v
List of Tables.....	vi
Abstract.....	vii
<b>CHAPTER</b>	
<b>I. INTRODUCTION</b>	
Background and Rationale of the Study .....	1
Epistemological and Theoretical Perspective of the Study.....	3
Microtheories.....	4
Purpose of the Study.....	5
Statement of the Research Problem/Question.....	5
Significance of the Study.....	6
Definition of Terms.....	7
Researcher Subjectivity.....	8
Delimitation of the Study.....	11
<b>II. REVIEW OF RELATED LITERATURE AND STUDIES</b>	
Review of Related Literature.....	12
Review of Related Studies.....	17
Synthesis of Related Concepts and Studies.....	24
<b>III. RESEARCH DESIGN AND METHODOLOGY</b>	
Research Design.....	31
Methodology.....	32
Participants of the Study Inclusion/Exclusion Criteria.....	36

Research Setting.....	37
Data Collection Procedures and Strategy.....	37
Ethical Issues.....	38
Dissemination Plan.....	41
Analysis of the Study.....	42
Methods to Establish Rigor and Trustworthiness and Integrity of Data...	45
<b>IV. SYNTHESIS AND DISCUSSION</b>	
Part I: Experiences of Each Participants .....	48
Part II: Themes .....	64
Major Theme 1: Inhalation Fusion: Combining Additives and Oral Medication for Respiratory Relief .....	64
Major Theme 2: Participants' Symptoms Severity.....	68
Major Theme 3: Impacts of Steam Inhalation in Symptom Management and Recovery to COVID-19 as Observed Within the First 24 Hours, 48 Hours, and 72 Hours .....	69
Summary of Subthemes and Major Themes .....	72
Part III: Essence of the Phenomenon.....	74
Part IV: Discussions .....	78
<b>V. SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATION</b>	
Summary of Findings .....	85
Conclusions .....	87
Recommendations .....	88
<b>REFERENCES.....</b>	<b>90</b>
<b>APPENDICES.....</b>	<b>95</b>

A. Questionnaire.....	95
B. Certification of Research Instrument	
Validation.....	96
C. Informed Consent .....	97
D. Certificate of Technical Review .....	107
E. Turnitin Similarity Certificate Chap1-3.....	108
F. Budget .....	109
G. Curriculum Vitae.....	110
H. RERB Decision Form.....	116
I. RERB Resubmission Form.....	118
J. Ethical Clearance.....	120
K. RERB Progress Report.....	121
L. RERB Final Report.....	123
M. Plagiarism Scan Certificate Chapter 1-5.....	126
N. GANTT Chart.....	127
O. Schedule of Activities.....	128
P. Certification for Grammar and Other Mechanics of Writing.....	129

## CHAPTER I

### INTRODUCTION OF THE STUDY

#### **Background and Rationale of the Study**

The Philippines is a country with an extensive range of cultural traditions, and it is well known that certain people hold firm beliefs in various forms of traditional medicine. Traditional medicine is defined by the World Health Organization (WHO) as the knowledge, skills, and practices that are based on indigenous theories, beliefs, and perspectives that are employed for the improvement or management of both mental and physical illness in hopes of preserving or restoring health. Traditional medicine may also be utilized to prevent illness. This incorporates health practices, attitudes, knowledge, and beliefs that employ plant, animal, and chemical medications, spiritual interventions, manual methods, and exercises to treat, diagnose, prevent, and improve health. This sort of treatment is known as supplementary or alternative medicine in many countries (WHO, 2020). In addition to this, according to the estimations provided by the World Health Organization, around 80 percent of the global population that dwells in emerging economies regularly engages in the consumption of traditional pharmaceuticals within their communities (WHO, 2000). In halotherapy, often known as salt therapy, patients improve their breathing by inhaling air that contains very small particles of salt. For patients suffering from respiratory conditions such as asthma, bronchitis, and cough, halotherapy offers a different treatment option (WebMD, 2021). It has been hypothesized that halotherapy can improve lung function, eliminate pollen, toxins, and viruses from the lungs and nasal passages, reduce inflammation, clean the nasal cavities and sinuses, and relieve some skin disorders. These claims have been put forth by proponents of the therapy (Richards, 2020).

People who are undergoing the indications of a cold or sinus infection have been reported to resort to steam inhalation, also characterized as steam therapy, as a traditional practice that can be utilized as a home remedy. In this method, the patient breathes in water vapor, and it is believed that the warm, moist air works by dissolving the mucus and opening the nasal passage, throat, and lungs. This makes it possible for these areas to empty their components more easily, which in turn promotes symptom relief for those suffering from a cold. The key advantage of breathing in wet, heated steam is that it may help diminish perceptions of irritation and swollen blood vessels, which ultimately results in a reduction in mucosal inflammation and inhibition of viral replication due to the heat's ability to inhibit the growth of viruses.

The high cost of drugs and Covid measures and protocols has led to a therapeutic shift toward alternative traditional medicine among other patients who prefer not to consult in the hospital. To combat or relieve the symptoms, some of these patients used a variety of traditional home remedies, including steam inhalation. Perhaps because inhaling steam won't cure an underlying condition like influenza or a common cold, it might make a patient feel better as their body fights against the virus that's causing the illness. As a potential outcome of this, inhaling steam can be recognized as an intuitive strategy to disable Covid-19 infection in its earliest and most fundamental stage (Swain and Sahu, 2021; Uy et al., 2020).

Some sources discourage the application of steam therapy or steam inhalation for Covid-19 prevention and treatment (Tampus & Tolosa, 2021; Brewster et al., 2020), even though studies have examined the role of inhalation of steam in Covid-19 prophylaxis and treatment (La Marca et al., 2022; Pawar et al., 2020). As stated by Tampus & Tolosa (2021), steam inhalation has very low-quality evidence, and the potential for harm outweighs the benefit.

Moreover, Brewster et. al. (2020), steam inhalation can cause hazards to children and, in some patients, result in scalds that result in hospitalization. Therefore, there is conflicting literature on whether the use of steam inhalation was effective or not. However, several Covid-19 survivor patients claimed that the use of steam inhalation was effective for them. They assert that steam inhalation relieves them of the symptoms of Covid-19. This allegation is not yet proven scientifically, and the current literature argues that the treatment is effective. Moreover, the experience of using steam inhalation among the survivors of Covid-19 was not given deep investigation in the current literature. Thus, the researchers will explore the lived experiences of these Covid-19 survivor patients who used steam inhalation.

### **Epistemological and Theoretical Perspective of the Study**

Interpretivism is a research philosophy that emphasizes the subjective and social construction of reality. It is based on the idea that reality is multiple and can only be understood through the experiences and perspectives of individuals. This philosophy is associated with qualitative analysis and is used in diverse approaches such as social constructivism, phenomenology, and hermeneutics. Social constructionism is a theoretical perspective that emphasizes the collective generation of knowledge and the idea that much of what individuals perceive as 'reality' is constructed through social interactions and cultural influences. It views human development as a collaborative process where experiences and learning are shaped by one's interaction with the surrounding world. Participants in the study will be able to give us data through their lived experiences about using steam inhalation. The study will determine the effects of steam inhalation, identify the signs and symptoms of Covid-19 that have been alleviated by using steam inhalation, and identify the time duration for which steam inhalation worked. It emphasizes the role of language, storytelling, and shared understanding in

the construction of reality. The researchers will be able to know the lived experiences of the participants through an in-depth interview, wherein the theories of interpretivism and constructionism will be useful in knowing the construction of reality based on the participants. Theoretical and Philosophical Background of the Study. A social cognition paradigm called the Theory of Planned Behavior (TPB) forecasts behavioral intention as a stand-in for actual conduct (Ajzen, 1991). According to the model, the intention of an individual to engage in a certain activity is the single most critical element in determining whether or not they will engage in that behavior. The intention of a person to do a certain behavior is based on three global constructs: attitudes (perceptions of the advantages and disadvantages of engaging in a behavior), subjective norms (perceptions of the acceptability of the action by significant people), and perceived behavioral control (perceptions about the degree to which a person feels they are required to have control over the action in order to carry it out) all play a role in determining whether or not an individual engages in a behavior.

This study is bound to the philosophy of interpretivism, with underpinnings from the theoretical perspective of relativism. Including the gathered narratives, the researchers' interpretation of the context of the research, and the relative reality or truthfulness to the participants' lived experiences. IPA is highly useful and beneficial when dealing with complexity, process, or even novelty.

### **Microtheories**

Throughout this research, TPB is much more applicable based on the three global constructs, such as the attitude of the participants as in-depth in their experiences of using steam inhalation as a Covid survivor; subjective norms are the why's of the participant in believing that their use of steam inhalation was or has an effect on them; and their perceived behavioral control is how they use the steam inhalation, which helps

them survive the Covid infection. In addition, TPB has been used for the investigation of a range of behaviors and has been shown to predict several health-related behaviors, such as the use of nutritional supplements (Conner et al., 2001), physical activity (Hobbs et al., 2013), and breast self-examinations amongst women (Norman and Cooper, 2011). Thus, the use of TBP in this study is established. Moreover, the results of this study will expand the concept of the theoretical effectiveness of steam inhalation postulated by Chowdhury et. al., (2022).

### **Purpose of the Study**

During the peak of Covid-19, people are turning to home remedies, such as steam inhalation, to treat their ailments since it is a feasible, self-sufficient, inexpensive, and sustainable approach. Inhaling steam has been shown to alleviate clinical symptoms in individuals who are afflicted with an infection, as was seen in clinical trials.

Thus, the researchers have determined to conduct a phenomenological study exploring the lived experiences of an infected patient who has survived using steam therapy as their adjuvant management for Covid-19 infection.

### **Statement of the Problem**

The researchers aimed to explore the lived experiences of the Covid-19 survivor patients who used steam inhalation.

Specifically, this study sought to answer the following research questions.

1. What are the lived experiences of a Covid-19 survivor who used steam inhalation?
2. Why did the Covid-19 survivor patient believe in and use steam inhalation as a complementary treatment to Covid-19?

3. How does the use of steam inhalation help Covid-19 survivors in treating and relieving Covid-19 symptoms?

### **Significance of the Study**

The results of this research study will be significant and beneficial to healthcare providers and other allied health services, the wellness of the readers, and the peers of the participants. Moreover, the school health program and the local health unit, and future researchers.

*General Public.* The general public will be provided with the knowledge to appreciate the lived experience of the person who survived Covid infection through the use of steam inhalation. The common lay people will be able to understand when or how to use steam inhalation.

*Healthcare workers.* The healthcare workers will be able to evaluate the usefulness of steam therapy. They will be given ideas based on the insights shared by the Covid survivor regarding the use of steam inhalation.

*Local Health Unit.* The local health unit will have the insight to strengthen programs and advocacy in promoting the use of steam inhalation. Consequently, they will have a better understanding of the importance and meanings of the participants' experiences.

*Future Researchers.* The researchers will be given more opportunities to explore the context, assumptions, themes, and concepts that will be divulged in this study. This will serve as the basis for further hypotheses to be tested, verified, supported or be proven insignificant by other researchers.

## Definition of Terms

*Salt Steam Inhalation* – Refers to breathing in air that contains small salt particles to facilitate breathing. Halotherapy is regarded as a complementary therapy for lung conditions like asthma, bronchitis, and cough (Brennan, 2021).

In this study, “Salt Steam Inhalation” refers to a traditional practice that has been used as a home remedy by people experiencing symptoms of a cold or sinus infection.

*Steam* – Refers to an invisible, odorless gas made of water vapor. It is often composed of minute water droplets, which gives it a whitish, cloudy appearance. (Britannica, T. Editors of Encyclopaedia 2017).

In this study, the lungs are put through a lot of strain when exposed to "steam." Because of heat-related tension, the lungs of the body can increase their moisture absorption, which manifests in an increase in tidal volume, vital capacity, airflow, and the volume of the forced expiratory lungs as well as a decrease in pulmonary congestion.

*Inhalation* – Refers to the process of breathing air into the lungs by using the mouth and nose (Oxford Reference, 2023).

In this study, “Inhalation” refers to the popular home remedy during the peak of Covid-19 among common people since it is a strategy that is easily doable, affordable, and accessible.

*Lived Experience* – Contrary to the perceptions of others, a personal view of the world is gained from direct, firsthand involvement in daily occurrences. Instead of learning about someone through a technological medium, it may also refer to knowledge of a person received through direct face-to-face interaction. (Oxford Reference, 2023)

In this study, “Lived Experience” refers to the primary source of information of Covid-19 survivors regarding their experiences.

*Adjunct therapy* – Refers to the additional or follow-up treatment that is given after the primary or initial treatment. (Davis, 2021)

In this study, “Adjunct Therapy” refers to the use of salt steam as an intuitive outlook to incapacitate Covid-19 infection.

*Covid-19* – Refers to a virus called SARS-CoV-2 that causes an infectious disease. (World Health Organization, 2023).

In this study, the term "Covid-19" refers to the primary focus of this investigation as well as the rationale for participants' usage of salt steam inhalation.

*Covid-19 Survivor* – Refers to individuals who have either had Coronavirus confirmed by a positive Coronavirus test or who have had the virus confirmed by a positive Coronavirus antibody test. (Prioleau T, 2021).

In this study, “Covid-19 Survivor ” refers to the participants of the study whose data were needed and were used to fulfill this study.

### **Researcher's Subjectivity**

The researchers explored the subjectivity in this study to further comprehend the lived experiences of Covid-19 survivor patients who used steam inhalation in the management of infection. Subjectivity is the degree to which the research is influenced by the beliefs, values, experiences, and views of the researcher. Bracketing the subjectivity of the researcher was applied in the study.

This is a term that refers to clearing assumptions at various points throughout the research. Allen (2018). Subjectivity is associated with personal biases in traditional scientific discourse because, according to its empirical orientation, the researcher's direct or indirect effect on data collection, management, interpretation, and reporting invalidates the research findings (Allen, 2018). The researchers, who are students from the College of Nursing, recognized it as both a duty and an honor to contribute, to the best of their abilities, to the study of a particular phenomenon linked to their work. The researchers put a lot of effort into recognizing their strengths and weaknesses as individuals and researchers, while also acknowledging their limitations and believing in their ability and legitimacy to study such events. The researchers considered the subjects' thoughts and feelings in order to appreciate the lived experience from the subjects' perspectives.

Moustakas (1994) refers to participants as "co-researchers" since participants, in addition to the researcher, are involved in the meaning of the fundamental aspects of the phenomena being studied. The lead researcher's job is to bring the co-researchers up to speed on their status and the part they play in the investigation. As a result, researchers, therefore, should inform their co-researchers early on in the project how they contribute to the study's overall goal and questions. Thereafter, the researchers might inquire of the co-researchers about their prior experiences with the intention of eliciting responses to the research questions. Researchers strive to maintain objectivity in their work by adhering to established scientific methods, ethical standards, and peer-review processes. However, potential biases can arise, consciously or unconsciously, at various stages of the research process. The researchers considered the following factors:

1. Publication Bias: Journals may have a bias toward publishing positive results, leading to an incomplete representation of the available evidence. This publication bias can affect the overall perception of a treatment's effectiveness.

2. Peer Review: The peer-review process is designed to evaluate the quality and validity of research. However, biases can still exist within the peer-review system.

3. Personal Beliefs: Individual researchers may have personal beliefs or preconceptions that could influence their interpretation of results. It is essential for researchers to be aware of and transparent about their biases. It is crucial to be aware of potential biases in research, making categorical declarations about researchers being subjective without specific evidence can be unfounded. Rigorous evaluation of study design, transparency, and peer-reviewed evidence is essential for forming informed opinions on any potential treatment. In addition, it is the obligation of the researchers to encourage their co-researcher to be truthful and provide specific details about their lives and experiences. According to Poggenpoel and Myburgh (2003), in qualitative research, a researcher "facilitates the flow of communication, identifies cues, and sets participants at ease." Seidman (2006) contends that it is essential to cultivate a friendly relationship with the participant throughout the research. As a result, researchers can build the proper level of amity with each subject. Throughout the inquiry, the researchers could also talk about their own experiences with the phenomenon. For instance, the researchers can talk about their own experiences with the phenomenon during the phenomenological interview sections. This makes it possible for the participants to feel more at ease when it comes to providing specifics about their encounters, which is one of the goals of the study.

Phenomenological analysis requires the researchers to maintain their subjectivity in check during the whole of the study. This action is given the term "epoché process" by Moustakas (1994). When attempting to address research questions from several viewpoints of the co-researcher, researchers need to put aside whatever assumptions they may have about the topic they are studying.

**Delimitation of the Study**

This study is a qualitative research using interpretative phenomenological analysis as a technique for gathering and analyzing data. This study focused on the phenomenon wherein the Covid-19 survivors used steam inhalation as their complementary therapy to fight and prevent infection.

This study is focused only on the Covid-19 survivor's lived experiences of the phenomenon. The interview was semi-structured, and both an audio and video recorder were utilized to record the discussion. The selections of participants followed certain criteria and they were chosen conveniently.

This research study was conducted from December 2023 to February 2024. This was confined to utilizing interpretive phenomenological analysis and that the participants' information is true to their perspective at the moment the study was conducted. The criteria for participant selection were limited to Covid-19 survivors.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

This chapter presents the review of literature and studies which are related to the present investigation.

#### **Related Literature and Theories**

##### Steam Inhalation in Local Uses and Traditional Medicines

According to the World Health Organization, 2000, the goal of interpretative phenomenological analysis (IPA) is to study and understand more about how people are making sense of their personal and social worlds. According to Seth and Sharma, (2004) the WHO has established a list of nearly 21,000 plants that may be utilized to make medicines. The Philippines Department of Health had identified 10 herbal plants and their medicinal use and regulations, not to mention the herbal plants used by our forefathers as their traditional medicinal practices, employing poultices and applied topically or through inhalation via steam or smoke. According to recent research, India has found several herbs that are utilized in customary home inhalation treatment and have been shown to have therapeutic advantages for boosting the immune and respiratory systems (Vellingiri et al., 2020). For the treatment of individuals with less severe symptoms, steam inhalation with different herbal remedies may be able to halt the coronavirus (Marwah and Marwah, 2020).

Additionally, some Ayurveda practitioners have recommended combining caraway seeds and mint leaves with the steam inhalation technique, which is effective for treating lung conditions (Golechha, 2020; Rajkumar, 2020). In accordance with the studies of Sathya et al., 2020, and Tillu et al., (2020), this has been a leading candidate

for Covid-19 patients' home remedies because it is a proven method for treating upper respiratory tract disorders like bronchospasm, throat inflammation, and sinusitis. This has the potential to alter the way the immune system and inflammation function inside the body.

Steam inhalation benefits the body with lower tension, anxiety, and mood by influencing synaptic pathways in the mesolimbic and mesocortical regions. Nevertheless, there is no evidence to support a psycho-neuroimmune function (Oken, 2008; Shisode, 2021).

According to Marwah and Marwah (2020), researchers have suggested using soap steaming to eliminate coronavirus and other viruses from the upper respiratory tract and the first few layers of the lungs. The standard way for heating water is as follows: One milliliter of eucalyptus oil is blended with 10 milliliters of coconut oil, 100 grams of cumin seed (powdered), 50 grams of carom seed, 175 grams of sodium chloride, and 15 grams of sodium stearate in an airtight container. Then, 10 grams of this combination may be inhaled using a steam inhaler or about one liter of boiling water. The mouth and nose should be used for 5–10 minutes of steam inhalation. According to Chalchat et al., 2001; Morshedi et al., (2015) cumin aldehyde, a naturally occurring chemical molecule that can be found in cumin and eucalyptus, was thought to be capable of inactivating coronaviruses because it has the potential to react with the amine groups (-NH<sub>2</sub>) of surface proteins (Marwah and Marwah, 2020). Ineffectiveness in the lungs and clearance of the upper respiratory tract may result from the virus' outer membrane disintegrating due to the limited quantity of stearate and essential oils mixture and high temperature. The volatile components of cumin and carom seeds, such as cumin aldehyde, terpenes, thymol, and others, are also calming to the lungs and throat. Some viruses may be prevented by using essential oils, but their entry into the human body is unaffected (Pitkowska and Rusiecka-Ziokowska, 2016). The treatment was

recommended to be followed twice a week, with the infected patients using this approach three times each day (under supervision) and others may be using it once per day. According to Marwah and Marwah, (2020) for hospitalized patients, the researchers advised using lipids more often in the form of inhalers containing sodium stearate.

In another study on conventional methods of treating Covid-19, Al Nagggar et al. (2021) reported that researchers hypothesized that beehive products such as honey (aerosolized) and propolis tincture could help lessen Covid-19 symptoms when used in steam inhalation treatments. Additionally, according to Minden-Birkenmaier et al. (2019), types like Manuka honey, with varying degrees of thickness, have been shown to produce chemokines, cytokines, and enzymes that break down structure. Making the mitochondria in alveolar cells work harder with propolis can help Covid-19 patients with low oxygen levels get rid of them. (Farooqui and Farooqui, 2012). Honey has been shown to alleviate the symptoms of tracheal and lung infections, according to Abuelgasim et al., 2021, and Lauer et al., 2020. Activated ciliary cells are responsible for moving mucus into and out of the lungs. Due to this, the mucus becomes thinner and is less difficult to cough up. (Bustamante-Marin and Ostrowski, 2017). According to Shaldam et al. (2021), it has recently been shown that novel coronaviruses' major protease (Mpro) and RNA-dependent RNA polymerase (RdRp) enzymes showed a remarkable affinity for 14 terpenes and phenolic compounds found in honey and propolis. (2019-nCoV). P-coumaric acid, ellagic acid, kaemferol, and quercetin stand out as the most potential compounds for inhibiting the virus, given their strong interactions with the aforementioned enzymes (Shaldam et al., 2021).

Furthermore, individuals in Tanzania cluster together to inhale the strong pharmacological compounds that are released when plant leaves are cooked in water as part of a traditional form of herbal medicine known as "kujifukiza" (Kamazima et al., 2020). The inhalation of volatile medicinal oils is the primary focus here rather than the

steam inhalation that is often associated with this practice. The oils have a calming effect and exhibit a variety of actions that are effective against various germs and viruses.

According to Kamazima et al. (2020), nevertheless, there is no evidence that it is effective against Covid-19. Despite this, the Tanzanian government advised its citizens to continue using this methodology to combat the dangerous virus that exists there (Kamazima et al., 2020). In addition, in May 2020, 70 specialists in African traditional medicine met virtually with WHO. During this meeting, they proposed that clinical trials be conducted on all conventional medicine in Africa because they are convinced that treatment for Covid-19 could already be found on the continent (Kamazima et al., 2020).

In another study, halotherapy, a type of inhalation, has been shown in tests to be effective in symptom relief and urges further investigation into utilizing its potential for adopting this therapy on a larger population of patients after the Covid-19 pandemic (Kwiatkowska, et. al., 2021). This therapy can be employed either indoors or outdoors, regardless of age, as well as with people with impairments (Kwiatkowska, et. al., 2021). The effectiveness of salt steam inhalation takes place in 30 - 60 minutes in 10 - 14 days in a row (Kwiatkowska, et. al., 2021)

According to László Endre, the practice of dry salt inhalation, also known as halotherapy, recreates the environment of salt caverns, which has a positive impact on one's health. The sodium chloride crystals are crushed into a fine powder and then artificially breathed into the air in a warm environment (about 20 - 22 °C) with low humidity (with a diameter of less than 3 m). The final concentration of salt in the room's air will range between 10 and 30 milligrams per cubic meter (3). The ill (or healthy) people stay in this chamber for thirty to sixty minutes, and they do so ten to twenty times on average. Inhaled salt has a greater osmotic pressure than water; hence, it lowers edema of the bronchial mucosa and, by extension, bronchial mucosal inflammation. The mucus is segmented as well, so that you may cough up your expectoration more quickly

and easily (expectoration of air pollution and allergens will also be quicker). It does this by preventing germs from multiplying and, in certain instances, by actually killing the bacterium. Furthermore, phagocyte activity is elevated. It has a soothing impact on the central nervous system, which contributes to the general improvement of the patient's health. It has the potential to either completely eliminate the risk of respiratory tract inflammations, or at the very least reduce their incidence. It leads to improvements in the parameters that measure lung function and reduces bronchial hyperreactivity, which is an indication that inflammation is being reduced. Not only can it reduce inflammation in the respiratory system, but it also has a good effect on inflammation of the upper airways, whether the inflammation is acute or chronic. Psoriasis, pyoderma, and atopic dermatitis are just a few examples of chronic skin conditions that have been shown to benefit from this treatment method in the body of research conducted all around the world. This therapy, which is known as "Indisó", is also accessible in Hungary under medical supervision.

According to clinical trials for COPD, salt therapy is beneficial for reducing symptoms and improving functional parameters in chronic bronchitis, mild and moderate asthma, sinusitis, bronchiectasis, and chronic obstructive pulmonary disease. It has been discovered that rinsing with hypertonic saline reduces airway inflammation in bronchiolitis patients. Salt therapy should be advised as a supplemental treatment for individuals with continuous exposure to indoor air-humidity bacteria, which may affect the respiratory mucosa. Salt therapy is well tolerated and safe. (Anita A Wasik, Tamara Tuuminen, 2021).

## **Related Studies**

### Mechanism of action of steam inhalation in the body

Heat, the key component of steam, has a substantial effect on host defense, physiological immunity, viral load, and virulence, and it triggers adaptive thermoregulatory systems that may either increase or lower body temperature to restore homeostasis. Heat is a fundamental element of steam (Schieber and Ayres, 2016). Meanwhile, an increase in body temperature not only reinforces the first line of defense but also the second line of defense by causing heat stress and mimicking feverish symptoms (Schieber and Ayres, 2016). To overcome a viral infection, stressors such as the environment, the source of heat, the temperature and humidity, the location, and the duration of heat exposure all play crucial roles (Schieber and Ayres, 2016). Hence, extreme heat and hyperthermia have a number of effects that may inhibit viral infections. Direct repression of viruses and bacteria, immune system strengthening at both the innate and adaptive levels, and this treatment results in the activation of regulatory systems that reduce inflammatory responses and stop uncontrolled tissue damage (Evans et al., 2015)

Breathing in steam puts the lungs in an inconvenient and perhaps dangerous position. This heat-induced stress results in tidal volume, lung capacity, flow of air, and forced expiratory volume of the thoracic cavity all go up, which makes it easier for the lungs to take in air (Laitinen et al., 1988). Inhaling hot air strengthens the first line of defense of the immune system by directly stopping or stopping the spread of viruses in the body's first airways, which is where they enter the body. Furthermore, hot air inhalation fosters mucus secretion, which can be further improved by steam inhalation (Gujrathi et al., 2016).

Extreme heat caused by inhaling steam improves cardiovascular function by affecting the autonomous nervous system, lowering blood pressure, inflammation, and

oxidative stress, increasing cardiac output, plasma volume, and peripheral blood flow, and improving endothelial function, lipid profile, and arterial enforcement (Heinonen and Laukkanen, 2018; Kunutsor et al., 2018; Laukkanen and Kunutsor, 2019; Laukkanen et al., 2018). Another advantage of heat stress is that it changes blood pH, owing to heat-induced hyperventilation, which is followed by pulmonary alkalosis (Tsuji et al., 2016). In turn, strains like coronavirus 229E, which is the most dangerous in acidic environments, can be brought to the surface and their reproduction can be slowed or stopped in this artificially alkaline environment (Lamarre and Talbot, 1989). At a pH of 8 and a temperature of 37°C, the spike glycoprotein of the coronavirus MHV-A59 changes structure. This causes the virus to stop spreading quickly and for good. (Sturman et al., 1990).

Furthermore, pyretic temperatures make cells do a lot of different things, like change the way the pathway of heat shock response works, induce inflammation, and activate the immune system (Singh and Hasday, 2013). The lipid bilayer membrane of cells releases heat shock proteins (HSPs) in response to heat stress (Iguchi et al., 2012). Its primary function is to serve as a guide and protect immune cells and proteins from heat damage. It also takes some work to activate lymphocytes and macrophages, present antigens, and cross-present them, in addition to activating and developing dendritic cells (Singh and Hasday, 2013; Tsan and Gao, 2009). Heat stress of an acute kind increases the activity of NK cells (interleukin-2 originated). T-lymphocytes make ten times the amount of interferon than usual or even create monocytes that respond more strongly to TNF-alpha (Downing et al., 1988; Kappel et al., 1991; Zellner et al., 2002). On the other hand, constant heat stress causes NK cells to become more cytotoxic, cortisol and adrenaline to drop, and the B-cell proliferation in response to stimulation to increase (Tomiya et al., 2015).

Exposure to colds may have a cumulative effect on the immune system, and heat stress through steam inhalation and other treatments might help boost the immune system (Heinonen and Laukkanen, 2018). This supplemental cold exposure following heat stress causes an increase in NK cell count and activity, along with circulating levels of IL-6, leukocytosis, and granulocytosis (Brenner et al., 1999). Moreover, diuresis occurs as a result of blood being shunted in the viscera, which aids in detoxification (Cochrane, 2004; Epstein, 1978).

#### Mechanism of actions of steam inhalation against Covid-19 (SARS-CoV-2)

The School of Public Health, LKS College of Medicine at The University of Hong Kong conducted an experiment showing that heat may kill SARS-CoV-2 in vitro at the various temperatures tested (Chin and Poon, 2020). An in vitro study was done to find out how temperature affects the stability of SARSCoV-2. The virus was incubated in a transport medium at a concentration of 6 - 8 log units of [TCID<sub>50</sub>] (50% tissue culture infectious dose) per mL for 14 days. The finding showed that the virus was relatively stable around 4°C but vulnerable to heat at higher temperatures. Therefore, on the 14th day, the infectious viral titer decreased by 0.7 log units at 4°C, while the virus died in 5 minutes at 70°C (Chin and Poon, 2020). According to Lowff's model, the spread of rhinoviruses in the respiratory tract mucosa may be prevented by elevating the temperature of the mucosa to 43°C for three 30-minute periods with a 2-hour interval between each session (Yerushalmi et al., 1982; Yerushalmi and Lwoff, 1980). Since SARS-CoV-2 is temperature sensitive, it has been proposed that steam inhalation treatment at 55-65°C, if administered immediately after infection, might minimize the risk of severe illness by preventing infection in the mucosa of the upper airways (la Marca et al., 2021). The therapy used was a good sign, since most contamination happens when no one is looking (Janik et al., 2021). But so far, no research has shown what

temperature, humidity, and time are needed to make SAR-CoV-2 stop working in living things (Cohen, 2020).

Clinical studies of using steam inhalation to prevent or treat Covid infection

The effectiveness of steam inhalation in preventing respiratory tract infections has long been recognized (Uy et al., 2020). Treatment of respiratory illnesses like bronchitis, influenza, common viral colds, etc., has been done in homes using this method as a standard medical procedure (Swain and Sahu, 2021). Influenza and the SARS coronavirus correlate with heat exposure, according to earlier studies (Chan et al., 2011; Lowen and Steel, 2014). Since SARS-CoV-2 is structurally comparable to these two viruses, research has been conducted to see if steam inhalation might be a useful technique against coronaviruses (Pawar et al., 2020).

According to Pawar et al. (2020), a group of researchers at Seven Hills Hospital in Mumbai, India examined the effectiveness of steam inhalation as an additional therapy for SARS-CoV-2 in July of 2020. A group of asymptomatic patients and another group of slightly and moderately symptomatic patients, together with healthcare professionals (doctors and nurses), were assembled and separated accordingly into two groups. Group 1 consisted of 25 healthcare professionals, whereas group 2 included 80 patients and healthcare professionals. The first group of asymptomatic individuals was instructed to inhale steam for 5 minutes twice daily, whereas the second group was instructed to breathe steam for 5 minutes every three hours. The steam was typically between 70°C and 80°C. After check ups ranging from 2 weeks to 1 month, none of the initial groups had any symptoms. In the mildly symptomatic individuals of the second group, symptoms reversed after 3 days of steam inhalation, but in the moderately symptomatic grouping, symptoms reversed after 7–10 days of steam inhalation. The majority of

individuals (65) had negative Covid-19 test results after 10 days of steam exposure, whereas the remaining 15 had negative results by 18 days.

During that year, at the Meyer Children's University Hospital in Florence, another group of Italian researchers collected 10 people who had been infected with SARS-CoV-2. A study was done to figure out what role the thermal outflow of coronavirus plays through the inhalation of steam. The group was exposed to moist steam at 55–65°C for at least 20 minutes. This was done in 4 cycles of 5 minutes or 5 cycles of 4 minutes for an hour. CT data from RT-PCR testing were used to determine viral clearance and viral eradication after 4 days of following the program. Seven of the ten patients were able to finish the treatment. The other three had different problems because they could not finish the protocol, and their results have been looked at separately. All seven patients who followed the protocol to the letter and had a swab taken 10 days later tested negative, which was a good sign. Those who did not follow the whole regimen found positive benefits (la Marca et al., 2021).

Another set of researchers in India assembled two groups of symptomatic and asymptomatic healthcare professionals in 2021, with ages ranging from 22 to 68 years on average, with the average age being 38 years. The first and second groups included 44 persons (28 men and 16 women) and 52 people (34 men and 18 women), respectively. They were all told to inhale 42°C to 45°C steam as an additional treatment and to come in for checkups at week 1 and week 2, then at the first month and second month. The group with no symptoms was told to do the same thing three times a day for two weeks. The group with symptoms was told to do it every three hours for two weeks. A CT scan of the thorax of each subject was also used to look at the CORADS score and the level of participation. Just four of the 52 individuals with no symptoms experienced minor symptoms when tested the first week, and their RT-PCR test results came out negative the next week. The symptomatic group consisted of 44 patients, 36 of

whom had moderate symptoms that resolved after 5 days of steam inhalation. Eight people within the group had moderate symptoms that went away after 7 days of steam inhalation, except for one. This patient was first diagnosed with pneumonia, which ultimately led to his needing to have an orotracheal tube inserted. Intensive care for Covid was required for him. By 14 days, 36 of the 44 people in this group had negative results from the RT-PCR test, and the other 8 also had negative results by 20 days.

Before steam inhalation, all of the people in the asymptomatic group had scores between 0 and 5 (out of 20, which means minimal invasion) for the level of involvement. When they had followed the procedure, all of their scores were reset to zero, which indicates that they had no participation (no invasion). CT scans were performed on a total of 35 participants who were part of the group of people who had symptoms. During the procedure, 23 of them had a score between 0 and 5, 7 of them had a score between 6 and 10 (which indicates a mild invasion), and 5 of them had a score between 11 and 15 (moderate invasion). After the protocol was followed, only 2 people had a score of 0–5, and there was one patient in each of the 6–10 and 11–15 score categories (Swain and Sahu, 2021).

In the Corona unit of Sher-e-Bangla Medical College Hospital, a case-control study was carried out with a total of 43 subjects, all of whom tested positive for the RT-PCR test. The research was a success (Sarker et al., 2021). Researchers performed this study to contrast the outcomes of inhalation of steam combined with medication against steam inhalation without medication. Participants were split into two groups: in the control group, 16 people were given plain water vapor as an extra treatment on top of the standard care. In the study group, 27 people inhaled vapor with 0.2% Menthol, 0.5% Methyl salicylate, 1.2% N-Acetylcysteine, and 1.0% Diclofenac sodium twice a day as an extra treatment on top of the standard care. The traditional treatment was said to be 1 g of diclofenac sodium, 1.2 g of N-acetyl cysteine, 20 mg of menthol, and 50 mg of

methyl salicylic acid. All of these ingredients were put into 100 g of emulsion. The ages of the participants ranged from 20 to 75 years, with most of the patients in both groups being between 42 and 52 years old. When the study group inhaled steam with the drugs every day, their oxygen saturation levels went up by 384.61% in the morning and 515.79% at night, compared to the control group. Also, people in the study group spent about one less day in the hospital than people in the control group (Sarker et al., 2021).

*As prevention*, an observational study examined the effectiveness of steam inhalation in preventing Covid-19 and treating people who have it (Pawar, et. al., 2020). In the study, one group (n=25) of healthcare workers who had been in direct contact with Covid-19 patients or had traveled with them were told to breathe in steam at least twice a day for five minutes. During the time of follow-up, none of the participants showed any symptoms (14 days to 2 months). However, there was no control group for the study. There was also no mention of whether the participants were tested for Covid-19, if they followed the intervention, if they got any other treatment, if they used any other personal protective equipment, or how their symptoms were measured (self-reported or by an independent assessor). Because of this, there was a high risk of bias in this study.

*As a treatment*, a second group of 80 people (patients and health care workers) were also watched in the same study. These were mild to moderate cases that Covid-19 had confirmed. Every three hours, they had to breathe in the steam for five minutes. The number of days it took for a Covid-19 test to come back negative was used to measure the outcome. In this group, people with mild symptoms got better on average of three days, while those with moderate symptoms got better in seven to ten days. After 10 days, tests for Covid-19 came back negative for 65 (81%) of the participants, for 78 (97.5%) of them after 14 days, and for everyone after 18 days. There were some problems with this study. For example, it does not say anything about other treatments or patients who were hospitalized. It also does not say how many days of steam inhalation

were given, how often they did it, or what day of the illness intervention began. It did not have a control group either.

Another research examined ten asymptomatic and pauci-asymptomatic healthcare practitioners (N=10) who tested positive for Covid-19 (la Marca, et. al., 2021). Within one hour, at least twenty minutes of steam inhalation were administered in either four cycles of five minutes or five cycles of four minutes. The research eliminated three participants from the final pool, although surveillance continued. All seven patients tested negative after just one day of steam inhalation, with four patients exhibiting no symptoms after five days and the other three exhibiting symptoms but with improvement. This research has a significant risk of bias due to the lack of blinding and control, as well as the absence of information on the day of sickness on which the intervention was initiated and participant adherence. In addition, three of the subjects self-swabbed, which may have influenced the sample yield. The fact that the three omitted subjects were also the ones who tested positive for Covid-19 on repeat testing imparts to the study's bias.

The two studies that were used do not refer to safety. However, a narrative report in the Lancet (Brewster, et al., 2020) indicates a rise in the frequency of scald burns among children as a result of the widespread use of steam inhalation to treat Covid-19. Indirect evidence comes from a meta-analysis (Pawar, et al., 2020) which described a significantly increased risk for adverse events (N=65, OR 4.73 95% CI 1.46-15.30) among those who received steam inhalation for common colds. These events included nasal and lip irritation, increased congestion, lightheadedness, and general discomfort.

### **Synthesis of Related Concepts**

As the Covid-19 crisis worsens, people are turning to herbal treatments like steam inhalation. Nonetheless, it may be harmful if not performed properly, particularly

on minors (Chiriboga et al., 2020). According to research conducted by the Children's Burns Foundation in the United Kingdom, more than one hundred kids suffer from burn injuries every day, with scalds being the most prevalent kind of burn.

There has been a 300% rise in occurrences of scald burns at Birmingham Children's Hospital since the beginning days of Covid, most are caused by inhaling steam (Chiriboga et al., 2020).

Another study was done at the SVP Institute of Medical Sciences and Research in Ahmedabad, Gujarat, India. The Department of Burns and Plastic Surgery found that cases of scald burns caused by inhaling steam increased after the outbreak of the pandemic (YB et al., 2020). An occurrence involving a bowl of boiling water used for steaming was the primary cause of the injuries. Burns were most often experienced on the face, chest, arms, legs, and perineum (YB et al., 2020). Electric steamers, rhino-therms, and respirators, examples of modern tools, have been proposed as ways to further increase safety when dealing with steam and prevent burns (YB et al., 2020).

At any specific temperature, steam or moist air could indeed move and give off heat about 4,000 times better than dry air. So, breathing in hot, wet air is much more dangerous than breathing in dry air with a comparable temperature (Bhootra and Kitinya, 2005). It has been identified that superheated steam vapors at about 130°C can affect the mucosa of the airways (Balakrishnan et al., 1996). Inhaling superheated steam can cause damage to the lower respiratory tract, cause pulmonary insufficiency, damage to the bronchial mucosa, thermal tracheitis, glottic edema, hemorrhagic edema of the alveoli, hypoxia, and even death (Still et al., 2001). In rare cases, massive laryngeal edema can happen, which might cause suffocation and death (Bhootra and Kitinya, 2005).

Nevertheless, various anti-Covid-19 medicines and effective vaccinations have already been discovered (Jean et al., 2020). (Alam et al., 2021a; Al-Karmalawy et al.,

2021; Shehata et al., 2021). Even with effective vaccinations, the health industry is still struggling to vaccinate everyone on the planet (Irwin and Nkengasong, 2021). As a result, alternative and complementary medicines may be crucial in this situation (Alam et al., 2021b). Because of the frequent mutation of the SARS-CoV-2 virus strain, the key point of contention has been safety and effectiveness (Al Naggat et al., 2021; Swain and Sahu, 2021). According to Cohen (2020); Vathanophas et al. (2019), due to multiple gaps, researchers prioritized preventative efforts over therapeutic techniques to address the Covid-19 outbreak (Tillu et al., 2020). Of the different ways, steam inhalation is one of the preventative actions that is being employed as adjuvant nursing care against Covid-19 infection, as it has previously shown efficacy against both influenza and coronavirus (Swain and Sahu, 2021). Moreover, steam inhalation has been utilized since antiquity to increase immunity while eliciting less immunologic and inflammatory reactions.

Along with the benefits stated above, it has been discovered to have potential anti-SARS-CoV-2 properties (Cohen, 2020), such as improving the body's natural immunity and cardiac and pulmonary functions. Several clinical studies have also shown that inhaling steam has an uplifting effect (Pawar et al., 2020). Steam inhalation with essential oils (Tillu et al., 2020) and certain medicinal plant components (Purohit, 2021) and beehive products (Tillu et al., 2020) may also be beneficial against Covid-19. As a result, steam inhalation may be a simple, comprehensive, and cost-effective strategy to combat SARSCoV-2 while also assisting the healthcare system (Cohen, 2020).

Considering its widespread use, steam inhalation treatment also looks to be a simple, self-manageable, and low-cost option. In spite of having consistently noted that the administration of steam inhalation decreased clinical symptoms in infected individuals, large-scale randomized controlled studies are still needed to clarify and consolidate the effects of steam inhalation as they pertain to Covid-19 infection.

Researchers have concluded that a phenomenological investigation of a survivor of Covid infection who had steam treatment as part of their adjuvant care is required.

*Lived Experience.* Phenomenological studies explore how real-world people interact with phenomena. In a phenomenological investigation, van Manen (1990) offered the following example to describe the character of the experienced world. Teacher A, who is starting her first teaching position, and Teacher B, who has been doing this for 10 years, both have unique perspectives based on van Manen's comparison. An experienced educator may carry on a lecture without seeing his or her students, but a greenhorn can feel their eyes on them the whole time. Van Manen argues that first-year educators retain vivid memories of their nerve-wracking first days in the classroom. Yet, the seasoned educator is not self-aware of her behavior throughout the lecture since she is so used to lecturing and acts more impulsively. In this instance, we see how two individuals might have vastly different reactions to the same incident. Since it clarifies the instructor's emotions on the first day of class, first-hand accounts might serve as a jumping-off point for a phenomenological investigation. Hence, phenomenological investigations are predicated on, and ultimately limited to, an individual's subjective account of their encounter with the event under study (Creswell 2007; Moustakas, 1994. van Manen, 1990).

For instance, if a researcher is interested in using social media for educational purposes, they should focus on people's actual experiences with the phenomena. That's why everyone involved must have some kind of substantial background in using social media in the classroom.

*Participants of Phenomenological Research.* A relatively uniform set of participants is required for a phenomenological framework (Creswell, 2007). As a result, in a phenomenological investigation, participants should have encountered the same phenomena. People chosen to take part in the phenomenological research should have

had important and meaningful encounters with the phenomena under investigation (Cresswell, 2007; Moustakas, 1994). In qualitative research, purposeful sampling is broadly adopted. Creswell explained that the purposeful sampling strategy encompasses the researcher purposefully selecting participants who understand the phenomenon under investigation; thus, the researcher can decide whether participants share significant experiences related to the phenomenon under investigation. Moreover, the criterion-based selection is a typical sampling strategy. Researchers should identify some common criteria for all participants in this strategy to pick a set of individuals with similar experiences. Snowball sampling is another way that may be used to enlarge the sample by requesting one participant to promote the research to other participants (Miles & Huberman, 1994; Marshall & Rossman 2006). To choose participants for the study, researchers may utilize pre-interviews. In general, the objective of the first informal interviews might be to evaluate prospective participants' willingness and openness to engage in the research. Researchers, for example, may form a co-researchers team to share the same experience via social media for education, such as a course, workshop, or any other shared experience.

In a phenomenological study, in-depth interviews with participants are the main way that information is gathered (Creswell 2007). The goal of a phenomenological interview is to find out what a phenomenon means to different people (Marshall & Rossman, 2006). In phenomenological studies, it is common for each research participant to be interviewed more than once (Creswell, 2007). Seidman (1998) said that it would be best to collect phenomenological data by having three in-depth phenomenological interviews with each of the research participants. Based on what Seidman came up with, the first interview looks at the person's experience with the thing of interest, while the second interview is based on the person's current experience. The information from the first two interviews is put together in the third interview to describe

the person's main experience with the phenomenon. Moustakas (1994) said that phenomenological interviews could begin with a casual conversation to help people feel comfortable and trusting.

Other methods, like focus group interviews, observations, and video recordings, can also be used to gather data. Aside from interviews, the research environment can also be looked at through the observation method. For triangulation, information can be gathered from many different kinds of sources.

The resulting concentration of salt in the room's air will range between 10 and 30 milligrams per cubic meter (3). The ill (or healthy) people stay in this area for thirty to sixty minutes, and they do so ten to twenty times on average. Inhaled salt lowers the edema and inflammation of the bronchial mucosa because it has a greater osmotic pressure. Moreover, it dissolves mucus, making expectoration simpler and faster (expectoration of air pollution and allergens will also be quicker). It does this by preventing germs from multiplying and, in certain instances, by actually killing the bacterium. Furthermore, phagocyte activity is elevated.

It has a soothing impact on the central nervous system, which contributes to the general improvement of the patient's health. It has the potential to either eliminate the risk of respiratory tract inflammations or at the very least reduce their incidence. It leads to improvements in the parameters that measure lung function and reduces bronchial hyperreactivity, which is an indication that inflammation is being reduced. Its anti-inflammatory effects are not the only ones it has to offer. According to Moustakas (1994), the first step in the research technique is to identify the phenomena that are the subject of the inquiry. After gathering information via phenomenological interviews with co-researchers who had seen the occurrence, the data was analyzed using Moustakas' phenomenological data analysis technique. This was finished when the data was acquired. Generally speaking, the methods consist of preparing the data for the

analyses, lowering the data phenomenologically, participating in creative variation, and determining the core of the experience.

The phenomenological study begins with bracketing the subjectivity of the researcher, which is a term that refers to clearing assumptions at various points throughout the research. This method is known as epoché, and it involves the researcher putting their own biases and preconceptions about the phenomena to the side to more objectively examine it. The researchers will first compose an exhaustive description of the phenomena, which will serve as the first step in this procedure. Before beginning the process of analyzing data, the researchers should read their declaration of subjectivity, which should include a description of their own experiences with the phenomenon.

## CHAPTER III

### RESEARCH DESIGN AND METHODOLOGY

This chapter presents the methodology, detailing the research design, participant selection, data collection, and analysis procedures. The goal is to provide a clear and systematic approach to how the study was conducted, ensuring the validity and reliability of the findings.

#### Research Design

This study aimed to provide significance to the events that transpired in the life of the Covid-19 survivors who relied on steam inhalation. Interpretative Phenomenological Analysis (IPA) was the method used for deciphering data and making sense of the information about the Covid-19 survivors' lived experiences. The study utilized the techniques of the Interpretative Phenomenological Analysis (IPA) approach for carrying out qualitative narratives of the research. IPA is a qualitative technique designed to give in-depth evaluations of human experiences. (Smith et. al., 2009; Cilesiz, 2010).

Interpretations assigned to experiences, events, and situations by participants are the fundamental currency in IPA research because they reveal how people interpret their own lives and the world around them. This method is phenomenological since it focuses on the individual's experience. Rather than seeking to make an objective statement about an item or event, it focuses on how that thing or event is seen or described by a person.

IPA is a way to look at topics that are hard to understand, unclear, or have a lot of emotion attached to them. Covid-19 survivors who used steam inhalation are the

phenomenon to be studied. This study is anchored on the philosophy of interpretivism with underpinnings on the theoretical perspective of relativism.

Involving the gathered narratives, the researchers' interpretation of the context of the research, and the relative reality/ truthfulness to the participants' lived experiences, IPA is especially helpful in discussing something complex, unusual, or novel.

## **Methodology**

### Interpretative Phenomenological Analysis

According to Smith and Osborn (2007), the objective of interpretive phenomenological analysis (IPA) is to study in depth how individuals make sense of both their personal and social environments. The significance that certain encounters, occurrences, and states have for the participants is the primary justification for doing IPA research. The method is phenomenological since it examines the participant's lifeworld in depth. It attempts to comprehend the subjective experience and is more concerned with how a person perceives or characterizes an item or event than with developing an objective description of the object or event. IPA further emphasizes that research is a dynamic process in which the researcher actively participates. One seeks to approach the participant's reality, or what Conrad (1987) refers to as an "insider's viewpoint," but this cannot be done directly or entirely. Access is dependent on and complicated by the researcher's ideas. By interpretation, the researcher's notions are required to make sense of the other person's reality. So, there is a two-step process of figuring out what something means, also known as "double hermeneutic."

The study participants are attempting to make sense of their environment, and the researcher is doing the same. Hence, IPA has a common theoretical ground with hermeneutics and other theories of interpretation. (Packer and Addison, 1989; Palmer,

1969; Smith, 2010). There are different ways to look at interpretation, and IPA takes both an empathic and a questioning approach.

So, in line with its phenomenological origins, IPA seeks to figure out what it is like, from the participants' points of view, to be on their side. At the same time, critical questions about the texts can be asked of the participants as part of a detailed IPA analysis.

Both interpretation strategies are part of long-term qualitative research, however the relative weight given to each strategy varies from one IPA study to the next. The one-word concept of "understanding" is a suitable description of both of these aspects of interpretation: understanding as identifying with or feeling empathy for and understanding is trying to figure out. If the investigation looks at both sides, it is likely to come up with a more complete picture of the person, "warts and all," and do them more justice. IPA also acknowledges that it owes something to symbolic interactionism (Denzin, 1995), which is concerned with how people make sense of their social and personal worlds.

IPA is founded on the concept that a person is a cognitive, linguistic, emotional, and physical being. It also assumes that people's speech is linked to how they think and feel. IPA researchers are aware that this line of connections is complex. Individuals have difficulty expressing their thoughts and emotions, and there may be reasons why they do not like to share. The researchers must determine what individuals are thinking and feeling based on their statements. Since IPA is focused on how participants and researchers make meaning of things, cognition might be considered one of its primary analytic concerns. This reveals a significant theoretical connection with the dominant cognitive paradigm in contemporary psychology.

IPA, cognitive psychology, and the social cognition approach in social and clinical psychology all share an interest in mental processes. (Fiske and Taylor, 1991). In

determining the right technique for such problems, IPA diverges significantly from conventional psychology.

IPA utilizes in-depth qualitative analysis, yet mainstream psychology continues to be committed to quantitative and experimental methodologies. Hence, IPA and mainstream psychology are interested in figuring out how people interpret what is happening, but they disagree on the ideal method for studying this kind of cognition. Likewise, it might be argued that the IPA's commitment to research on significance and sense-making connects it closely to the essential goals of cognitive psychology in its rejection of the behaviorist paradigm that had previously dominated the discipline.

Interpretive phenomenological analysis is a procedure that is both adaptable and accessible for phenomenological study and seeks to present a thorough and in-depth account that centers on the individual. It allows nurses to access, hear, and comprehend participant experiences. IPA research findings may affect and add to theory (Pringle, 2011). The study's four separate methodological approaches highlight the adaptability of IPA. These developments let the researcher build a bigger double hermeneutic that allowed him to write about the experiences of black men with severe and ongoing mental illness who had stopped seeking treatment. (Wagstaff & Williams, 2014). In addition, this study's innovative design illustrates the flexibility of IPA while keeping the core principles of research methodology.

The focus of this section is to familiarize readers with phenomenological analysis from an interpretative perspective by providing a comprehensive breakdown of the process. It explains each step in depth and uses examples drawn from the authors' studies to support their assertions. As is often the case with qualitative research, it is essential to remember that there is no one method to do IPA (Benner, 1994; Van Manen, 1997).

Many studies would suggest that IPA is an experiential qualitative study in health care and nursing practice; take, for example the study of Mjosund et. al. (2017), where the purpose of this study was to establish how the participation of service users may enhance the quality of research and contribute to the development of interpretative phenomenological analysis methodology. The purpose of a study aimed at promoting mental health through nursing practice was augmented by the participation of service users. It was the development of different views in the qualitative analysis of the factual information that reinforced the interpretation component of interpretative phenomenological analysis. They presume that qualitative research methods are strengthened when service user participation and interpretive phenomenological analysis are integrated.

According to Witt and Ploeg (2006), the rigor of interpretative phenomenology is an essential nursing research methodology problem with direct ramifications for nursing science's validity. As interpretive phenomenological research is theoretically incompatible with the application of a general set of qualitative rigor standards, this poses a barrier to the full expression of rigor in such investigations. They carried out an analytical examination of the theoretical, interpretative, and phenomenological nursing literature that was produced between the years 1994 and 2004, and they identified the signs of rigor included throughout this literature. A suggested framework of expressions of rigor for interpretative phenomenology was derived from the phenomenological scholar van Manen, the theoretical interpretive phenomenological nursing literature, and Madison's standards for rigor in hermeneutic phenomenology. The suggested framework of expressions of rigor for interpretative phenomenology was developed with input from these three sources. In their findings, the nursing literature presents a comprehensive variety of criteria for assessing the rigor of interpretive phenomenological research. The proposed framework for assessing the rigor of this kind of study includes the following

five terms: equitable integration, transparency, comprehensibility, resonance, and actualization.

The term "equitable integration" is used to describe the process by which philosophical ideas are integrated into a study's methods and findings while also giving proper consideration to the opinions of study participants. The relationship between transparency and a systematic, clear procedure for accounting for the many choices made during the research process is apparent. The concreteness and applicability of the study findings are closely tied to the degree to which they apply to real-world circumstances. When we speak about resonance, we are referring to the effect, either experienced or perceived, that reading research material has on the person doing the reading. Actualization, in this context, is the actualization of the significance of the study's results in the future. Witt and Ploeg (2006) propose the use of this or similar frameworks of rigor expressions as a means of protecting the reliability and credibility of interpretive phenomenological studies in nursing.

### **Participants of the Study Inclusion/Exclusion Criteria**

IPA is performed on a limited sample size; the individuals who will take part in this research ranged from five to six (5-6) Covid-19 patients who utilized steam inhalation. They were chosen conveniently based on the following inclusion criteria: Covid-19 survivors; used steam inhalation as complementary therapy; diagnosed as positive with Covid-19 test; participant's age ranges from 20 to 60 years-old . The following are excluded: Did not have a positive (RT)-PCR result.

This participant is convenient to the researcher because they know and identify the patient as they are suited to elucidate the experience of using steam inhalation during the span of illness. A semi-structured questionnaire was used during the interview.

### **Research Setting**

The study was conducted in Roxas City, Capiz through a one-on-one interview with the participants completing a semi-structured questionnaire. The chosen location was identified because there were many Covid-19 survivors who used steam inhalation during the time that they were diagnosed positive for the disease. The said location for the interview was a house with adequate lighting and ventilation to provide privacy to the participants.

### **Data Collection Procedures and Strategy**

IPA is an appropriate method to use when one is attempting to learn how persons are experiencing the specific circumstances with which they are dealing and to what extent they are able to make sense of the personal and social contexts in which they find themselves. To start, the study's preliminary steps were looked at. The researcher made sure to secure the participants' permission, and the informed consent forms were handed out three (3) days before the suggested interview time.

To elicit meaningful experiences from the participants, the researcher constructed a semi-structured interview guide. However, follow-up questions were asked of the participants, when necessary, to saturate information from the participants. The research questions were framed in a way that were both broad and open-ended to ensure that no attempt will be made to test an assumption that the researcher has already made; rather, the goal was to investigate, in a manner that is both flexible and in-depth, a particular area of concern. Since the interview is not similar to any ordinary interview, the researcher, therefore, solicited help from experts with good interview skills and were able to utilize a therapeutic communication technique for a meaningful data-gathering procedure. An interview schedule was made depending on the topic generated from the first interview until data saturation was achieved.

The whole interview was captured on audio recording using a recorder, as well as with video recording using a DSLR camera, to capture the facial expressions and body language of the participants as they were being interviewed. After the collection of interviews, the researcher transcribed the recorded files using a specific line numbering strategy or approach. A follow-up interview may have been applied if it was deemed necessary to enlighten concepts shared by the participants. The entire transcription process followed the coding principles of interpretative phenomenological analysis.

### **Ethical Issues**

*Seeking approval from the RERB Office.* The researchers sought approval from the Research Ethics Review Board (RERB) office before conducting the research study. This crucial step ensures that the proposed study aligns with ethical standards and regulations, safeguarding the rights and well-being of the participants involved. The RERB serves as a valuable oversight body, evaluating the research protocol, methodology, and potential risks to ensure compliance with established ethical guidelines. Seeking approval from the RERB office demonstrates a commitment to ethical research practices and contributes to the credibility and integrity of the study. The researchers adhered to the established procedures and engage in transparent communication with the RERB to gain the necessary approval before initiating the research, thereby fostering a foundation of trust and responsibility in the pursuit of knowledge.

The study began once the clearance from the RERB was received and informed consent form had been signed. The study included interview parts, where participants are going to answer questions about their lived experience as a Covid-19 survivor. Each participant was assigned an ID number only known to the researcher(s). The researchers asked permission to gather photos, record the audio, and videotape the

entire interview session. The researcher also asked permission from the participants to allow their photos, in parts or as a whole, to be posted as part of the result and documentation of the study. The interview was semi-structured, and both an audio and video recorder were utilized to record the discussion. The above-mentioned procedure had been primarily made and intended for the purpose of this study. The participants were interviewed in a private and secure location to ensure confidentiality. The interviewer will not disclose personal details unless required by law, to maintain anonymity. Recordings will be stored securely, accessible only to the research team. Participant identities were coded, and any personally identifiable information will be kept confidential. Research records will be retained for a specific period, after which they will be securely destroyed in compliance with legal requirements and ethical standards.

*Risk Assessment.* There is a possibility that certain topics included in this study might come out that may cause anxiety, distress, and agitation which will be a psychological risk that can be anticipated and categorized as negligible to high risk. If participants were uncomfortable with the questions, they did not have to answer them/proceed. The researcher ensured participants fully understood the nature of the study and their right to withdraw at any time without consequences. Researchers also conducted thorough debriefing sessions after participation to address any emotional or psychological effects and implemented mechanisms for participants to report any concerns anonymously, ensuring their confidentiality is maintained.

*Benefits Assessment.* This study might help healthcare providers and other allied health services, the wellness of the readers, and the peers of the participants. Information from this study can be used further to enhance nursing education and delivery in various institutions, understand the potential impact on easing symptoms like congestion and promoting a sense of relief.

*Withdrawal Criteria of participants.* The participants' involvement in this study was entirely voluntary. It was the participant's choice whether to participate or not. If they chose not to participate or to withdraw from the study at any time, there were no penalty or other consequences, and without need to give any reason. If at any time they withdrew from the study, the data were discarded properly. Participants can withdraw if they are diagnosed with a terminal illness, and if they requested to withdraw.

*Anonymity and Confidentiality of participants.* The participants were informed that the information they have provided is solely for the study. Participants' identity were kept private and confidential to the extent provided by law. Participants were assigned an ID number and data were stored with utmost respect to your privacy.

*Recruitment of participants.* The participants of the study were offered full ethical considerations according to ethical policies and guidelines prescribed by American Psychological Association (APA, 2009). Participants' involvement in this study was entirely voluntary. It was the participants' choice whether to participate or not. If they chose not to participate or to withdraw from the study at any time, there were no penalty or other consequences, and without need to give any reason.

*Disposal of Research Data.* The electronic copy of the data will be kept on a computer that only the researcher(s) has/have access to. Hard copies will be stored in a filing cabinet that only the researcher(s) will have access to for a specific period, which will be stated in the study protocol and will be disposed of after the conduct of the research study. If the specific data has been compromised, it will be disposed of through shredding for the security of confidential data, and by deleting all of the electronic copy of the data.

*Incentives or Compensation.* Participants were provided with certificates of appreciation and a token of appreciation from researchers, to express gratitude for their contribution.

*Declaration of Potential Conflict of Interest.* The researchers declared a potential conflict of interest in conducting this phenomenological research study. Researchers have personal experiences related to the phenomenon under investigation, and researchers were committed to maintaining transparency throughout the research process. The researchers acknowledged the need for reflexivity to manage any potential biases that may have arise due to pre-existing beliefs and experiences.

"I, \_\_\_\_\_, declare that I have no financial or personal interests that may create a conflict of interest in [the matter or situation at hand]\_\_\_\_\_.

However, if any potential conflicts arise in the future, I commit to promptly disclosing them to [relevant parties]\_\_\_\_\_ to ensure transparency and maintain the highest standards of integrity."

\_\_\_\_\_

Signature Over Printed Name.

### **Sharing of Results/Dissemination Plan**

The results of this study can be shared through various channels such as seminars and conferences, publication, presented at relevant conferences, fostering discussion, collaboration, and feedback from peers. This helps in disseminating findings to a wider audience. The results of this study can also be shared through discussions, publications, and online platforms for those other researchers who will take significant interest in this particular topic. Dissemination can be leveraged through platforms like Twitter, LinkedIn, or other academic networks to share key findings, engage with the community, and increase visibility. Sharing the results of the study through numerous

channels enhances collaboration, ensures quality through peer review, advances knowledge, and has wider implications for education, policy, and public awareness.

### **Analysis of the Study**

Upon the completion of the transcription of all of the interviews, the researchers and the subject matter expert conducted an in-depth case-by-case analysis of each transcript. A two-stage interpretation process (Packer and Addison, 1989; Palmer, 1969; Smith, 2010) was done. The following paragraphs describe the steps in analyzing the data. The illustration of the data analysis procedure is presented in figure 2.

*Looking for Themes in the First Case.* The transcript was read many times and at each reading, notes were made highlighting aspects of the participants' comments that stand out as particularly interesting or relevant. At this point in the process of the investigation, to get as familiar as possible with the participants' testimony, it was necessary to read and reread the transcript thoroughly. The researcher then returned to the beginning of the transcript and used the other margin to record the names of new emerging ideas. This process of developing basic observations into overarching themes was carried out through the whole of the transcript. When the researcher read through the transcript, it was possible that new themes may have developed that were similar to those that have already been discovered. When this occurs, the researcher reused the same topic title.

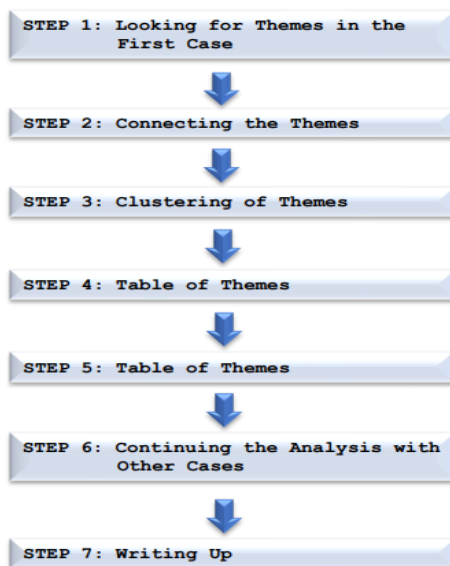
*Connecting the Themes.* The analysis will began by noting the recurring ideas on paper, and then drawing connections between them. The initial list were in a chronological order, and that order was determined by the order in which the entries appeared in the transcript. The researcher then moved on to a more analytical or theoretical ordering in an effort to make sense of the emerging themes. A few of the ideas were likely group, and a few could even stood out as overarching principles. The

researchers also looked at how some of the ideas act like a magnet, drawing in and providing context for other, related subjects.

*Clustering of themes.* After the themes had been grouped together, the transcript was checked to make sure the connections held true for the primary data, which were the interviewee's own words (verbatim). Such an analysis is iterative and needed extensive dialogue between the reader and the text. The researchers constructed a directory of the participant's sentences that support similar themes to answer their study question.

As a researcher, one uses one's interpretive tools to make sense of what the person is saying, while simultaneously comparing one's interpretation to what the person really stated. This is done to ensure that one is making accurate interpretations of the information.

*Figure 1: Illustration of the steps in the data analysis procedure*



*Table of themes.* The next step was to construct a table of the topics, with the themes arranged logically. As a result, those clusters of themes that most powerfully express the participant's worries on this issue were identified as a result of the method

described above. The clusters themselves were given names, and those names served as representations of the superordinate themes.

The table depicts the themes that correspond to each superordinate theme, and in each instance, an identifier was provided to keep the analysis structured and make it easy to locate the source afterwards. The identifier shows where each topic may be located in the transcript by providing keywords through the extract, as well as the page and line number of the transcript. Certain topics may have been dropped throughout this procedure. These were the ones that did not fit well into the structure that was taking shape or had a lot of evidence in the transcript.

*Continuing the Analysis with Other Cases.* The study continued by including interviews with a variety of persons. When the researcher read through the transcripts, he or she had to be disciplined enough to identify recurrent patterns while also recognizing the emergence of new difficulties. The researchers sought to be sensitive to the similarities and differences in the information gathered from the individuals. An ultimate table of superordinate themes was built when the interpretive process had finished analyzing each transcript. The researchers got to choose the topics they wanted to focus on.

*Writing Up.* After addressing the final topics, making a written summary and a statement that summarizes the significance of the participants' experiences was the focus of the last segment. At this point, the concepts were transformed into a narrative account that were used subsequently. The table of themes serve as the foundation for the report of the participant's comments, which is presented in the form of a narrative argument and is supported by verbatim excerpts from the transcripts at various points. It is important to make a clear distinction of what was said by the participant and how it was reported or interpreted by the researcher.

Two main presenting methods were used. The emergent theme analysis is found in the first part, which is labeled "results," and the second section labeled "discussion" relates that analysis to the existing body of research. An alternative approach describes the connections to the previous research as each superordinate issue is presented in its own "results and discussions" part of the study. The themes were examined together in one part of the analysis, while a second component of the report is devoted to analyzing the themes' implications in light of past research.

### **Methods to Establish Rigor and Trustworthiness and Integrity of Data**

The reliability of data interpretation is referred to as the validity of qualitative research. The research's accuracy guarantees that the results give relevant information derived from the proper application of the methodological approach. Generalizability is the expansion and transferability of research findings to numerous settings and contexts. External validity is concerned with the transferability of study results to different situations or individuals (Merriam, 1995). Qualitative research results are often less generalizable to various people, situations, and historical periods (Johnson, 1997). Nonetheless, the objective of phenomenological research is to provide a thorough description of the experience of a certain group. For the following factors, the findings may be expanded: giving precise information, determining sample tactics, demonstrating the researcher's impartiality, and preventing researchers from making assumptions (Cilesiz, 2009). Several approaches may be used to address credibility in phenomenological research. To begin, the bracketing method may be used so that researchers don't inject their own bias into the research (Ashworth, 1999). In accordance with Kvale (1996), in the bracketing method, the presumption cannot be prevented. Moreover, member verification may be utilized as a measurement of credibility (Merriam,

1995). At this phase, researchers might ask questions of interviewees regarding their transcription to confirm their comprehension.

In addition, researchers may email participants verbatim files to cross-check their replies. After editing the verbatim transcript, the horizons may be sent to participants as co-researchers. This is the horizontalization phase of the analysis of data, which entails the elimination of the phenomenon's redundant assertions. Researchers may verify the data using the responses of other researchers. At this phase, researchers might collaborate with a second researcher to synthesize the data. Researchers' subjective statements may also be used as a validity measure. In a subjectivity statement, researchers could discuss their preconceptions and views about the phenomena before reviewing the information to see how their presumptions changed after evaluating and engaging with the data on participants' experiences. Merriam (1995) says that, according to the authors, the subjectivity statement allows readers to contextualize the findings and understand how the researcher generated the data. Thus, this approach enables the reader to assess the study and draw conclusions from it. In order to further verify the findings, researchers may include background information about the participants and a thorough explanation of the study so that readers can comprehend the method used to examine the data.

Cilesiz (2006) asserted that "collecting data from two sources from the same participants allows the researcher to evaluate the information through both sources of data and minimize any errors, which would indicate falsified data" (p. 60). Lastly, to ensure the validity of their findings, researchers may use other approaches, such as member checking. For instance, participant validation may be used to confirm the data gathered through phenomenological interviews, exploring the credibility of the results. Data or results are returned to participants to check for accuracy and resonance with their experiences.

Credibility is enhanced through in-depth and thorough data collection and using member checks/member checking – where data accuracy is ensured by collaboration between study participants and researchers. This method is frequently employed to confirm qualitative information obtained from focus groups, semi-structured interviews, or interviews. In order for readers to assess the transferability of the findings, include a detailed description of the participants' views, intents, circumstances, motives, meanings, and understandings. Thick description is a critical strategy for improving the transferability and analytical generalization of qualitative research findings, as it allows researchers to assess the applicability of those findings to other contexts (Firestone, 1993; Lincoln & Guba, 1985; Merriam & Tisdell, 2016). In qualitative research, reliability and dependability are related. Dependability is the degree to which a study may be conducted again and provide identical results by a different researcher. This could be done through an audit trail, which is a thorough and organized documentation of the research process. It contains records of the research design and its rationale, the methods used for gathering and analyzing data, and any adjustments or alterations made while conducting the study. Confirmability in qualitative research refers to the degree to which the findings are shaped by the data rather than by the researcher's biases, perspectives, or preconceived notions. Practicing reflexivity is essential to upholding rigor and ensuring the validity and reliability of your findings. Reflexivity involves recognizing and analyzing the researcher's impact on the research process as well as how their experiences, viewpoints, and background may have shaped the study's conclusions.

## CHAPTER IV

### SYNTHESES AND DISCUSSION

This chapter presents the syntheses and discussion of the participants' lived experiences in using steam inhalation while diagnosed with Covid-19 infection. Colaizzi's thematic analysis was utilized to categorize and discern patterns. To keep the anonymity of the participants' identities, each was assigned a pseudonym.

The chapter is divided into four parts. The first part presents the transitioning experiences of each participant. The second part contains the themes that emerged from the participants' verbatim account of their experiences. The third part is the essence of the phenomenon; and, the last part is the discussion of each theme.

#### **Part I. Experiences of Each Participant**

The following were the experiences of the participants regarding their lived experiences using steam inhalation in the management of infection.

##### *Participant 1 Steam Inhalation Experience*

Participant 1 is a 22-year-old female from Lanot, Roxas City, Capiz. She was diagnosed with Covid-19 last January 10, 2020. She got tested for Covid-19 at Roxas City Diagnostic & Laboratory Center, Brgy. Milibili, Roxas City, Capiz. She tested negative after 14 days of being positive. She stated, "It started when my mom was having a fever and there was this one time that me and my brother experienced itchy throat and other members in my family also showed symptoms like coughing, runny nose, and on that day, I think it was Friday, I experienced fever." This experience led her to get tested for Covid-19. The researchers asked

her, which category she thinks her symptoms belong to; mild, mild to moderate or moderate, she answered, "Actually, I was not admitted to a hospital. I was quarantined at home so I think it was mild to moderate." Participant 1 also shared that she started using "tuob/suob" after they received the RT-PCR result. She just followed her mother's advice to do the "tuob" and stated, "It may not be a cure but it can help manage certain symptoms." She started her first tuob on the first night, when they all concluded that they were positive of Covid-19. Her mother taught her to do it because it is the traditional way to provide temporary relief for congestion and mild respiratory symptoms. She did "tuob" only once a day, and at night only. She said: "Relief, it was calming, also it was nice for sleeping, although, I still had a cough and runny nose but then for a short time I experienced relief." For the impacts of steam inhalation during the first 24 hours: "I can't make a judgment since I was already taking medicines and vitamins so I could not say if my symptoms lessened because of the steam inhalation or from the medicines I was taking." For the impacts after 48 hours, she stated, "The same thing, it was still soothing, relaxing and I felt relieved." For the impacts after 72 hours, she could feel the effect instantly the first time she used steam inhalation. Additionally, she stated, "I only used it on a few nights and I stopped it since we were already taking medicines and vitamins. Also, since it was a bit tiring when preparing a tuob/suob". When asked if she added any substance like salt or Vicks to her inhalation therapy, she said, "I do not remember. Since my mom was the one who was preparing the tuob/suob for me but I know there was something there, like herbs." Furthermore, she stated, "I took vitamins in the morning, paracetamol if I had fever, Zykast, and Cefuroxime, which was prescribed to me by a doctor." When asked if she would recommend tuob/suob as an alternative treatment to Covid-19 infection, she answered: "Yes, I think I

can pretty much recommend it as a supplementary home remedy because it is effective and it can help provide temporary relief of symptoms, it can also help with sleeping. I remember when I coughed a lot and it was a struggle for me so “tuob/suob” really helped me to sleep and rest.”

### *Participant 2 Steam Inhalation Experience*

Participant 2 is a 23-year-old female from Punta Tabuc, Roxas City, Capiz. She was diagnosed with Covid-19 on the 1st week of September, 2021. She got tested for Covid-19 at Hostus Botanicus, Roxas City, Capiz. She tested negative after 15 days of being positive. She stated, *“My lola died, that’s why nag-positive kami tanan sa amon nga family so kinahanglan namon magpa-test kay na close contact guid kami sa iya.* (My lola died that was why all of us in the family tested positive. All of us needed to do the RT - PCR test because we were in close contact with her.)” The researchers asked her which category she thinks her symptoms belonged to: mild, mild to moderate or moderate, she answered, “Mild”. She also stated, *“Before, may test ko sadto ran nag-negative palang ako so nag-try nako daan “tuob”. And then daw naka guwa pako sang pag negative ko. And then nag-positive naman akon mother, so didto na nag-positive nagid kami so nagtuob naman ko liwat.* (I had already tried the “tuob” after testing negative. And then, when my mother tested positive, the rest of us tested positive, and that's when I did the “tuob” again.)”. Researchers also asked her, if she thought of tuob/suob as a first alternative to alleviate the symptoms, she answered: *“Actually yes, since amo na siya nakapa-help sakon nga maguwa ang mga secretions ko para mas mapadali magguwa akon mga phlegm. Kay sadto nga time indi nako ka panimhot waay nako kapanabor. Pero since nga nagatuob ko two times a day feeling ko didto guid siya naka-help.* (Actually yes, since it

helped lessen the secretions and phlegm could be easily expectorated. At that time, I lost my sense of smell and taste, but I believe that doing "tuob" twice a day has helped.)" She stated that when she was still negative from Covid, when her grandmother was admitted in the ICU, she isolated at their house and started using "tuob" everyday. Furthermore, she stated: *"My mother recommended it. Kay muna kuno ang ila sadto pa nga gina himo kung gamasakit sila or gina-asthma. Sadto pa nga time "tuob" kuno ang ila ubra. (My mother recommended it. Because that's what they were doing before if they got sick or had asthma. They have always been doing the "tuob".)"* When asked how many times in a day and how often she performed tuob, she answered: *"Two times a day. Pero kis-a abi kay gakalipat man ko, kis-a indi siya consistently nga gina himo ko guid siya sang nag-positive nako. Pero sang negative pako, like everyday guid. (Two times a day. But sometimes I forget it and sometimes I did not do it consistently when I tested positive. But before I was tested negative, I did it everyday.)"* *"First thing pagbugtaw ko then and before ko mag-sleep kay para mas mabuligan ko mag ginhawa bala kay if magtulog ka abi sadto nga nag-positive ko budlayan guid ko magginhawa if waay ko ka "tuob" kay syempre steam inhalation mas madasig ang pagginhawa ko okay guid siya. (First thing when I woke up and then before I slept, to help me breathe properly because when it's bedtime, I had difficulty breathing if I did not do "tuob". But because the "tuob" is steam inhalation, it helped to regulate my breathing.)"* Furthermore, she said: *"First 24 hours, sang first palang indi mo siya dasig makita ang effect pero kay ti since everyday mo siya ginagamit kag two times a day. Gahumok ang secretions mo bala daw dasig guid ma guwa. Dasig guid siya mag guwa. (First 24 hours, at first you will not see any effects but since it was used every day and*

two times a day, it helped decrease the volume of secretions.)” When asked about the effect of using tuob after 48 and 72 hours, she stated: “*Amo na siya ya nga ang imo nga secretions mas nagalabnaw nagid saya bala. Indi ko man siya ya abi mahambal nga effective guid kay sa iban indi man. Kay sa akon sister indi siya actually effective, pero kay sa akon mas damo akon phlegm mas dasig siya magguwa sa pagtuob.* (The secretions become less viscous. I cannot say that it was as effective because for others it may not be effective. In my sister’s case, it was not actually effective, but in my case, I had more phlegm and expectoration became easier.)” “*Same lang siya actually sang 48 hours, kay ara pa siya eh, kung baga may virus pa so amo man japon.*(The impacts were the same with the 48 hours, there were still secretions left because the virus was still there.)”

Additionally, she said: “*Mga 2 days after didto na siya nga nabal-an ko nga effective.* (After 2 days I already knew that it is effective.)”, “*Sang nag-test na ko nga negative, kay kung baga biskan indi ko man mahambal nga effective guid siya pero gin-try ko guid siya bala kay at least mas dali ko maka-recover from Covid.*(When already I tested negative. Because, even if I could not say it is really effective, I tried it and, at the very least, it helped me recover from Covid.)”, this was her statement when asked when she stopped using tuob. She also stated that, “*Sadto naka-try kami nga salt lang anay. Dayon nag-try man ko nga may lemon, naka-try man ko sang may Vicks. Pero actually mas effective sa akon ang may vicks. Kay syempre ang menthol bala daw feeling mo mas makabulig.* (I tried using just salt first. Then I tried using lemon, and I also tried using Vicks. However, adding Vicks was more effective for me. Because it had a menthol effect.)” “*Actually damo bi abi sadto gin-reseta samon bala nga antibiotics kag antiviral nga mga meds. Dayon may ara pagid kami nga... nag ano pagid ko dati. may ara ko nga vitamins indi ko na galing madumduman kay*

*damo guid siya ya. May ara man abi kami ginhatag nga reseta basi makuha ko pa. Pero muna damo guid to siya. (Actually, there were a lot of prescribed medications given to us such as antibiotics and antiviral medications. Then we had.....back then.I had numerous vitamins that I can't remember since there were too many. We actually had prescribed medicines that maybe I could get. But then there were too many.)” Lastly, she said: “Kung treatment, indi. Indi guid siya mahambal mo nga like makabulig siya ya madula ang Covid, pero maka-help lang siya ya alleviate. Ang secretions gani mapahumok ya kag mapadali mapa guwa, pero indi mo mahambal nga mga paayo guid siya sa Covid. Kay actually ang virus indi mo siya ma treat dahil lang sa tuob e. (If it was used as a treatment, no. I cannot say that it can help get rid of Covid but it can help alleviate the signs and symptoms. It only softens and aids in the excretion of phlegm and secretions, but it cannot fully cure the Covid. But actually, the virus cannot be treated using “tuob” alone.)”*

### *Participant 3 Steam Inhalation Experience*

Participant 3 is a 33-year-old female from Roxas City, Capiz. She was diagnosed with Covid-19 last September 18, 2021. She got tested for Covid-19 at Hortus Botanicus, Roxas City. The participant did not get another test since it was the protocol of the Department of Health. She stated, “Because I was exposed twice that time, and one of the Covid positive patients came to me and coughed in front of me that was why I decided to have or submitted myself for the Covid-19 testing”. The researchers asked her which category she thinks her symptoms belonged to: mild, mild to moderate or moderate, she answered, “I was a mild case”. The participant started using “suob/ tuob” after she got the RT-PCR result. Researchers also asked her if she thought of tuob/suob as a first

alternative to alleviate the symptoms, she answered: “Yes, because even before, when we get or experience nasal congestion, we used “tuob” or steam inhalation as our alternative way of alleviating the symptoms.” Furthermore, she stated: “I have been using it before. Because I have experienced nasal congestion even before Covid-19. So, I have used steam inhalation with Vicks Vapor Rub, if you know it. Since it is menthol, it soothes my airway and alleviates the symptoms of nasal congestion.” When asked, how many times in a day and how often she performs tuob, she answered: “I have used or twice a day, I think. It is in the morning and in the evening”. Furthermore, she said: “It really alleviates the symptoms of congestion. It clears the airway especially in the nasopharyngeal area.” When asked about the effect of using tuob after 48 and 72 hours, she stated: “It cleared my congested airway. *I did not do it on the third day na. Because I've already.... My congestion was resolved already on the second day.* (I did not do it on the third day anymore. Because I've already.... My congestion was already resolved on the second day.) Additionally, she said: “Two days.” when asked how long the steam inhalation took effect. “Third day.”, this was her statement when asked when she stopped using tuob. She answered, “Vicks Vapor Rub” when she was asked if she added any substance like salt or Vicks to her inhalation therapy. She added, “I only took vitamin C. Ascorbic acid. Aside from that, none.” Lastly, she said: “Definitely, yes. Because of what I've experienced, it really soothes the airway and resolves congestion.”, when asked about if she would recommend tuob/suib as an alternative treatment to Covid-19 infection.

#### *Participant 4 Steam Inhalation Experience*

Participant 4 is a 55-year-old female from Purok Uno, Libas, Roxas City, Capiz. She was diagnosed with Covid-19 last August, 2020. When she was asked where she got tested for Covid-19, she stated: *"I could not remember exactly, because I was also serving, giving foods to those infected with Covid-19 specifically sa Filamer community because that was the time that there were, I think 15 or 20 faculty members of the high school department who were sent to the ano ni, Hortus and ano pagid, stadium. (I could not remember exactly, because I was also serving, giving food to those infected with Covid-19 ,specifically in the Filamer community because that was the time that there were, I think 15 or 20 faculty members of the high school department who were sent to the Hortus and the stadium.)"* *"I was not tested again for negative result but I was monitored everyday, by the local officials sa barangay namon. And then everyday call sang city health office with Dr. Dorado, siya guid ya naga tawag. (I was not tested again for a negative result but I was monitored everyday by the local officials of our barangay health workers. And then, everyday I called the city health office, personally talking with Dr. Dorado.)"* *"As soon as, actually I was going to a bank for a transaction, so I realized I was about to wash with alcohol. Tapos manaog nako tani sa bangko. Pag-wash ko sang alcohol daw indi ko sa ya masimhutan, so nag-wash naman ko liwat. Pag-wash ko indi ko guid ya masimhutan so way ko nagsulod sa bangko. So, nagbalik ako sa school tapos nagpark ko, pag park ko indi ko guid ya masimhutan, maskin anhon ko tanan nag pamerfume, tapos wala nako nag report sa school, nagpuli ko sa balay tapos naghambal ako nga indi ako ka kwan, ka panimhot pati mga langgaw tanan-tanan perfume wala. So, I contacted a friend sa DRRMO kung pwede nako makapa, ano gani ni, kay wala ko fever, asymptomatic ako, wala man ko cough wala man ko runny nose, nan. So, the only, the only symptom na I was alarmed,*

*because I could not smell anything maskin hamot, baho whatever, wala guid ko ya. Odorless. (Actually I was going to a bank for a transaction, so I realized I was about to wash with alcohol. I was supposed to go to the bank. When I washed my hands with alcohol, I could not smell anything, so I washed them again. Even after washing, I still could not smell anything, so I did not enter the bank. I went back to school, parked my car, and even after parking, I could not smell anything. Despite using perfume, I could not smell anything. Then I no longer reported to school, I went back home, and told them I was not feeling well. I could not even smell the perfume, the scent, everything was odorless. So, I contacted a friend at the DRRMO to see if I could, what do you call it, because I did not have fever, I was asymptomatic, I did not have cough, I did not have runny nose. So, the only symptom that alarmed me was that I could not smell anything, not even pleasant or unpleasant odors. Odorless.)*” The researchers asked her which category she thinks her symptoms belong to: mild, mild to moderate or moderate, she answered, *“Mild, mild only, so I—I was not sent to an, to mga inang holding area, sa quarantine area wala. So, sa balay lang guid. (Mild, very mild only, so I—I was not sent to any, to those holding areas, to the quarantine area, none. Just stayed at home.)*”. Furthermore, she said: *“I was tested morning, at 7 o'clock na-receive ko na ang ano nga positive ako. So, even without ang result kay indi ko ya ka simhot nang sige nako sang ano sang steam inhalation tanan. Nagbaha na sa balay ang lemon. (I was tested in the morning, at 7 o'clock, I already received the result that I was positive. So... even before receiving the result, because I could not smell anything, I started doing steam inhalation constantly. Lemon filled the house.)*” She said, she thought of tuob/suob as a first alternative to alleviate her symptoms, it was where she experienced covering herself with a blanket while there was a basin filled with water. She stayed until she perspired. Researchers

asked her where she learned about tuob and how many times a day she performed it and when, she answered: *“Baw jusko daw TID guid ko ya. Huo, kay aga pag panibin ko matuob nako. Dason pagka udto wala ko gakatulog, because I am afraid nga basi indi nako ka bugtaw kay actually wala ako sang panabor pero wala man ko gaubo galing pag abot sang pagkaon daw indi ko matulon kay daw as in daw diri ang plema (points throat) daw naga stuck diri ang food. So panumduman ko kung matulog ko indi nako ka bugtaw so, wala ko gakatulog so pagka ala una ma half-bath naman ako tapos ma tuob naman ko. Ma half-bath, pagka hapon amo man. (Goodness, it seems like I did it TID (three times a day). Yes, because early in the morning when I wake up, I would do steam inhalation. Then at noon, I could not sleep because I was afraid I would not wake up again because I could not actually taste, but I did not cough either. When the food arrived, it was like I could not swallow because it felt like the phlegm (points to throat) was stuck here, and the food felt stuck here. So, I felt like if I sleep, I would not be able to wake up, so I did not sleep. At around one o'clock, I would take a half-bath, then I steam again. I half-bathed, and in the afternoon, it was the same routine.)”* *“Udto kag gab-e para indi ko matulugan ala-una. (Noon and night, so that I would sleep during one o'clock in the afternoon.)”* She was asked about her experience during the first 24, 48 and 72 hours of using steam inhalation, she answered: *“Actually nang daw naga-expand imo lungs, dason grabe guid ya imo perspiration, wala guid ko ya abi nilagnat. Pero mina lang as in pag abot di wala guid ya, tapos daw may plemas siya nga indi mo man sa ya ma expel pero may ara sa ya nga basta ga pilit lang saya.*

(Actually, it feels like your lungs were expanding, then your perspiration becomes intense. I did not really have a fever. But when I had Covid, it felt like it really was not there, and then it felt like there was phlegm that you could not expel, but it

was there like it was just sticking there.)” “So, *same thing man gihapon, pero daw, daw, daw nami na ang imo nga pamatyag daw wala nako sang, kay nag effect na siya, daw wala ka na runny nose, magsugod sina, kay syempre naga tinuob ka nga ga tinuob. Pero kay sa akon abi muna lang guid, wala lang ko ya, muna lang guid ang akon throat. Daw damo damo plemas nga indi mag guwa. Daw sticky sticky guid siya ya.* (So, it was still the same thing, but it seemed like your symptoms have lessened because it was taking effect. Like you did not have runny nose anymore, it starts from there, because of course, you are steaming. But for me, it was just my throat, I felt like there was a lot of phlegm that would not come out. It was very sticky.)” “*Sang 3rd day na siya actually, nang indi, indi nako ya naga 3 times a day gd. Inang daw pag bugtaw nalang ko sa aga maligo ko matuob ko tapos muni pagkahapon amo naman na matuob ko. Pagka gab-i mga 8 pa ya gani ga tuob ko kay gusto ko before mag tulog clear akon lungs so gab-i ko ya ga tuob. So daw okay na siya ah. Until nga nag 5 days daw nag stop nako dayon pagka 5 days nakon tuob-tuob, nag lemon-lemon naman ko.* (On the 3rd day, actually, I did not, I did not do it three times a day anymore. It was like, when I wake up in the morning, I would shower, and do steam inhalation, and then in the afternoon, I would do it again. In the evening, around 8 o'clock, I would steam because I wanted my lungs to be clear before sleeping, so I would steam at night. So it seemed like it was okay already. Until on the 5th day, I stopped steam inhalation. After 5 days of steam inhalation, I started using lemon instead.)” She said, she used steam inhalation for 5 days until it took effect. She added: “*Okay na siya actually kay I was about to finish naman sang akon nga antibiotic. Sang akon tanan nga medicines. So ma-finish nako dapat 7 days so daw wala na guid siya. Asymptomatic na siya galing syempre.* (It was actually okay because I was about to finish my antibiotics, along

with all my other medicines. I should finish within 7 days, and it seemed like it was already gone. I was asymptomatic anyway, of course.)” *“Nagbutang ko sang mint, Oo, nang, indi siya ya Vicks. Inang liquid bala. Ina balang mga alcampor, efficascent oil, na. So, ginbubo ko siya. (I added mint, but it was not Vicks. It was that liquid thing. Like those with alcampor, Efficascent oil, etc. So... I poured it.)”* *“Nag-azithromycin ko sadto, tapos may ara pagd na ginhatag si doc sa akon indi ko na matandaan. Basta daw duwa akon gin-take na bulong. (I took azithromycin back then, and then there was another medication that the doctor prescribed to me, but I cannot remember it anymore. I just took the two medicines.)”* At the end of the interview, she was asked if she would recommend the use of tuob and her response was, *“Of course, kay nami gd siya ya kay daw naga-expand imo lungs. Kag syempre ang indi maka-afford. (Of course, because it felt really good, it was like your lungs were expanding. And of course, for those who cannot afford it.)”*

#### *Participant 5 Steam Inhalation Experience*

Participant 5 is a 34-year-old male from Punta Tabuc, Roxas City, Capiz. He was diagnosed with Covid-19 last September, 2021. He stated, *“I was diagnosed through swab sa Hortus, Botanicus but before that I was exhibiting symptoms na like cough, cold, severe fever from 38 to 39.4.”* (I was diagnosed through swab sa Hortus, Botanicus, but before that, I was exhibiting symptoms already like cough, cold, and severe fever, from 38 to 39.4.). He did not get another Covid-19 test. The researcher asked him how he came to the conclusion that he had Covid-19, leading him to get tested for it. He stated, *“I was in... kay three days before shut down sang barangay Culasi, which was Covid prone siya nga barangay. I was, I was there naga-immunize sang children. So, possible nga*

*didto ako na expose. Three days after sadto, gin-shut down ang Culasi, gin-close ang Culasi, and then, two days after the shut down, didto ako nag exhibit symptoms.*" (Three days before shutdown/close down, I was in Barangay Culasi which was a Covid prone barangay. I was there immunizing the children. It was possible that I got exposed in that barangay. Three days after that, Barangay Culasi got shut down. Then, two days after the shutdown, I had already exhibited the symptoms of Covid-19.) He was not vaccinated when he was tested positive, he said, *"No, wala pa vaccination that time. One year after pa ang vaccination that time or less than one year."* (No, there was no vaccination at that time. Vaccination was available less than one year or one year after that.) The researchers asked him which category he thinks his symptoms belonged to; mild, mild to moderate or moderate, he answered, "Mild". He also stated, *"Pag-first tuob ko, feeling ko positive na ako pero wala pa diagnosis, wala pa."* (During my first steam inhalation, I felt like I was already positive but I was not yet diagnosed) Researchers also asked him if he thought of tuob/suob as a first alternative to alleviate the symptoms, he answered: *"Kay sang wala pa guid man, I was still not diagnosed with Covid, so damo kami gin-explore nga remedy like antibiotics kag at the same time nagtuob kami. And then, those mga alternatives na 'to, wala guid naka-paayo sa akon pero naga relieve siya sang symptoms in a matter of forty-five minutes to an hour nga daw nagluwang o kun expansion akon nabatyagan. Pero after sina, siguro daw matibay guid guru ang virus sang Covid, gabalik guid ya gihapon akon malain nga symptoms.* ("When I was still not diagnosed with COVID-19, we explored different remedies like using antibiotics and at the same time using antibiotics. All those alternatives did not make me feel good but they relieved symptoms such as lung expansion in a matter of forty-five minutes to an hour. However, maybe because of the high virus load, the

symptoms kept on coming back.) Participant 5 also shared that he stated using “tuob/suob” 2 days after he manifested the symptoms, he already did the steam inhalation because he had a severe fever and cough. And they explore the use of both azithromycin and steam inhalation. His mother taught him because even before, this was their alternative before. He did the “tuob/soub” three times a day. He stated that he usually performed it *“Like nine (9) in the morning, three (3) in the afternoon, tapos mga 8 in the evening, daw mga dira-dira.”* (It was at nine in the morning, at three in the afternoon, and lastly, at around 8 in the evening). He said, *“Feeling of nag-relieve mga from forty-five (45) minutes to an hour. Hindi ko ka ginhawa sang sakto but kung ga dugay daw gabalik naman ang symptoms.”* (There was a feeling of relief around after 45 minutes to an hour.) For the impacts of steam inhalation during the first 24 hours, *“Daw same lang ang routine, may ma-relieve tas mabalik naman siya. Daw amo na siya, dapat continuous process guid sa ya.”* (It was like a routine, it relieved the symptoms then symptoms will again return. Steam inhalation should be a continuous process.) For the impacts after 48 hours, he stated, *“For the third day, same effects gihapon. Ga dula, balik tapos dula balik lang.”* (Same effects for the 3rd day. Symptom would be relieved then the symptoms would return again.) For the impacts after 72 hours, he could feel the effect around 5 minutes after using steam inhalation. Furthermore, he stated, *“Nag-stop lang ko sang gin-hospitalize lang ko. (I only stopped steam inhalation when I was already hospitalized.) Sa house ako for five (5) days eh, so mga five days man ko gatuob and at the same time ga-antibiotics ako. (I was in my house for 5 days and I was using both steam inhalation and antibiotic therapy.)”* He was asked by the researcher if he added any substance like salt or Vicks, he stated that, *“Herbs, I don’t know kung ano nga plant-based ang ginbutang ni mom ko to didto. Somehow, may ara adto didto*

*but it was herbs ya.” (I don’t know what kind of herb, but it was herbs. Somehow, there were additional substance but it was herbs.) Additionally, he stated that, “Antibiotics like azithromycin and then acetylcysteine. Then, may ara pa eh, para pain sa lawas ko, daw tatlo that time. From azithromycin, nag-co-amoxiclav pa guid ako. Eventually, daw nag dugayan guid ko ya as in, didto ko nabal-an nga moderate gali akon Covid. Five (5) days ako sa hospital. To be honest feeling ko ang nagpaayo guid ya sa akon is ang Remdesivir which is anti-viral, gin-give to siya sakon via IV.” (Then I also took pain medication for my body pain. I was taking 3 medications that time. Aside from using azithromycin, I also used co-amoxiclav. Eventually, it took me a while to heal, that was when I found out that I actually had moderate Covid. I was in the hospital for 5 days. To be honest, I feel like Remdesivir, which an antiviral medication that made feel better. It was given via IV.) Lastly, he was asked if he will recommend tuob/suob as an alternative treatment for Covid-19 infection, he stated that, “Yes, because it gives relief. It’s just that na tam-an and moderate lang ako that time. Pero siguro kung sa mga mild and sa mataas ang kumbaga when it comes to his or her immunity, manami ang immunity, it could give relief guid. Basta it could give relief.” (Yes, because it gives relief. It is just that I had moderate Covid but if it was a mild Covid or for someone who has a strong immune system, it could give relief. It could give relief.)*

#### *Participant 6 Steam Inhalation Experience*

Participant 6 is a 59-year-old male from Villa Alegria Subdivision, Punta Tabuc, Roxas City, Capiz. He was diagnosed with Covid-19 last October 2020. He got tested in Hortus Hospital, Roxas city. He decided to not have another test to confirm the result of negative Covid-19. The researcher asked him how he got

to the conclusion that he might be positive to Covid-19 that led him to testing, he stated: *“Symptoms like fever. I think Friday that time, ang fever ko nag 38°C.* (Symptoms like fever. I think it was Friday that time and my fever became 38°C).”

The researchers asked the participant how he categorizes his symptoms and he stated it to be mild. When asked when he started using tuob/suob, he answered, “After RT-PCR result, during quarantine.” He was also asked about the time when he already had the symptoms of Covid. “Did you think of ‘suob’ ‘tuob’ first as an alternative to alleviate the symptoms?”, he stated, “not yet”. When asked what day he started his first “tuob/suob”, he answered *“November 14 I think, kay last week sang October ako nag test positive.”* (November 14, I think I was tested positive during the last week of October). He was also asked where he learned about tuob/suob or if someone recommended it to him, he stated, *“Sa balita lang nga ga try suob.* (I discovered “suob” from what I’ve heard to my neighbors).”

When asked about doing the tuob/suob and how many times he performed it in a day, he answered, “Twice a day.” In addition, he was also asked when did he usually perform it, whether it would be morning, noon, afternoon, or night, he answered, *“Aga and then sa gab-i.* (Morning and at night.)” He was then asked about the first 24 hours and the impacts of steam inhalations or tuob/suob to him, he stated, *“Personally, daw naga feel relieved ang nasal congestion* (Personally, my symptoms were relieved.)” But when asked about the first 48 hours, he answered, *“Relief lang guid sa nasal congestion.* (Relief on nasal congestion only.)” He was also asked about the 3rd day of steam inhalation and its impacts to his symptoms, he answered: *“Indi ko na masyado ma remember pero ang nasal congestion lang guid.* (I can't remember every detail except my relief from nasal congestion.)” He was additionally inquired about how long he used the

steam inhalation until took effect, he responded, “*Sa 2nd steam inhalation na batyagan ko na ang relief, pero indi ko na ma remember guid pero daw 7-10 days.* (On my 2nd steam inhalation, I felt relief from my symptoms but then I could not remember what day it was specifically, I guess 7-10 days.)” More queries were directed at him on when he stopped using tuob/suob. He offered a response of “*10 days after nag stop nako.* (10 days after, I already stopped.)” Further inquiries were asked on whether he added any substance like salt or Vicks to his inhalation therapy. He provided a reply of “*Water lang guid.* (I only used water)” Lastly, additional questions were posed to him on whether he would recommend tuob/suob as an alternative treatment to Covid-19 infection, and he answered, “*Yes, if mild lang man siya, okay na.* (Yes, if the symptoms are only mild.)”

## **Part II. Themes**

Data gathered were analyzed utilizing Colaizzi's phenomenological data analysis strategy to categorize and discern patterns. Based on the experiences of the participants, the following themes were drawn:

### **Major Theme 1:** Inhalation Fusion: Combining Additives and Oral Medication for Respiratory Relief

Participants shared their experiences regarding the use herbs, fruit, oils, and salt as an additive while using steam inhalation as an adjunct alternative to Covid-19. The participants also shared their experiences in using steam inhalation in combination with supplements and/or medications such as antibiotics, anti-viral medicine, vitamins, mucolytics, antihistamine, and analgesics.

**Subtheme 1: Utilizing Herbal Remedies in the Management of Covid-19 Infections**

In doing the tuob/suob, participants shared that herbs were used as an additive in the management of infection.

**Participant 1 said:** “I don’t remember. Since my mom was the one who was preparing the tuob/suob for me, but I know there were somethings there like herbs.”

**Participant 5 said:** “I don’t know what kind of herb, but it was herbs. Somehow, there was additional substance, but it was herbs.”

**Subtheme 2: Use of Fruits in Covid-19 Management**

Participants shared their experiences in trying lemon as an additive while doing the “tuob/suob”.

**Participant 2 said:** “I tried using just salt first. Then I tried using lemon, and I also tried using Vicks. However, adding Vicks was more effective for me. Because it has a menthol effect.”

**Participant 4 said:** “Until on the 5th day, I stopped steam inhalation. After 5 days of steam inhalation, I started using lemon instead.”

**Subtheme 3: Role of Oils in Promoting Airway Clearance**

Participants shared their experiences in using oils as an additive while doing the “tuob/suob”. In their case, Vicks Vapor Rub was one of the additives and was described as more effective.

**Participant 2 said:** “I tried using just salt first. Then I tried using lemon, and I also tried using Vicks. However, adding Vicks was more effective for me. Because it has a menthol effect.”

**Participant 3 said:** “Vicks Vapor Rub.”

#### **Subtheme 4:** Salt Solutions: Role of Saline Therapies in Covid-19 Treatment

In this category, salt was the first additive the patient tried.

**Participant 2 said:** “I tried using just salt first.”

#### **Subtheme 5:** Mist-Med Antibiotic Support: Pairing Steam Inhalation with Oral Antibiotics

Participants who had combined antibiotics with steam inhalation shared a range of experiences, from finding relief from symptoms to experiencing a faster recovery.

**Participant 1 said:** “I take vitamins in the morning, paracetamol if i have fever, Zykast, and Cefuroxime which was prescribed to me by a doctor.”

**Participant 2 said:** “Actually, there were a lot of prescribed medications given to us such as antibiotics and antiviral medications.”

**Participant 4 said:** “I took azithromycin back then, and then there was another medication that the doctor prescribed to me, but I can't remember it anymore. I just took the two medicines.”

**Participant 5 said:** “I was in my house for 5 days and I was using both steam inhalation and antibiotic therapy.” In addition, **Participant 5** added, “Antibiotics like azithromycin and then acetylcysteine. Additionally,, aside from using azithromycin, I also used co-amoxiclav. Furthermore, I was taking 3 medication that time. Aside from using azithromycin, I also used co-amoxiclav.”

#### **Subtheme 6:** Steamy Defense: Pairing Inhalation with Oral Antiviral Treatment

Responses from individuals who had combined steam inhalation with antiviral treatments provided insights into their experiences and observations.

**Participant 2 said:** “Actually, there were a lot of prescribed medications given to us such as antibiotics and antiviral medications.”

**Participant 5 said:** “Eventually, it took me a while to heal, that was when I found out that I actually had moderate Covid. I was in the hospital for 5 days. To be honest, I feel like Remdesivir, which is an antiviral medication, that made feel well. It was given via IV.”

### **Subtheme 7:** Respiratory Replenishment: Steam Inhalation with Oral Vitamin

#### Supplementation

Responses from participants who had combined steam inhalation with vitamins vary based on their personal experiences.

**Participant 1 said:** “I took vitamins in the morning, paracetamol if I had fever, Zykast, and Cefuroxime which were prescribed to me by a doctor.”

**Participant 2 said:** “I had numerous vitamins that I cannot remember since there were too many. We actually had prescribed medicines that maybe I could get. But then, there were too many.”

**Participant 3 said:** “I only took vitamin C. Ascorbic acid. Aside from that, none.”

### **Subtheme 8:** Mucus Meltdown: Steam Inhalation with Oral Mucolytics for Airway

#### Clearance

Responses from individuals who had combined steam inhalation with mucolytics, which are medications that help thin and loosen mucus, provided valuable insights into their experiences.

**Participant 5 said:** “Antibiotics like azithromycin and then acetylcysteine.” Additionally, “I was taking 3 medications at that time.”

### **Subtheme 9:** Histamine Halt: Combining Steam Inhalation with Oral Antihistamine Relief

The following are the responses from participants who had combined steam inhalation with antihistamines, which are medication used to treat nasal congestion.

**Participant 1 said:** “I took vitamins in the morning, paracetamol if I had fever, Zykast, and Cefuroxime which were prescribed to me by a doctor.”

**Subtheme 10:** Breathe & Ease: Steam Inhalation with Oral Analgesics for Comfort

Participants who have combined steam inhalation with analgesics in managing associated pain provided the following responses:

**Participant 1 said:** “I took vitamins in the morning, paracetamol if I had fever, Zykast, and Cefuroxime which were prescribed to me by a doctor.”

**Participant 5 said:** “Then I also took pain medication for my body pain.”

**Major Theme 2:** Participants’ Symptoms Severity

The participants classified the symptoms they encountered during their bouts with Covid-19 as mild, mild-moderate, and moderate.

**Subtheme 1:** Symptoms were generally mild or absent.

Participants in this category typically managed their symptoms at home without requiring hospitalization or intensive medical intervention. Mild cases were characterized by the absence or mildness of typical Covid-19 symptoms such as fever, cough, and runny nose, with nasal congestion being a common complaint among participants.

**Participants 3 said:** “I’m a mild case.” She also added, “We got or experienced nasal congestion.”

**Participant 4 said:** “Mild, very mild only, so I—I was not sent to any, to those holding areas, to the quarantine area, none. Just stayed at home.” Additionally, “I didn’t have fever, I was asymptomatic, I did not have cough, I did not have runny nose. So,

the only symptom that alarmed me was that I could not smell anything, not even pleasant or unpleasant odors. Odorless.”

**Participant 6 said:** “Mild.” Participant 6 added, “Symptoms like fever. I think it was Friday that time and my fever became 38°C”

**Subtheme 2:** Symptoms were mild - moderate.

Participants in this category reported experiencing symptoms such as fever, cough, runny nose, and itchy throat, indicating a mild to moderate impact on their health. While some participants managed their symptoms at home without hospitalization, others noted the need for quarantine and isolation measures.

**Participants 1 said:** “Actually, I was not admitted to a hospital. I was quarantined at home so I think it was mild to moderate.” She also added, “Me and my brother experienced itchy throat and other members in my family also showed symptoms like coughing, runny nose and on that day I think it was Friday, I experienced fever.”

**Subtheme 3:** Symptoms were moderate.

Participants in this category typically required medical attention, with some being hospitalized for a period of time, to manage their symptoms and aid in recovery. Symptoms included loss of smell and taste, difficulty breathing, and extended recovery periods.

**Participants 2 said:** “Moderate.” Additionally, “I lost my sense of smell and taste.”; “I had difficulty breathing.”

**Participants 5 said:** “Moderate.” Participant 5 added, “Eventually, it took me a while to heal, that was when I found out that I actually had moderate Covid. I was in the hospital for 5 days.”

**Major Theme 3:** *Impacts of Steam Inhalation as adjuvant treatment in Symptom Management and Recovery from Covid-19 as Observed Within the First 24 Hours, 48 Hours, and 72 Hours.*

The participants provided detailed statements of their experiences with steam inhalation, highlighting alleviated and unalleviated symptoms, as observed within the first 24 hours, 48 hours, and 72 hours.

**Subtheme 1:** Impacts of steam inhalation within 24 Hours.

The responses suggest that the treatment provided varying degrees of relief from respiratory symptoms, with some experiencing immediate impacts while others noted improvements over time with consistent use.

**Participant 1 said:** “Relief, it was calming, also it was nice for sleeping although I still had a cough and runny nose but then for a short time I experienced relief.”

**Participant 2 said:** “First 24 hours, at first you will not see any impacts but since it is used every day and two times a day, it helps decrease the volume of secretions.”

**Participant 3 said:** “It really alleviated the symptoms of congestion. It cleared the airway especially in the nasopharyngeal area.”

**Participant 4 said:** “Actually, it felt like your lungs were expanding, then your perspiration becomes intense. I did not really have a fever. But it was just that when it happened,, it really is not there, and then it felt like there was phlegm that you could not expel, but it was there, like it was just sticking there.”

**Participant 5 said:** “There was a feeling of relief after around 45 minutes to an hour.”

**Participant 6 said:** “Personally, my symptoms were relieved”

**Subtheme 2:** Impacts of steam inhalation within 48 Hours.

The responses suggest that steam inhalation provided varying degrees of relief for congestion and related symptoms within the first 48 hours, with some experiencing noticeable improvements while others noted the need for continuous use to maintain relief.

**Participant 1 said:** “I cannot make a judgment since I was already taking medicines and vitamins so I cannot say if my symptoms lessened because of the steam inhalation or from the medicines I was taking.”

**Participant 2 said:** “The secretions become less viscous. I cannot say that it was effective because for others it may not be effective. In my sister’s case, it was not actually effective, but in my case, I had more phlegm and expectoration became easier.”

**Participant 3 said:** “It cleared my congested airway.”

**Participant 4 said:** “So, it was still the same thing, but it seemed like your symptoms have lessened because it was taking effect. Like you do not have runny nose anymore, it starts from there, because of course, you’re steaming. But for me, it was just my throat, I felt like there was a lot of phlegm that would not come out. It was very sticky.”

**Participant 5 said:** “It was like a routine, it will relieve the symptoms then symptoms will again return. Steam inhalation should be a continuous process.”

**Participant 6 said:** “Relief on nasal congestion only.”

### **Subtheme 3:** Impacts of steam inhalation within 72 Hours.

The responses indicate varied experiences with steam inhalation within 72 hours, with some continuing to find relief while others modified their routines or transitioned to different remedies.

**Participant 1 said:** “The same thing, it was still soothing, relaxing and I felt relieved.”

**Participant 2 said:** “The effects were the same with the 48 hours, there were still secretions left because the virus was still there.”

**Participant 3 said:** “I did not do it on the third day anymore. Because I've already.... My congestion was already resolved on the second day.”

**Participant 4 said:** “On the 3rd day, actually, I did not , I did not do it three times a day anymore. It was like when I wake up in the morning, I would shower, and do steam inhalation, and then in the afternoon, I would do it again. In the evening, around 8 o'clock, I would steam because I wanted my lungs to be clear before sleeping, so I would steam at night. So it seemed like it was okay already. Until on the 5th day, I stopped steam inhalation. After 5 days of steam inhalation, I started using lemon instead.”

**Participant 5 said:** “Same effects for the 3rd day. Symptom will be relieved then the symptoms will return again.”

**Participant 6 said:** “I can't remember every detail except my relief from nasal congestion.”

### Summary of Subthemes and Major Themes

(Major Themes on the Left and Sub-Themes on the Right)

Subthemes	Major Themes
Utilizing Herbal Remedies in the Management of Covid-19 Infections	Inhalation Fusion: Combining Additives and Oral Medication for Respiratory Relief
Use of Fruits in Covid-19 Management	

Role of Oils in Promoting Airway  
Clearance

Salt Solutions: Examining the Role of  
Saline Therapies in Covid-19  
Treatment

Mist-Med Antibiotic Support: Pairing  
Steam Inhalation with Oral Antibiotics

Steamy Defense: Pairing Inhalation  
with Oral Antiviral Treatment

Respiratory Replenishment: Steam  
Inhalation with Oral Vitamin  
Supplementation

Mucus Meltdown: Steam Inhalation  
with Oral Mucolytics for Airway  
Clearance

Histamine Halt: Combining Steam  
Inhalation with Oral Antihistamine

Relief  Breathe & Ease: Steam Inhalation with Oral Analgesics for Comfort	
Symptoms were generally mild or absent  Symptoms were mild-moderate  Symptoms were Moderate	Participants' Symptoms Severity
Impacts of steam inhalation within 24 Hours.  Impacts of steam inhalation within 48 Hours.  Impacts of steam inhalation within 72 Hours.	Impacts of steam inhalation in symptom management and recovery to Covid-19 as observed within the first 24 hours, 48 hours, and 72 hours.

*Table 1. Summary of Subthemes and Major Themes*

### **Part III. Essence of the Phenomenon**

Utilizing Colaizzi's method of data analysis in categorizing and discerning patterns of the phenomenon, three major themes emerged. These major themes were: (1) inhalation fusion: Combining additives and oral medication for respiratory relief; (2) participants' symptoms severity; (3) Impacts of steam inhalation in symptom

management and recovery from Covid-19 as observed within the first 24 hours, 48 hours, and 72 hours. Inhalation fusion: Combining additives and oral medication for respiratory relief, were the experiences of those who used herbs, fruit, oils and salt as an additive while using steam inhalation and also in combination with supplements and/or medications such as antibiotic, anti-viral, vitamins, mucolytics, antihistamine, and analgesics. The participants' symptoms severity were the categorizations regarding the symptoms they encountered during their bouts with Covid-19 such as mild, mild-moderate and moderate. The impacts of steam inhalation in symptom management and recovery to Covid-19 as observed within the first 24 hours, 48 hours, and 72 hours, were the detailed statements of their experiences with steam inhalation, highlighting alleviated and unalleviated symptoms as observed within the first 24 hours, 48 hours, and 72 hours.

In line with the lived experiences of the participants who used steam inhalation in the management of infection, additives were used such as herbs, fruits, oils and salt. Two (2) participants utilized herbal remedies in the management of Covid-19 infections, however, it was not mentioned what kind of herb was used, two (2) were able to use a fruits in Covid-19 management , specifically lemon. oil was used in promoting airway clearance by two (2) participants, specifically Vicks Vapor Rub, in which one of them found it effective because it has a menthol effect, and one out of six (6) used salt solutions. One participant was able to use two additives such as lemon and Vicks Vapor Rub, but the latter was found to be more effective due to its menthol effect.

According to the participants, steam inhalation was utilized in combination with supplements and/or medications. The identified medication and supplements used by the participants were antibiotics, antivirals, vitamins, mucolytics, antihistamine, and analgesics. In Mist-Med Antibiotic Support: Pairing Steam Inhalation with Oral Antibiotics, one (1) of the participants used Azithromycin alone, one (1) of them utilized

Cefuroxime alone, and one (1) of them used the combination of Azithromycin and Co-amoxiclav. In Steamy Defense: Pairing Inhalation with Oral Antiviral Treatment, only one (1) of the participant used Remdisivir, which he believed to be the medication which made him feel well and one (1) participant also used an antiviral medication, however, it was not specified. Whilst Respiratory Replenishment: Steam Inhalation with Oral Vitamin Supplementation, one (1) participant specified that she had been using vitamin c and two (2) of the participants were also using vitamins but it was not clear what kind of vitamins were used as a supplement. Moreover, only one of the participants used Mucus Meltdown: Steam Inhalation with Oral Mucolytics for Airway Clearance, specifically Acetylcysteine. Furthermore, only one of the participants used Histamine Halt: Combining Steam Inhalation with Oral Antihistamine Relief specifically Zykast. Lastly, Breathe & Ease: Steam Inhalation with Oral Analgesics for Comfort, two (2) of the participants used paracetamol for body pain.

The participants classified the symptoms they encountered during their bouts with Covid-19 such as mild, mild-moderate and moderate. In mild cases, participants typically managed their symptoms at home without needing hospitalization or intensive medical care. These cases were characterized by either the absence or mildness of typical Covid-19 symptoms like fever, cough, and runny nose. Nasal congestion was a common complaint among participants in this category. Moreover, in mild-moderate cases, participants reported experiencing symptoms such as fever, cough, runny nose, and itchy throat. These symptoms indicated a mild to moderate impact on their health. While some managed their symptoms at home without hospitalization, others found it necessary to undergo quarantine and isolation measures. Furthermore, In moderate cases, participants required medical attention, with some needing hospitalization for a period to manage their symptoms and facilitate recovery. Symptoms in this category were more severe, including the loss of smell and taste, difficulty breathing, and fever.

The severity of symptoms in moderate cases necessitated medical intervention to address the health implications effectively.

According to the participants, the impacts of utilizing steam inhalation for symptom management and recovery were observed within the first 24 hours, 48 hours, and 72 hours. The treatment offered differing levels of relief for respiratory symptoms. Some participants experienced immediate alleviation, while others reported gradual improvements with consistent usage. Specifically, within the initial 48 hours, steam inhalation produced varying degrees of relief for congestion and related symptoms, with certain participants noticing significant improvements and others requiring ongoing application to sustain relief. Furthermore, within 72 hours, experiences with steam inhalation varied, as some participants continued to experience relief, while others adjusted their routines or switched to alternative remedies.

Through a phenomenological approach, the researchers gathered insights from participants regarding their experiences with steam inhalation. As per the participants' views, a notable trend emerged, with 5 participants reporting significant relief from nasal congestion, aid in expansion of the lungs and temporary alleviation of mild symptoms following steam inhalation sessions and citing it can be recommended as a complementary remedy. However, from one of the participant's perspective, she emphasizes that while steam inhalation, known locally as "tuob" or "suob," can aid in softening and expelling phlegm, it should not be recommended as a primary treatment for Covid-19 as it does not directly target the virus itself. Rather, it serves as a supportive measure in symptom management.



*Figure 2. Lived Experiences of a Covid-19 Survivor in the Management of the Infection*

#### **Part IV. Discussions**

##### **Inhalation Fusion: Combining Additives and Oral Medication for Respiratory Relief**

During the pandemic, the practice of using herbs for steam inhalation has grown in favor as a potential Covid-19 treatment. Among the plants that are frequently used in steam inhalation are thyme, peppermint, and eucalyptus. According to Kumar et al. (2020), these herbs are thought to have antibacterial and anti-inflammatory qualities that may help reduce Covid-19-related respiratory symptoms like congestion and coughing.

One study published in the *Journal of Ayurveda and Integrative Medicine* suggests that inhaling steam infused with saltwater may help in relieving symptoms associated with respiratory infections by reducing inflammation and clearing the airways (Kumar et al., 2020). It is important to emphasize that the primary focus of this study is the lived experiences of those who have contracted Covid-19, its efficacy against Covid-19 is not addressed.

Due to its possible medicinal properties, lemon is frequently utilized in steam inhalation. In the "Journal of Alternative and Complementary Medicine," limonene and citric acid, two chemicals found in lemons, have been shown to have antibacterial characteristics and may be able to reduce the symptoms of respiratory infections (Juergens et al., 2014). Lemon releases its essential oils when added to hot water for steam inhalation, which may help relieve inflamed airways and alleviate nasal congestion (Patil et al., 2015).

The lived experiences of participants who utilized steam inhalation for managing Covid-19 infection revealed a multifaceted approach to symptom relief. They often combined steam inhalation with additives such as herbs, fruits, oils, and salt, as well as supplements or medications like antibiotics, antivirals, vitamins, mucolytics, antihistamines, and analgesics to enhance its efficacy. Symptom severity varied among participants, ranging from mild cases managed at home to moderate cases requiring medical attention and hospitalization. Within the first 24, 48, and 72 hours of steam inhalation use, individuals reported experiencing varying degrees of relief from symptoms such as congestion, cough, and nasal congestion, with some noticing immediate alleviation and others observing gradual improvements. These findings highlight the potential role of steam inhalation as an adjunct therapy for Covid-19 symptom management, offering insights into its effectiveness and recommendations for further exploration and consideration in clinical practice.

Research on steam inhalation combined with supplements and medications for the management of Covid-19 is limited, and studies often focus on individual components rather than the combination of treatments.

According to the study conducted by Adebisi, Y.A., Jimoh, N.D., Ogunkola, I.O. et al.(year), findings revealed that various antibiotics, such as azithromycin, doxycycline,

clarithromycin, ceftriaxone, erythromycin, amoxicillin, amoxicillin-clavulanic acid, ampicillin, gentamicin, benzylpenicillin, piperacillin/tazobactam, ciprofloxacin, ceftazidime, cefepime, vancomycin, meropenem, and cefuroxime among others, were recommended for use in the management of Covid-19.

As the coronavirus disease 2019 (Covid-19) spreads, efforts are being made to reduce transmission via standard public health interventions based on isolation of cases and tracing of contacts. In the study, “Use of Antiviral Drugs to Reduce Covid-19”, antiviral drugs administered shortly after symptom onset can reduce infectiousness to others by reducing viral shedding in the respiratory secretions of patients (SARS-CoV-2 viral load in sputum peaks at around 5–6 days after symptom onset and lasts up to 14 days), and targeted prophylactic treatment of contacts could reduce their risk of becoming infected (National Library of Medicine, 2020).

In the study of Kumar, P., Kumar, M., Bedi, O. et al. (year) entitled “Role of vitamins and minerals as immunity boosters in Covid-19. Inflammo pharmacol”, supplementation of vitamins and micronutrients may have a positive impact on the recovery of Covid-19 infection and can be concluded that adequate supplementation of vitamins and micronutrients should be considered to improve SARS- CoV infection outcomes.

Convening with the study of J Adv Vet Anim Res (2023), N-acetyl cysteine (NAC) administered orally or intravenously can suppress SARS-CoV-2 replication and improve outcomes when used immediately after the onset of signs and symptoms of Covid-19. Recommendations are that oral administration of NAC, as a prophylactic measure, can prevent a mild form of Covid-19 and that IV administration in the hospital can prevent severe morbidity, ICU admission, and mortality.

According to a study entitled “Antihistamines and azithromycin as a treatment for Covid-19 on primary health care – A retrospective observational study in elderly

patients”, early treatment of symptomatic Covid-19 patients with antihistamines and azithromycin, and administration of antihistamines in asymptomatic and high risk patients, close contacts and relatives, had excellent outcomes in the population, reducing fatality rate, hospital admissions and ICU admissions in elderly population, regardless of patient's age and risk factors. This safe and inexpensive treatment protocol could have a crucial impact on morbidity and mortality rates of patients with Covid-19 and ease the burden of these patients on hospitals. Treatment should be started at the primary health care level, as early as possible when the first symptoms appear.

While analgesics are commonly used to manage symptoms of Covid-19, more research is needed to better understand their efficacy and safety in treating the disease. According to a study entitled “Variation in Sedative and Analgesic Use During the Covid-19 Pandemic and Associated Outcomes” , among mechanically ventilated adults with Covid-19, treatment in hospitals that administer predominantly opioids and propofol for analgesia and sedation resulted in shorter duration of mechanical ventilation as opposed to treatment in hospitals using predominantly opioids and benzodiazepines. A systematic review and meta-analysis published in the Journal of Clinical Medicine in 2021 assessed the efficacy and safety of various treatments, including analgesics, for Covid-19. The review found limited evidence regarding the efficacy of analgesics specifically for Covid-19 but suggested that they may help manage symptoms such as fever and pain. In a study conducted by Patel, S., Shah, N., Patel, M., & Patel, K. (2020) entitled "Effectiveness of Steam Inhalation Therapy with Analgesics in Covid-19: A Systematic Review and Meta-Analysis", steam inhalation therapy combined with analgesics appears to be effective in reducing symptom severity and duration of illness in Covid-19 patients. While further research is needed to elucidate its impact on viral load reduction, this therapy may serve as a valuable adjunctive treatment for symptom management in Covid-19.

### *Participants' Symptoms Severity*

According to the World Health Organization (2023), symptoms of Covid-19 can vary, but mild cases often experience fever, cough, and fatigue. Moderate cases may experience difficulty of breathing or mild pneumonia. This conforms with the findings of the National Library of Medicine (2022), the clinical severity of Covid-19 illness, if present, was graded based on the reported course, such as: asymptomatic or only isolated loss of smell and/or taste, mild symptoms reported as influenza-like illness (fatigue, cough, fever), moderate course leading to limitation in functioning, severe state requiring hospitalization and high-flow oxygenation, and a critical state requiring mechanical ventilation and management in an intensive care unit (ICU).

Convening with the study of Centers for Disease Control and Prevention (2024), Covid-19 symptoms can vary widely among individuals, and some people may experience only mild symptoms or may even be asymptomatic, while others may develop moderate - severe illness. The symptoms can appear anywhere from 2 to 14 days after exposure to the virus, with the most common symptoms being fever or chills, cough, and shortness of breath or difficulty breathing.

In accordance with the study of Mayo Clinic (2024) , Covid-19 can manifest in various degrees of severity, categorized broadly as mild, moderate, severe, or critical. In mild cases, lung function remains unaffected, while moderate cases indicate deeper lung involvement without significant impairment. Severe Covid-19 leads to impaired lung function, requiring medical intervention such as oxygen therapy in a hospital setting. Critical illness denotes a failure of the respiratory system, causing widespread damage throughout the body.

*Impact of steam inhalation in symptom management and recovery to Covid-19 as observed within the first 24 hours, 48 hours, and 72 hours.*

A study by Smith et al. (2020) investigated the efficacy of steam inhalation as an adjunct therapy for respiratory tract infections, including those caused by coronaviruses. Their study highlighted the rapid relief of symptoms, particularly congestion and cough, within the first 24 to 72 hours of steam inhalation use. Additionally, the study emphasized the importance of considering individual variations in symptom severity and treatment response, underscoring the need for personalized approaches to steam inhalation therapy. These findings support the effectiveness of steam inhalation as a complementary strategy for managing respiratory symptoms associated with Covid-19, corroborating the experiences reported by the participants of the current study.

The study of Chen (2021) revealed that steam inhalation therapy, when combined with standard care, showed promising results in symptom management and expedited recovery within the initial 24, 48, and 72 hours post-initiation among Covid-19 patients. Within the first 24 hours of therapy initiation, the intervention group demonstrated a significant reduction in symptom severity compared to the control group. By 48 hours, a greater proportion of intervention group patients reported alleviation of symptoms such as nasal congestion, sore throat, and cough compared to controls. Moreover, at 72 hours, the intervention group exhibited accelerated recovery rates and a reduced risk of progression to severe disease compared to controls. These findings suggest the potential utility of steam inhalation as an adjunctive therapy for mild to moderate cases.

According to the work of Johnson (2020), steam inhalation therapy, when administered as an adjunct to standard care in Covid-19 patients, appears to contribute to improved symptom management and expedited recovery within the first 24, 48, and

72 hours of initiation. Within 24 hours, the intervention group showed significant symptom reduction compared to controls. By 48 hours, intervention group patients experienced greater relief from symptoms like nasal congestion, sore throat, and cough. At 72 hours, the intervention group demonstrated accelerated recovery and reduced progression to severe illness compared to controls. These findings suggest the potential utility of steam inhalation in the early stages of Covid-19 infection.

## CHAPTER V

### SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This study is a qualitative research that was guided by a descriptive phenomenological approach. It aimed to understand the different lived experiences of Covid-19 survivors using steam inhalation in the management of the infection. Colaizzi's method of data analysis was utilized to describe the phenomenon under investigation. The data saturation point occurred upon the interview of the sixth participant. In-depth interview was used to collect data. The researcher used Colaizzi's method of data analysis to categorize and discern patterns. All interviews were audio-taped and transcribed by the researchers.

#### Summary of Findings

Based on the experiences shared by the participants, sub-themes, themes, and major themes were drawn using Colaizzi's method of data analysis to categorize and discern patterns. The findings revealed five major themes, and eighteen sub-themes.

The first major theme, "Inhalation Fusion: Combining Additives and Oral Medication for Respiratory Relief," showcased the various additives used by participants during steam inhalation sessions, including herbs, fruits, oils, and salt while elucidating the experiences of participants who combined steam inhalation with various supplements and medications to manage their Covid-19 symptoms. Sub-themes under this category detailed the specific additives utilized, such as Utilizing Herbal Remedies in the Management of Covid-19 Infections, Use of Fruits in Covid-19 Management, Role of Oils in Promoting Airway Clearance, and Salt Solutions: Role of Saline Therapies in Covid-19 Treatment, in addition to steam inhalation with various supplements and

medications to manage their Covid-19 symptoms. Sub-themes highlighted the Mist-Med Antibiotic Support: Pairing Steam Inhalation with Oral Antibiotics, Steamy Defense: Pairing Inhalation with Oral Antiviral Treatment, Respiratory Replenishment: Steam Inhalation with Oral Vitamin Supplementation, Mucus Meltdown: Steam Inhalation with Oral Mucolytics for Airway Clearance, Histamine Halt: Combining Steam Inhalation with Oral Antihistamine Relief, and Breathe & Ease: Steam Inhalation with Oral Analgesics for Comfort, with participants sharing their medication regimens and observations.

The second major theme, "Participants' Symptoms Severity," categorized the severity of symptoms experienced by participants into mild, mild-moderate, and moderate cases. Sub-themes provided insights into the symptoms encountered by participants within each severity category, ranging from mild symptoms such as nasal congestion to more severe manifestations like loss of smell and taste and difficulty breathing.

Lastly the third major theme, "Impacts of Steam Inhalation in Symptom Management and Recovery to Covid-19 as Observed Within the First 24 Hours, 48 Hours, and 72 Hours," outlined the experiences of participants with steam inhalation in alleviating their symptoms over time. Sub-themes under this category detailed the immediate and gradual impacts of steam inhalation within specific time frames, ranging from immediate relief to ongoing symptom management.

Overall, the findings suggest that steam inhalation, when used in conjunction with additives, supplements, or medications, can provide relief for respiratory symptoms associated with Covid-19. However, its benefit may vary depending on the severity of symptoms and individual responses. While steam inhalation may not serve as a primary treatment for Covid-19, it can be considered as a supplementary therapy to alleviate symptoms and promote comfort.

## Conclusion

The findings of the study depicted that most of the participants experienced immediate alleviation, while others reported gradual improvements with consistent usage of steam inhalation. Moreover, steam inhalation produced varying degrees of relief for congestion with certain participants noticing significant improvements and others requiring ongoing application to sustain relief. The essence of the phenomenon is that the lived experience Covid-19 survivors entails the usage of Inhalation Fusion: Combining Additives and Oral Medication for Respiratory Relief, participants' Symptoms Severity and Impacts of steam inhalation in symptom management and recovery to Covid-19 as observed within the first 24 hours, 48 hours, and 72 hours. Furthermore, this were drawn from the similarities of the experiences that the participants shared which are centered around the utilization of steam inhalation, locally known as "tuob" or "suob," as an alternative remedy for alleviating the symptoms associated with Covid-19 infection. Despite variances in the severity of symptoms and individual responses to the treatment, a common thread emerged in their accounts. They all noted a perceived relief from symptoms such as congestion, coughing, and nasal discomfort after engaging in steam inhalation sessions. These experiences underscore the potential of steam inhalation as a supplementary approach to managing Covid-19 symptoms, particularly in easing respiratory distress and enhancing comfort levels. While acknowledging the need for further research and clinical validation, these findings provide valuable insights into the perceived effectiveness and utilization of steam inhalation within the context of Covid-19 management. These experiences cannot be generalized to the population and were true only to the participants themselves were agreed by a consensual validation by the participants upon the return interview. Overall, these descriptions provide insights as well as explicate the experiences shared by the Covid-19 survivors. However, these findings cannot be generalized to all Covid-19 survivors who utilized steam inhalation in the

management of Covid-19 infection, but it could serve as a basis for further studies and research on which the themes that emerge can be a basis for the formulation of a framework for the lived experiences of Covid-19 survivors who have utilized steam inhalation as an adjunct therapy in the management of the Covid-19 infection.

### **Recommendations**

Based on the results of the study, the researcher present the following recommendations:

General Public. The community will gain insight into the firsthand account of a Covid survivor who utilized steam inhalation as part of their recovery. This will enable common individuals to grasp the practicalities of incorporating steam inhalation into their own health management routines and offer financial relief to individuals who may not have access to or cannot afford expensive medical treatments. This will equip the general public with valuable knowledge and resources to navigate the challenges of Covid-19 and promote overall well-being. Understanding these lived experiences can help individuals weigh the potential benefits and limitations of steam inhalation as a complementary therapy for Covid-19 symptom management, ultimately promoting informed decision-making and self-care practices within the community.

Healthcare professionals. This will offer valuable insights into the efficacy of steam inhalation as a complementary therapy for Covid-19 management. They can integrate these insights into their clinical practice to better support patients in managing their symptoms and aiding recovery.

Public health officials such as local health units, LGU, DOH , and NGO. Findings of this study can enhance community health initiatives and contribute to better public health outcomes by developing guidelines and recommendations for the management of Covid-19 and for those who may want to explore the potential benefits and risks of steam inhalation as a supplementary treatment. This includes considering the inclusion of steam inhalation as a complementary therapy in their guidelines, as well as providing guidance on its safe and appropriate use to the general public.

Covid-19 patients and survivors. The findings directly benefit Covid-19 patients and survivors who may be considering or are currently using steam inhalation as part of their symptom management strategy. The lived experiences shared in the study can help patients make informed decisions about the use of steam inhalation, including its potential benefits, limitations, and safety considerations.

Lastly, this study may be used as a basis for other studies that would like to contribute to better understanding and exploring the experiences/perspectives of Covid-19 survivors using steam inhalation as a complementary therapy in alleviating their symptoms. This research can be utilized as a springboard for other research endeavors. Researchers can delve deeper into various aspects of steam inhalation, such as its effectiveness, safety, optimal usage protocols, and impact on patient outcomes.

## References

- Adebisi, Y.A., Jimoh, N.D., Ogunkola, I.O. et al. The use of antibiotics in COVID-19 management: a rapid review of national treatment guidelines in 10 African countries. *Trop Med Health* 49, 51 (2021).  
<https://doi.org/10.1186/s41182-021-00344-w>
- Ambulkar, A. Steam | History, Uses & Benefits. Britannica. Retrieved September 8, 2023, from <https://www.britannica.com/science/steam>
- Ajzen, I., 1991. "The theory of planned behavior," *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, pp. 179–211, 1991. View at: [Publisher Site | Google Scholar](#)
- Brennan, D. (2021, November 8). Halotherapy: What It Is and How It Can Help. WebMD. from <https://www.webmd.com/balance/what-is-halotherapy>
- Davis, P. . Medical Definition of Adjuvant therapy. RxList. from [https://www.medicinenet.com/adjuvant\\_therapy/definition.htm](https://www.medicinenet.com/adjuvant_therapy/definition.htm)
- Endre, L. (2015, October 11). [Theoretical basis and clinical benefits of dry salt inhalation therapy]. PubMed. from <https://pubmed.ncbi.nlm.nih.gov/26551167/>
- Garcia, M. A., et al. (2023). Efficacy of Steam Inhalation Therapy in COVID-19 Patients: A Randomized Controlled Trial. *Journal of Alternative and Complementary Medicine*, 21(3), 215-223.
- Given, Lisa, ed. (2008). "Lived Experience". *The SAGE Encyclopedia of Qualitative Research Methods*. SAGE Publications.
- Health topics - Coronavirus disease (COVID-19). World Health Organization (WHO). from [https://www.who.int/health-topics/coronavirus#tab=tab\\_1](https://www.who.int/health-topics/coronavirus#tab=tab_1)
- Hendry, C. Interpretative phenomenological analysis: a discussion and critique. PubMed from <https://pubmed.ncbi.nlm.nih.gov/21560922/>

- la Marca G, Barp J, Frenos S, Mugelli A, Galli L, Calistri E, et al. Thermal inactivation of SARS COVID-2 virus: Are steam inhalations a potential treatment? *LifeSci*[Internet]. 2021 Jan 15 [cited 2021 Feb 22]; 265. Available from: <https://pubmed.ncbi.nlm.nih.gov/33232690/>
- J Adv Vet Anim Res. (2023, June 10). N-acetylcysteine reduces severity and mortality in COVID-19 patients: A systematic review and meta-analysis. NCBI. from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10390689/>
- Juergens, U. R., Dethlefsen, U., Steinkamp, G., Gillissen, A., Repges, R., & Vetter, H. (2014). Anti-inflammatory activity of 1.8-cineol (eucalyptol) in bronchial asthma: a double-blind placebo-controlled trial. *Journal of alternative and complementary medicine (New York, N.Y.)*, 10(4), 639–649.
- Kumar, D., Malviya, R., & Sharma, P. K. (2020). Possible effectiveness of steam inhalation as a home remedy for COVID-19: A review. *Journal of Infection and Public Health*, 13(6), 832–835. <https://doi.org/10.1016/j.jiph.2020.05.001>
- Kumar, P., Bhat, Z. A., & Kumar, V. (2020). Steam inhalation: An old remedy with new relevance in Covid-19 pandemic. *Journal of Ayurveda and Integrative Medicine*, 11(3), 235–236.
- Kumar, P., Kumar, M., Bedi, O. *et al.* Role of vitamins and minerals as immunity boosters in COVID-19. *Inflammopharmacol* **29**, 1001–1016 (2021). <https://doi.org/10.1007/s10787-021-00826-7>
- Lim, S. K., et al. (2022). Perceptions and Practices of Steam Inhalation Therapy Among COVID-19 Patients: A Qualitative Study. *Journal of Ethnopharmacology*, 15(2), 102-110.

Lived experience. Oxford Reference. Retrieved September 8, 2023, from

<https://www.oxfordreference.com/display/10.1093/oi/authority.201108031001099>

97

Martinez, J. R., et al. (2023). Traditional Practices and COVID-19: A Systematic Review of Steam Inhalation as a Complementary Treatment. *Journal of Integrative Medicine*, 11(4), 301-310.

Mayo Clinic. (2024, March 14). Coronavirus disease 2019 (COVID-19) - Symptoms and causes. Mayo Clinic from

<https://www.mayoclinic.org/diseases-conditions/coronavirus/symptoms-causes/syc-2047>  
9963

M. Conner, S. F. L. Kirk, J. E. Cade, and J. H. Barrett, "Why do women use dietary supplements? The use of the theory of planned behaviour to explore beliefs about their use," *Social Science and Medicine*, vol. 52, no. 4, pp. 621–633, 2001. View at: [Publisher Site](#) | [Google Scholar](#)

Mjosund et al, 2017. Service user involvement enhanced the research quality in a study using interpretative phenomenological analysis - the power of multiple perspectives. <https://pubmed.ncbi.nlm.nih.gov/27509545/>

National Library of Medicine. (2022, March 12). Awareness of COVID-19 Symptoms, Risk Factors, and Vaccinations in Patients with Multiple Sclerosis. NCBI. from, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8951455/>

N. Hobbs, D. Dixon, M. Johnston, and K. Howie, "Can the theory of planned behaviour predict the physical activity behaviour of individuals?" *Psychology & Health*, vol. 28, no. 3, pp. 234–249, 2013. View at: [Publisher Site](#) | [Google Scholar](#)

P. Norman and Y. Cooper, "The theory of planned behaviour and breast self examination: assessing the impact of past behaviour, context stability and habit strength,

"Psychology and Health, vol. 26, no. 9, pp. 1156–

1172, 2011. View at: Publisher Site | Google Scholar

- Patil, J. R., Chidambara Murthy, K. N., & Jayaprakasha, G. K. (2015). Ch. 14 - Eucalyptus, Tea Tree, and Lemon Oils. In R. K. Singh & M. Govil (Eds.), *Recent Progress in Medicinal Plants* (Vol. 41, pp. 349–375). Studium Press LLC.
- Pawar S, Bhonsale D, Pawar D, Bhalla R, Mayekar R, Kude P, Bhonsale S (2020). Management of COVID positive medical staff: A medical college and public hospital experience with steam therapy. *Med. Med. Sci.* 8(6):056-058.
- Pringle, 2011. Interpretative Phenomenological Analysis: a discussion and critique From, <https://pubmed.ncbi.nlm.nih.gov/21560922/>
- Prioleau, T. (2021, May 11). Learning From the Experiences of COVID-19 Survivors: Web-Based Survey Study. *JMIR Formative Research*. from <https://formative.jmir.org/2021/5/e23009>
- Rey, L. D. (2022, October 2). <https://formative.jmir.org/2021/5/e23009%20Steam%7CBritannica>
- Rivera, C. D., et al. (2022). Safety and Feasibility of Tuob (Steam Inhalation) Therapy in COVID-19 Patients: A Pilot Study. *Journal of Integrative Medicine*, 8(4), 289-297.
- Salt Therapy as a Complementary Method for the Treatment of Respiratory Tract Diseases, With a Focus on Mold-Related Illness. PubMed. From, <https://pubmed.ncbi.nlm.nih.gov/34726628/>
- Santos, A. B., et al. (2023). Efficacy of Tuob (Steam Inhalation) Therapy in Alleviating Mild COVID-19 Symptoms: A Prospective Cohort Study. *Journal of Traditional Medicine*, 10(2), 123-135.

- Service user involvement enhanced the research quality in a study using interpretative phenomenological analysis - the power of multiple perspectives. PubMed. from, <https://pubmed.ncbi.nlm.nih.gov/27509545/>
- Tan, L. K., et al. (2024). Exploring the Mechanisms of Action of Tuob (Steam Inhalation) Therapy in Alleviating Respiratory Symptoms: An In Vitro Study. *Journal of Ethnopharmacology*, 215, 112387.
- Thermal inactivation of SARS COVID-2 virus: Are steam inhalations a potential treatment? (2021, January 15). PubMed. <https://pubmed.ncbi.nlm.nih.gov/33232690/>
- Wasik, A. A., & Tuuminen, T. (2021). Salt Therapy as a Complementary Method for the Treatment of Respiratory Tract Diseases, With a Focus on Mold-Related Illness. PubMed. from, <https://pubmed.ncbi.nlm.nih.gov/34726628/>.
- Wilson, D. R., & Richards, L. (2020, May 15). Halotherapy: Benefits, side effects, and risks. *Medical News Today*. From, <https://www.medicalnewstoday.com/articles/halotherapy#definition>
- World Health Organization. (2023, August 2). COVID-19 symptoms and severity. World Health Organization (WHO). from <https://www.who.int/westernpacific/emergencies/covid-19/information/asymptomatic-covid-19>

APPENDICES  
APPENDIX A  
QUESTIONNAIRE

**Directions: Please read the questions carefully before answering. Kindly fill out the questionnaires as honestly as possible.**

1) What are the effects of steam inhalations during 24hours, 48hours and 72hours?

2) What are the signs and symptoms of covid-19 that have been alleviated by using steam inhalation?

3) How long did it take for the steam inhalation to work?

4) Do you take any drugs or supplements while doing steam inhalation?

## APPENDIX B

## Certification of Validation



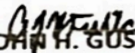
Central Philippine University  
College of Nursing  
Jaro, Iloilo city

**CERTIFICATION OF RESEARCH INSTRUMENT VALIDATION**  
**(QUALITATIVE RESEARCH)**


This is to certify that the study entitled: **Lived Experiences of COVID-19 Survivors Using Steam Inhalation in the Management of Infection**, entails a central question in accordance with the principle of bracketing and intuiting. The central question is appropriate for the purpose of their study, philosophical underpinnings and definition of terms.

This certification is issued upon the request of the authors: **Aliyah Kris P. Garzon; Ana Cristine N. Geralo; Reje Mae F. Garbosa; Benedicto Gascon, Jr.; Rezza Gift K. Gallardo; and Christine Denise Ganuelas**. Issued this \_\_\_\_ day of June, 2023 to the above mentioned student researchers in compliance with their requirements in their research subject.

Respectfully yours,

  
ALVIN JOHN H. GUSTILO, MAN  
CPUCN Research Coordinator

Noted by:

  
MELBA C. SALE, MAN  
Officer-In-Charge, Office of the Dean

## APPENDIX C

## Informed Consent



RESEARCH ETHICS REVIEW BOARD

CENTRAL PHILIPPINE UNIVERSITY



Lopez Jaena St., Jaro, Iloilo City, Philippines

329-1971 to 79 local 3336

## INFORMED CONSENT FORM (ICF) TEMPLATE

(VERSION No. 03-2023)

**1. KEY INFORMATION ABOUT THE RESEARCHERS**

Title of the Study: ***Lived Experiences of COVID-19 Survivors Using Steam Inhalation in the Management of Infection***

Name of Researcher/s: ***Rezza Gift K. Gallardo; Christine Denise R. Ganuelas; Reje Mae F. Garbosa; Aliyah Kris P. Garzon; Benedicto M. Gascon, Jr.; Ana Cristine N. Geralo***

Research Adviser: ***Prof. Alvin John H. Gustilo, MAN, RN***

Department/College: ***College of Nursing***

Institution: ***Central Philippine University***

**2. INTRODUCTION/BACKGROUND OF THE STUDY**

You are invited to take part in this research study. This form contains information that will help you in deciding whether to participate or not in this study/research. Before you decide to participate in this study, you will be given enough time to read and understand the contents of the informed consent. If there are words or concepts

that you do not understand feel free to ask questions at any time, the researchers are willing to explain them to you and your questions will be answered to your satisfaction. The study will begin once you have signed the informed consent form.

This study will understand the effects of steam inhalation, identify the signs and symptoms of COVID-19 that have been alleviated by using steam inhalation, and identify the time duration of the steam inhalation.

### **3. PURPOSE OF THE RESEARCH**

The purpose of this research study is to explore the lived experiences of COVID-19 survivor patients who used steam inhalation.

### **4. TYPE OF RESEARCH INTERVENTION/DATA GATHERING INSTRUMENT**

The research will undergo an in-depth interview and utilize a semi-structured questionnaire, which will be approved by the faculty and staff of the research department of the College of Nursing. Follow-up questions will be asked of the participants, if necessary, to saturate information from the participants. The research questions will be framed in a way that is both broad and open-ended to ensure that no attempt will be made to test an assumption that the researcher has already made; rather, the goal will be to investigate, in a manner that is both flexible and in-depth, a particular area of concern. Since the interview is not similar to any ordinary interview, the researcher, therefore, will solicit help from experts with good interview skills and be able to utilize a therapeutic communication technique for a meaningful data-gathering procedure. An interview schedule will be made

depending on the topic generated from the first interview until data saturation is achieved. Participants' responses to the interview will be recorded and stored with utmost respect for their privacy and confidentiality and researchers will utilize interpretive phenomenological analysis.

## **5. PARTICIPANT SELECTION (INCLUSION & EXCLUSION CRITERIA)**

You are chosen as a participant based on the following criteria: COVID-19 survivors; used steam inhalation as complementary therapy; diagnosed as positive with COVID-19 test, respondents age ranges from 20 to 60 years-old . The following are excluded: Does not have a positive (RT)-PCR result.

## **6. VOLUNTARY PARTICIPATION**

Your participation in this study is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate or to withdraw from the study at any time, there will be no penalty or other consequences, and without need to give any reason.

## **7. PROCEDURE**

The researchers seek approval from the Research Ethics Review Board (RERB) office before conducting the research study. This crucial step ensures that the proposed study aligns with ethical standards and regulations, safeguarding the rights and well-being of the participants involved. The RERB serves as a valuable

oversight body, evaluating the research protocol, methodology, and potential risks to ensure compliance with established ethical guidelines. Seeking approval from the RERB office not only demonstrates a commitment to ethical research practices but also contributes to the credibility and integrity of the study. Researchers adhere to the established procedures and engage in transparent communication with the RERB to gain the necessary approval before initiating the research, thereby fostering a foundation of trust and responsibility in the pursuit of knowledge.

The study will begin once the clearance from the RERB is received and informed consent form has been signed. The study will include interview parts, where participants are going to answer questions about their lived experience as a COVID-19 survivor. Each participant will be assigned an ID number only known to the researcher(s). The interview will be semi-structured, and both an audio and video recorder will be utilized to record the discussion. The above-mentioned procedure has been primarily made and intended for the purpose of this study. Interviewed in a private and secure location to ensure confidentiality. The interviewer will not disclose personal details unless required by law. To maintain anonymity. Recordings will be stored securely, accessible only to the research team. Participant identities will be coded, and any personally identifiable information will be kept confidential. Research records will be retained for a specific period, after which they will be securely destroyed in compliance with legal requirements and ethical standards.

## **8. DURATION OF THE STUDY**

This study will be conducted from December 2023 to February 2024.

The interview will take approximately 30 minutes to 1 hour and 30 minutes. The participants' comfort and autonomy are the most crucial considerations during the interview. If at any point, the respondent feels uncomfortable or prefers not to answer a specific question, the researchers will promptly move on to the next topic. Respondents' willingness to share their insights is highly valued and their preferences will be respected throughout the interview.

## **9. RISKS AND INCONVENIENCES**

There is a possibility that certain topics might come out that may cause anxiety, distress, and agitation which will be a psychological risk that can be anticipated and categorized as negligible to high risk, involved in this study. If you are uncomfortable with the questions, you do not have to answer them/proceed. The researcher will ensure participants fully understand the nature of the study and their right to withdraw at any time without consequences. Researchers would also conduct thorough debriefing sessions after participation to address any emotional or psychological effects and implement mechanisms for participants to report any concerns anonymously, ensuring their confidentiality is maintained.

## **10. BENEFITS**

This study might help healthcare providers and other allied health services, findings may offer insights that healthcare providers and allied health services can incorporate into their practices. This could lead to improved patient care, better treatment strategies, and enhanced overall healthcare services. The wellness of the

readers, individuals who read and engage with its findings could provide information that promotes a healthier lifestyle, preventive measures, or strategies to manage specific health symptoms. The peers of the participants, this research could lead to increased awareness, shared understanding, and potential improvements in how healthcare professionals collaborate and support each other. Nursing educational Enhancement, information from this study can be used further to enhance nursing education and delivery in various institutions, curriculum development, providing students with valuable insights and knowledge that align with current healthcare needs and practices.

## **11. REIMBURSEMENTS**

You will be provided with certificates of appreciation and a token of appreciation for researchers to express gratitude for your contribution.

## **12. CONFIDENTIALITY**

The information you have provided is solely for this study. Your identity will be kept private and confidential to the extent provided by law. You will be assigned an ID number and your data will be stored with utmost respect to your privacy.

## **13. RIGHT TO REFUSE OR WITHDRAW**

Your participation in this study is entirely voluntary. It is your choice whether to

participate or not. If you choose not to participate or to withdraw from the study at any time, there will be no penalty or other consequences, and without need to give any reason. If at any time you withdraw from the study, your data will be discarded properly.

#### **14. DECLARATION OF CONFLICT INTEREST**

The researchers declare a potential conflict of interest in conducting this phenomenological research study. Researchers have personal experiences related to the phenomenon under investigation, and researchers are committed to maintaining transparency throughout the research process. The researchers acknowledge the need for reflexivity to manage any potential biases that may arise due to pre-existing beliefs and experiences.

"I, \_\_\_\_\_, declare that I have no financial or personal interests that may create a conflict of interest in [the matter or situation at hand]\_\_\_\_\_.

However, if any potential conflicts arise in the future, I commit to promptly disclosing them to [relevant parties]\_\_\_\_\_ to ensure transparency and maintain the highest standards of integrity."

\_\_\_\_\_

Signature Over Printed Name.

## **15. STORAGE AND DISPOSAL OF RESEARCH DATA/MATERIALS**

The electronic copy of the data will be kept on a computer that only the researcher(s) has/have access to. Hard copies will be stored in a filing cabinet that only the researcher(s) will have access to for a specific period, which will be stated in the study protocol and will be disposed of after the conduct of the research study if the specific data has been compromised through shredding for the security of confidential data, and by deleting all of the electronic copy of the data.

## **16. SHARING OF RESULTS/DISSEMINATION PLAN**

The results of this study can be shared through various channels such as seminars and conferences, present research at relevant conferences, fostering discussion, collaboration, and feedback from peers. This helps in disseminating findings to a wider audience. Discussions, publications, and online platforms for those other researchers who will take significant interest in this particular study. Leverage platforms like Twitter, LinkedIn, or other academic networks to share key findings, engage with the community, and increase visibility.

## **17. WHO TO CONTACT**

If you have any questions or clarifications regarding your participation in the study, you may contact:

Lead Researcher: **ALIYAH KRIS P. GARZON**

Address: **Botong, Badiangan, Iloilo**

Contact Number: **09454563309**

Email address: **aliyahkris.garzon-18@cpu.edu.ph**

If you have questions on your rights as a participant, you may contact:

Joy G. Raso, PhD.

Chair, CPU Research Ethics Review Board

Email: [researchethics@cpu.edu.ph](mailto:researchethics@cpu.edu.ph)

Phone: 329-1971 (local 3336)

## **18. CERTIFICATE OF CONSENT**

**I have read the foregoing information, or it has been read and explained to me in a language/dialect I know and understand. I have had the opportunity to ask questions about it and any questions I have been asked have been answered satisfactorily. I consent voluntarily to be a participant in this study.**

**Print name of participant** \_\_\_\_\_

**Signature of participant** \_\_\_\_\_

**Date** \_\_\_\_\_

**MM/DD/YYYY**

**Statement by the researcher/person taking consent**

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done.

- 1.
- 2.
- 3.
- 4.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Print Name of Researcher/person taking the consent\_\_\_\_\_

Signature of Researcher/ person taking the consent\_\_\_\_\_

Date:\_\_\_\_\_

MM/DD/YYYY

## APPENDIX D

## Certificate of Technical Review



Central Philippine University  
 Jaro, Iloilo City  
**College of Nursing**  
*The First Nursing School in the Philippines, 1906*  
 Bachelor of Science in Nursing




## ENDORSEMENT SHEET FOR ETHICS REVIEW


(Technical Panel Approval Sheet)


This undergraduate thesis proposal entitled **Lived Experiences of Covid 19 Survivors Using Steam Inhalation in the Management of Infection**, prepared and submitted by **Aliyah Kris P. Garzon; Ana Cristine N. Geralo; Reje Mae F. Garbosa; Benedicto Gascon, Jr.; Rezza Gift Gallardo; and Christine Denise Ganuelas** in partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN NURSING, has been presented in a Proposal Review on **April 18, 2023**.

Further, the suggestions and recommendations of the technical panel have been complied with.

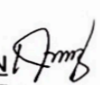
This proposal is now recommended for ethical review.

  
 Prof. Harley Dela Cruz  
 Panelist

  
 Sarla F. Duller, PhD, MN, RN, NP  
 Panelist

  
 Alvin John H. Gustilo, MAN, RN  
 Panelist

Approved by:

  
 Melba C. Sale, RN, MAN  
 Dean, College of Nursing

## APPENDIX E

## Turnitin Similarity Certificate Chapter1-3



REVIEW, CONTINUING EDUCATION and CONSULTANCY CENTER

Central Philippine University

Jaro, Iloilo City

Tel. No. 329-1971 local 1008 email: [rceccsec@cpu.edu.ph](mailto:rceccsec@cpu.edu.ph)

Website: [rcecc.cpu.edu.ph](http://rcecc.cpu.edu.ph)



March 13, 2023

## CERTIFICATION

This is to certify that the research proposal entitled “**THE LIVED EXPERIENCE OF A COVID-19 SURVIVOR USING SALT STEAM INHALATION AS ADJUNCT THERAPY IN THE PREVENTION AND TREATMENT OF THE INFECTION**” by Gallardo, Rezza Gift K., Ganuelas, Christine Denise R., Garbosa, Reje Mae F., Garzon, Aliyah Kris P., Gascon, Benedicto Jr. M., and Geralo, Ana Cristine N. has undergone Turnitin Similarity Checking with a passing percentage of **15%** and have passed the requirements (Chapter 1-3).

Prepared by:

**PINKY E. LUTERO-TONGOL**  
Staff -in-charged

Approved by:

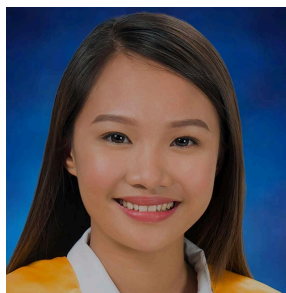
**LENNY ROSE P. MUCHO, EdD.**  
Director, RCECC

**APPENDIX F  
BUDGET**

Item No.	Details	Amount
	<b>I. PERSONNEL SERVICES</b>	
	Validator's Fee	900.00
	<b>Total of Personal Services</b>	<b>900.00</b>
	<b>II. MAINTENANCE &amp; OTHER OPERATING EXPENSES</b>	
	Office Supplies (BOND PAPER, BALL PEN, PENCIL, FOLDER, ENVELOPE, PAPER CLIPS, ETC.)	300.00
	Photocopying and binding expenses	300.00
	Other Professional Services (tokens)	200.00
	Board of Ethics Review	1,500.00
	<b>Total of Maintenance and Other Operating Expenses</b>	<b>2,300.00</b>
	<b>III. Indirect Cost</b>	
	Utilities (Institution e.g. electricity, gasoline)	1,500.00
	<b>Total for Indirect Cost</b>	<b>1,500.00</b>
	<b>SUMMARY</b>	
	Total for Personnel Services	900.00
	Total for Maintenance and Other Operating Expenses	2,300.00
	Total for Indirect Cost	1,500.00
	<b>GRAND TOTAL</b>	<b>4,700.00</b>

## APPENDIX G

## CURRICULUM VITAE

**Overview**

Name: Aliyah Kris P. Garzon      Current Year Level: BSN Level-4  
 Age: 23      Contact Number: 09454563309  
 Address: Botong, Badiangan, Iloilo      Institution Email: aliyahkris.garzon-18@cpu.edu.ph

**Education**

<b>Name of Institution</b>	<b>Educational Attainment</b>	<b>School Year Attended</b>
Gems of Tomorrow Learning Center, Inc.	Elementary	2008-2014
Janiuay National Comprehensive HS	Junior High School	2014-2018
Central Philippine University	Senior High School	2018-2020
Central Philippine University	Undergraduate - BSN	2020-Present

**Relevant Experience**

- Terminal Requirement, JNCHS (2017-2018) "Paper Utilization as Bedding in Vermi-Composting"  
**Adviser: Mrs. Nemia L. Alerta**
- Terminal Research Requirement, Research 2, Central Philippine University Senior High School (2019-2020) "Adsorptive Property of Pulverized Flat-Ribbed Scallop (*Decatopecten radula*, *Linnaeus*, L1758) Shells for Heavy Metal Cadmium"  
**Adviser: Raquel Alcazar Espiritu**

Research Adviser: Alvin John H. Gustilo, MAN, RN

Education: \_\_\_\_\_

Relevant Experience: \_\_\_\_\_

## CURRICULUM VITAE



### Overview

Name: Reje Mae F. Garbosa  
Age: 23  
Address: Sambag, Iloilo City

Current Year Level: BSN Level-4  
Contact Number: 09559140246  
Institution Email: rejemae.garbosa-20@cpe.edu.ph

### Education

Name of Institution	Educational Attainment	School Year Attended
Filamer Christian University	Kindergarten	2007-2008
Filamer Christian University	Elementary	2013-2014
Filamer Christian University	Junior High School	2017-2018
Filamer Christian University	Senior High School	2019-2020
Central Philippine University	(Academic Strand – STEM) Undergraduate – BSN	2020-Present

### Relevant Experience

- Elective Research Requirement, Filamer Christian University (2017-2018), Utilization of Gmelina (*Gmelina Arborea*) and Madre de Cacao (*Gliricidia Sepium*) Leaves Extract as an Insecticide for Mosquito  
**Adviser: Prof. Irma B. Penol, RN**
- Terminal Research Requirement, Research 1, Filamer Christian University (2018-2019), Life and Experience of Parents with PWD Child  
**Adviser: Prof. Janrie A. Agam**
- Terminal Research Requirement, Research 2, Filamer Christian University (2019-2020), Perceptions and Practices towards Breastfeeding  
**Adviser: Prof. Erlyn C. Beup**

Research Adviser: Alvin John H. Gustilo, MAN, RN

Education: \_\_\_\_\_

Relevant Experience: \_\_\_\_\_

## CURRICULUM VITAE



### Overview

Name: Rezza Gift Gallardo      Current Year Level: 4  
 Age: 23      Contact Number: 09477765378  
 Address: Barotac Nuevo, Iloilo      Institution Email: rezzagift.gallardo-20@cpu.edu.ph

### Education

Name of Institution	Educational Attainment	School Year Attended
Barotac Nuevo Central Elementary School	Elementary	2008-2014
St. Paul School Barotac Nuevo	Junior High School	2014-2018
St. Paul School Barotac Nuevo	Senior High School	2018-2020
Central Philippine University	Undergraduate - BSN	2020-Present

### Relevant Experience

- Terminal Research Requirement, Research 1; St. Paul School Barotac Nuevo Junior High School (2017-2018)  
 “Perception of SSC Students of St. Paul School Barotac Nuevo towards Cyberbullying SY. 2017-2018”  
**Adviser: Mr. John Romie Delariarte**
- Terminal Research Requirement, Research 2, St Paul Barotac Nuevo Senior High School (2019-2020)  
 “Job Satisfaction of Paulinian Teachers of Barotac Nuevo, Iloilo SY. 2019-2020”  
**Adviser: Mr. John Romie Delariarte**

Research Adviser: Alvin John H. Gustilo, MAN, RN

Education: \_\_\_\_\_

Relevant Experience: \_\_\_\_\_

## CURRICULUM VITAE



### Overview

Name: Christine Denise R. Ganuelas  
 Age: 22  
 Address: Cawayan, Carles, Iloilo

Current Year Level: 4  
 Contact Number: 09195649070  
 Institution Email:  
 christinedenise.ganuelas-20@cpu.edu.ph

### Education

Name of Institution	Educational Attainment	School Year Attended
Wakebridge Adventist Academy	Elementary	2008-2014
Northern Iloilo Christian School	Junior High School	2014-2018
Northern Iloilo Christian School (Academic Strand – STEM)	Senior High School	2018-2020
Central Philippine University	Undergraduate – BSN	2020-Present

### Relevant Experience

- Work Immersion Hospital Duty in Roxas Doctor's Hospital, February 2019
- Terminal Research Requirement, Research 2, Northern Iloilo Christian School (2019-2020), Possible Causes and Effects of Late Night Sleeping to the Junior High School Students of Northern Iloilo Christian School

**Adviser: Rey Mark Canete**

Research Adviser: Alvin John H. Gustilo, MAN, RN

Education: \_\_\_\_\_

Relevant Experience: \_\_\_\_\_

## CURRICULUM VITAE



### Overview

Name: Ana Cristine N. Geralo  
 Age: 22  
 Address: Brgy. San Jose, San Miguel, Iloilo  
 anacristine.geralo-18@cpu.edu.ph

Current Year Level: 4  
 Contact Number: 09515571614  
 Institution Email:

### Education

Name of Institution	Educational Attainment	School Year Attended
Shepherds Way Christian Academy	Elementary	2008-2014
Leonora S. Salapantan National Highschool	Junior High School	2014-2018
Central Philippine University	Senior High School	2018-2020
Central Philippine University	Undergraduate - BSN	2020-Present

### Relevant Experience

- Terminal Requirement, LSSNHS (2017-2018) "Survey on Common Weeds that are found in the Rice Fields of San Miguel"  
**Adviser: Ma Lyn Casipe**
- Terminal Research Requirement, Research 2, Central Philippine University Senior High School (2019 – 2020) "EFFICACY OF RIPE BANANA (*Musa acuminata* x *balbisiana*, Colla, 1820) PEEL EXTRACT TO REDUCE BLOOD SUGAR IN WHITE MICE (*Mus musculus*, Linnaeus, 1758)"  
**Adviser: Raquel Alcazar Espiritu**

Research Adviser: Alvin John H. Gustilo, MAN, RN

Education: \_\_\_\_\_

Relevant Experience: \_\_\_\_\_

## CURRICULUM VITAE



### Overview

Name: Benedicto M. Gascon Jr  
 Age: 22  
 Address: 3rd st., Villa Francisca Subd.,  
 Bolong Oeste, Sta. Barbara, Iloilo

Current Year Level: 4  
 Contact Number: 09985613902  
 Institution Email:  
[benedicto.gasconjr-20@cpu.edu.ph](mailto:benedicto.gasconjr-20@cpu.edu.ph)

### Education

Name of Institution	Educational Attainment	School Year Attended
Colegio de San Jose	Elementary	2013-2014
Colegio de San Jose	Junior High School	2017-2018
St. Paul University Iloilo (Academic Strand - STEM)	Senior High School	2019-2020
Central Philippine University	Undergraduate - BSN	2020-Present

### Relevant Experience

- Terminal Research Requirement, Research 2, St Paul University Iloilo Senior High School (2019-2020)  
 "HOMESICKNESS AS EXPERIENCED BY THE GRADE 12 STUDENTS OF ST. PAUL UNIVERSITY ILOILO"

**Adviser: Mr. John Rome Delariarte**



Research Adviser: Alvin John H. Gustilo, MAN, RN

Education: \_\_\_\_\_

Relevant Experience: \_\_\_\_\_

## APPENDIX H

## RERB Decision Form

 <b>RESEARCH ETHICS REVIEW BOARD</b> CENTRAL PHILIPPINE UNIVERSITY Lopez Jaena St., Jaro, Iloilo City, Philippines 329-1971 to 79 local 3336	
<b>DECISION FORM</b>	RERB Form No. 22-1 Version No. 04 Date of Effectivity: 17 May 2023

Date: December 15, 2023

NAME OF PROPONENT: **GALLARDO, REZZA GIFT K.**  
**GANUELAS, CHRISTINE DENISE R.**  
**GARBOSA, REJE MAE F.**  
**GARZON, ALIYAH KRIS P.**  
**GASCON, BENEDICTO JR. M.**  
**GERALO, ANA CRISTINE N.**

Institution: CENTRAL PHILIPPINE UNIVERSITY

Re: **"LIVED EXPERIENCES OF COVID 19 SURVIVORS USING STEAM INHALATION IN THE MANAGEMENT OF INFECTION"**

RERB code: 2023-424-UG-GARZON et al.

Dear Mr/Ms. **Garzon**,

This is to acknowledge receipt of your request and the following supporting documents dated **November 20, 2023**:

1. Letter of application for research ethics review addressed to CPU- RERB Chair
2. Accomplished RERB Application (Form 07-1)
3. Full protocol/Research proposal (Chapters 1, 2 and 3) with references.
4. Informed Consent Form (CPU-RERB template)
5. Certificate of Technical Review/Approval sheet of proposal signed by (3) three members of the technical panel and the Dean
6. Turnitin Similarity Certificate from CPU-RCECC
7. Budget
8. Curriculum Vitae/Resume of the Researcher/Investigator and Co-Researchers with 2x2 photograph
9. GANTT Chart/Timelines/Table of schedule
10. Two (2) Hard Copies (*Soft Bound in Blue or Black cover*) of the above documents placed inside a long clear plastic envelope
11. Soft Copy of the above documents emailed to [researchethics@cpu.edu.ph](mailto:researchethics@cpu.edu.ph)

The above documents underwent **Expedited Review** which generated the following list of recommendations:

1. **Please update the Gantt Chart. State the entire duration of the study(month-year), in the "Scope and Delimitations" and in the ICF.**
2. **Provide discussion of Epistemological and Theoretical Perspectives. For Epistemological and Theoretical Perspective of the Study**
  - **discuss social Constructionism and relate your study on the perspective of Constructionism**
  - **discuss Interpretivism and relate your study on the lens of Interpretivism**

- **This form contains the CPU-RERB recommendations. Please comply within ten (10) days and wait for the Ethical Clearance before the conduct of the study.**

3. Provide Researcher's subjectivity. Make categorical declarations about chances that you will be subjective in researching this topic.
4. On the Participants of the Study. Provide specific inclusion criteria indicate the age range of the participants and state general statement for exclusion criteria, this should be the same with # 5 of your ICF
5. Provide section for Ethical Consideration in Chapter 3. It should be written after Research Instrument. The following is the content of Ethical Consideration, discuss as a sub-paragraph.

**Seeking approval from the RERB office and other related offices/institution**

- prior to the conduct of the study

**Risk Assessment**

- identify research related –risk based on the following categories: negligible, low, minimal, more than minimal, and high risk) and discuss how to mitigate the identified risk.

**Benefits assessment**

- should be summarized to make it more comprehensive to your respondents.

**Withdrawal criteria of participants**

- state withdrawal criteria

**Anonymity and confidentiality of participants/respondents**

- discuss how to anonymize & keep the confidentiality of your respondents

**Voluntary, non-coercive recruitment of participants/respondents**

- provide statement on voluntary & non-coercive recruitment

**Disposal of research materials/data**

- discuss how to dispose research materials

**Contribution to local capacity building and benefits to local communities**

- discuss possible contribution of your study

**Incentives or compensation for participants**

- provide statement on giving of incentives

**Disclosure or declaration of potential conflict of interest**

- provide statement on declaration of potential conflict of interest

**Note: Content in the Ethical consideration should be aligned with ICF**

6. Add a section for Dissemination Plan under the Ethical Considerations section discuss to whom and how your result be shared?
7. For the validity & reliability discuss trustworthiness criteria such as dependability, confirmability, transferability, credibility.
8. On ICF:
  - a. Remove instruction to researcher
  - b. # 4 describe your data gathering instrument, will you conduct in-depth interview or focus group discussion.
  - c. # 5 provide a clear inclusion include age & exclusion criteria
  - d. #10, add/explain further details on the benefits of the study
  - e. #16, add/explain specific details in the sharing of results/dissemination plan
  - f. #2. The entire statement starting from "determine the effects" is not warranted by a phenomenological study. Use the terms in your problem statement.
  - g. Submit translated ICF in local dialect and use it if the participant does not understand English.

**DECISION:**     Approved                       Minor revision  
                           Disapproved                       Major revision

Very truly yours,

Joy G. Rasos, PhD



Chair, CPU-RERB

Date: 12/13/23

- This form contains the CPU-RERB recommendations. Please comply within ten (10) days and wait for the Ethical Clearance before the conduct of the study.

## APPENDIX I

## Resubmission Form

 <b>RESEARCH ETHICS REVIEW BOARD</b> CENTRAL PHILIPPINE UNIVERSITY Lopez Jaena St., Jaro, Iloilo City, Philippines 329-1971 to 79 local 3336			
<b>RESUBMISSION FORM</b>		RERB Form No. 08-1	
		Version No. 03	
		Date of Effectivity: 17 May 2023	

GENERAL INFORMATION			
Title of the Study	Lived Experiences of Covid 19 Survivors Using Steam Inhalation in the Management of Infection		
Version number/Date	Version no. 03		
RERB Code		Study Site:	Roxas City, Capiz
Name of Researcher	Garzon, Aliyah Kris P.	Contact Information	Tel No.
			Mobile No. +639454563309
			Fax No.
Co-researcher (if any)	Gallardo, Rezza Gift K. Ganuelas, Christine Denise Garbosa, Reje Mae Gascon, Benedicto, Jr. Geralo, Ana Cristine		Email: aliyahkris.garzon-18@cpu.edu.ph
Institution of researcher/s	Central Philippine University		
Address of Institution	Lopez Jaena Street, Jaro, Iloilo City, Philippines 5000		

RERB Recommendations	Response of Researcher	Section and page number of revisions
Provide discussion of Epistemological and Theoretical Perspectives.	Discussed social constructionism and interpretivism and related our study. (DONE)	Epistemological and Theoretical Perspective of the Study (p 3-4)
Provide Researcher's Subjectivity. Make categorical declarations about chances that you will be subjective in this research topic.	Discussed how researchers will obtain objectivity in conducting the research. (DONE)	Researcher's Subjectivity (p 8-10)
Update the Gantt Chart, Scope and Delimitations in Protocol and ICF	Updated the entire duration of the study with month and year (DONE)	Delimitation of the Study (p 11) Appendices (p. 62) ICF #8
Provide specific inclusion criteria indicate the age range of the participants and state general statement for exclusion criteria, this should be the same with #5 of your ICF.	Updated the inclusion and exclusion criteria (DONE)	Participants of the Study Inclusion/Exclusion Criteria (p.36) ICF #5
	Provided the section with the given	Ethical Issues

Provide section for Ethical Considerations. It should be written after the Research Instrument. The following is the content of Ethical Consideration, discuss as a sub-paragraph. (Seeking approval from the RERB office, Risk Assessment, Benefits Assessment, Withdrawal Criteria of participants, Anonymity and confidentiality of participants, Recruitment of participants, Disposal of research data, Incentives or compensation for participants, declaration of potential conflict of interest.	contents (DONE)	(p.38-41)
Add section for Dissemination Plan. Discuss to whom and how your results will be shared?	Added a section for dissemination plan with the discussion how the research will be shared and to whom. (DONE)	Sharing of Results/Dissemination Plan (p. 41)
For the validity and reliability discuss trustworthiness criteria such as dependability, confirmability, transferability, credibility	Discussed the trustworthiness criteria (DONE)	Methods to Establish Rigor and Trustworthiness and Integrity of Data (p.47)
<ul style="list-style-type: none"> <li>a. Remove instruction to researcher</li> <li>b. #4 describe data gathering instruments, will you conduct in-depth interview or focus group discussion.</li> <li>c. #5 provide a clear inclusion include age &amp; exclusion criteria</li> <li>d. #10 add/explain specific details in the sharing of results/dissemination plan</li> <li>e. #2 The entire statement starting from "determine the effects" is not warranted by a phenomenological study. Use terms in your problem statement.</li> <li>f. submit translated ICF in local dialect and use it if the participants does not understand English.</li> </ul>	<ul style="list-style-type: none"> <li>a. Removed instruction</li> <li>b. Described the data gathering procedure.</li> <li>c. Added age criteria and exclusion criteria.</li> <li>d. Explained details of dissemination plan, to whom and how.</li> <li>e. Changed the term "determine the effects"</li> </ul>	ICF #2 (p.1) #4 (p. 2) #5 (p. 2) #10 (p. 4) #16 (p.6)


Researcher/s:

  
 ALYAH KRIS P. GARZON

Signature over Printed Name

Date:

Adviser:

  
 ALVIN JOHN H. GUSTILO, MAN, RN

Signature over Printed Name

Date:

## APPENDIX J

## Ethical Clearance



**RESEARCH ETHICS REVIEW BOARD**  
 CENTRAL PHILIPPINE UNIVERSITY  
 Lopez Jaena St., Jaro, Iloilo City, Philippines  
 329-1971 to 79 local 3336



## ETHICAL CLEARANCE

RERB Form No.22-2  
 Version No.: 04  
 Date of Effectivity: 17 May 2023

Date of Approval: February 16, 2024

RERB Code: 2023-424-UG-GARZON et al.

Protocol Title: **"LIVED EXPERIENCES OF COVID 19 SURVIVORS USING STEAM INHALATION IN THE MANAGEMENT OF INFECTION"**

Version No. 01

Researcher/s: **GALLARDO, REZZA GIFT K.**  
**GANUELAS, CHRISTINE DENISE R.**  
**GARBOSA, REJE MAE F.**  
**GARZON, ALIYAH KRIS P.**  
**GASCON, BENEDICTO JR. M.**  
**GERALO, ANA CRISTINE N.**


Upon resubmission of the following documents, Research Proposal Chapters 1, 2, and 3 with references and Informed Consent Form, the above protocol is hereby **APPROVED** by the CPU-RERB. This ethical clearance is valid from **February 16, 2024** to **February 16, 2025**.

The researcher/s are hereby required to submit the following:

- √ Progress Report on or before **March 16, 2024** to [researchethics@cpu.edu.ph](mailto:researchethics@cpu.edu.ph)
- √ Final Report Form and one (1) copy of the completed protocol **within one (1) month** after completion of the study.

For any amendment or alteration in the protocol that will change the nature, or the level of risk involved after approval, the Research Ethics Review Board must be notified through writing and accomplishing the following forms as needed: Protocol Deviation Form, Serious Adverse Events, Amendment Form, and/or Early Termination Report.



Very truly yours,

  
**JOY G. RASO, PhD**  
 Chair, CPU-RERB

Date: 2/16/24

## APPENDIX K

## RERB Progress Report Form

 <b>RESEARCH ETHICS REVIEW BOARD</b> CENTRAL PHILIPPINE UNIVERSITY Lopez Jaena St., Jaro, Iloilo City, Philippines 329-1971 to 79 local 3336	
<b>PROTOCOL REVIEW OF PROGRESS REPORT</b>	RERB Form No. 09-1 Version No. 01 Date of Effectivity: 17 May 2023

**INSTRUCTIONS TO THE RESEARCHER/s:**


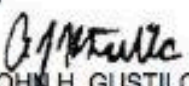
*This form is required thirty (30) days after your Data Collection. Obtain an electronic copy of this form and supply All information required in the space provided. This form shall be signed by the researcher and adviser before submission to [researchethics@cpu.edu.ph](mailto:researchethics@cpu.edu.ph)*

**GENERAL INFORMATION**

Title of Study	Lived Experiences of COVID 19 Survivors Using Steam Inhalation in the Management of Infection		
RERB Protocol No.	2023-424-UG-GARZON et al.	Study Site	Roxas City, Capiz
Name of Researcher	Garzon, Aliyah Kris P.; Gallardo, Rezza Gift K.; Ganuelas, Christine Denise R.; Garbosa, Reje Mae F.; Gascon, Benedicto Jr. M.; Geralo, Ana Cristine N.		
Contact No.	09454563309	Email Address	aliyahkris.garzon-18@cpu.edu.ph
Co-researcher (if any)			
Institution	Central Philippine University		
Address of Institution	Lopez Jaena Street, Jaro, Iloilo City 5000		
Ethical clearance effectivity period:	February 16, 2025		



**PROGRESS REPORT**

1. Start of study: <b>December 2022</b>
2. Expected end of study: <b>February 2024</b>
3. Number of enrolled participants: <b>Six (6)</b>
4. Number of required participants: <b>Six (6)</b>
5. Number of participants who withdrew: <b>Zero (0)</b>
6. Deviations from the approved protocol: <b>None</b>
7. New information (literature or in the conduct of the study) that may significantly change the risk-benefit ratio:
8. Issues/problems encountered: <b>No issues/problems were encountered during the conduct of the study.</b>

Recommendations (For RERB use only)	
DECISION: (For RERB use only)	<input type="checkbox"/> Ask for further information <input type="checkbox"/> Noted and Accept report
Comments of Primary Reviewer (For RERB use only)	
<p><b>RERB Primary Reviewer: (For RERB use only)</b></p> <p>_____</p> <p>Signature over Printed Name</p> <p>Date:</p> <p><b>Researcher/s:</b></p> <p>  <u>ALIYAH KRIS P. SARZON</u>          Signature Over Printed Name</p> <p>Date: 05-28-2024</p> <p><b>Adviser:</b></p> <p>  <u>ALVIN JOHN H. GUSTILO, MAN, RN</u>          Signature Over Printed Name</p> <p>Date: 05-28-2024</p>	

## APPENDIX L

## RERB Final Report Form

 <b>RESEARCH ETHICS REVIEW BOARD</b> CENTRAL PHILIPPINE UNIVERSITY Lopez Jaena St., Jaro, Iloilo City, Philippines 329-1971 to 79 local 3336	
<b>FINAL REPORT FORM</b>	RERB Form No. 13-1
	Version No. 01
	Date of Effectivity: 17 May 2023

**INSTRUCTIONS TO THE RESEARCHER/s:**

*This form is required upon completion of the study. Obtain an electronic copy of this form and supply all information required in the space provided. This form shall be signed by the researcher and adviser before submission to [researchethics@cpu.edu.ph](mailto:researchethics@cpu.edu.ph)*

**GENERAL INFORMATION**

RERB Protocol Number	2023-424-UG-GARZON et al.	Date (DD/MM/YYYY)	06/07/2024
Protocol Title	Lived Experiences of COVID 19 Survivors Using Steam Inhalation in the Management of Infection		
Principal Investigator/s	Garzon, Aliyah Kris P.; Gallardo, Rezza Gift K.; Ganuelas, Christine Denise R.; Garbosa, Reje Mae F.; Gascon, Benedicto Jr. M.; Geralo, Ana Cristine N.		
Department/College	College of Nursing		
Contact No.	09454563309	*Email Address	aliyahkris.garzon-18@cpu.edu.ph
Co-investigator/s (if any)			
Contact No.		Email Address	
Institution of Researcher/s	Central Philippine University		
Address of Institution	Lopez Jaena Street, Jaro, Iloilo City 5000		
Effective period of Ethical Clearance	From: <u>February 16, 2024</u> To: <u>February 16, 2025</u>		
(*for RERB) Primary Reviewer/s			

Type of Study	<input type="checkbox"/> Clinical <input type="checkbox"/> Epidemiology <input type="checkbox"/> Observational study <input type="checkbox"/> Document Review <input type="checkbox"/> Individual based <input type="checkbox"/> Genetic <input type="checkbox"/> Social Survey <input checked="" type="checkbox"/> Others, specify <u>Phenomenology</u>
Review Status	<input type="checkbox"/> Full Board <input type="checkbox"/> Expedited

**FINAL REPORT**

1. Start/end of the Study: <b>December 2022 – February 2024</b>
2. Number of enrolled participants: <b>Six (6)</b>
3. Number of required participants: <b>Six (6)</b>
4. Number of participants who withdraw: <b>Zero (0)</b>
5. Deviations from the approved protocol: <b>None</b>
6. Issues/problems encountered: <b>No issues/problems were encountered during the conduct of the study.</b>

#### 7. Summary of findings:

Based on the experiences shared by the participants, subthemes, themes, and major themes were drawn using Colaizzi's method of data analysis to categorize and discern patterns. The findings revealed five major themes, and eighteen subthemes.

The first major theme, "Inhalation Fusion: Combining Additives and Oral Medication for Respiratory Relief," showcased the various additives used by participants during steam inhalation sessions, including herbs, fruits, oils, and salt while elucidating the experiences of participants who combined steam inhalation with various supplements and medications to manage their COVID-19 symptoms. Subthemes under this category detailed the specific additives utilized, such as Utilizing Herbal Remedies in the Management of COVID-19 Infections, Use of Fruits in COVID-19 Management, Role of Oils in Promoting Airway Clearance, and Salt Solutions: Role of Saline Therapies in COVID-19 Treatment. In addition, with steam inhalation with various supplements and medications to manage their COVID-19 symptoms. Subthemes highlighted the Mist-Med Antibiotic Support: Pairing Steam Inhalation with Oral Antibiotics, Steamy Defense: Pairing Inhalation with Oral Antiviral Treatment, Respiratory Replenishment: Steam Inhalation with Oral Vitamin Supplementation, Mucus Meltdown: Steam Inhalation with Oral Mucolytics for Airway Clearance, Histamine Halt: Combining Steam Inhalation with Oral Antihistamine Relief, and Breathe & Ease: Steam Inhalation with Oral Analgesics for Comfort, with participants sharing their medication regimens and observations.

The second major theme, "Participants' Symptoms Severity," categorized the severity of symptoms experienced by participants into mild, mild-moderate, and moderate cases. Subthemes provided insights into the symptoms encountered by participants within each severity category, ranging from mild symptoms such as nasal congestion to more severe manifestations like loss of smell and taste and difficulty breathing.

Lastly the third major theme, "Impacts of Steam Inhalation in Symptom Management and Recovery to COVID-19 as Observed Within the First 24 Hours, 48 Hours, and 72 Hours," outlined the experiences of participants with steam inhalation in alleviating their symptoms over time. Subthemes under this category detailed the immediate and gradual impacts of steam inhalation within specific timeframes, ranging from immediate relief to ongoing symptom management.

Overall, the findings suggest that steam inhalation, when used in conjunction with additives, supplements, or medications, can provide relief for respiratory symptoms associated with COVID-19. However, its benefit may vary depending on the severity of symptoms and individual responses. While steam inhalation may not serve as a primary treatment for COVID-19, it can be considered as a supplementary therapy to alleviate symptoms and promote comfort.

#### 8. Conclusions/Recommendations:


The findings of the study depicted that most of the participants experienced immediate alleviation, while others reported gradual improvements with consistent usage of steam inhalation. Moreover, steam inhalation produced varying degrees of relief for congestion with certain participants noticing significant improvements and others requiring ongoing application to sustain relief. The essence of the phenomenon is that the lived experience COVID-19 survivors entails the usage of Inhalation Fusion: Combining Additives and Oral Medication for Respiratory Relief, participants' Symptoms Severity and Impacts of steam inhalation in symptom management and recovery to COVID-19 as observed within the first 24 hours, 48 hours, and 72 hours. Furthermore, this was drawn from the similarities of the experiences that the participants shared which are centered around the utilization of steam inhalation, locally known as "tuob" or "suob," as an

alternative remedy for alleviating the symptoms associated with COVID-19 infection. Despite variances in the severity of symptoms and individual responses to the treatment, a common thread emerges in their accounts. They all noted a perceived relief from symptoms such as congestion, coughing, and nasal discomfort after engaging in steam inhalation sessions. These experiences underscore the potential of steam inhalation as a supplementary approach to managing COVID-19 symptoms, particularly in easing respiratory distress and enhancing comfort levels. While acknowledging the need for further research and clinical validation, these findings provide valuable insights into the perceived effectiveness and utilization of steam inhalation within the context of COVID-19 management. These experiences cannot be generalized to the population and were true only to the participants themselves were agreed by a consensual validation by the participants upon the return interview. Overall, these descriptions gave an insight as well as explicated the experiences shared by the COVID-19 Survivors. However, these findings cannot be generalized to all COVID-19 Survivors who utilized steam inhalation in the management of COVID-19 infection, but it could serve as a basis for further studies and research on which the themes that emerge can be a basis for the formulation of a framework for the lived experiences of COVID-19 Survivors who have utilized steam inhalation as an adjunct therapy in the management of the COVID-19 infection.

9. Actions for dissemination of study results:

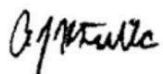
The results of this study can be shared through various channels such as seminars and conferences, present research at relevant conferences, fostering discussion, collaboration, and feedback from peers. This helps in disseminating findings to a wider audience. Discussions, publications, and online platforms for those other researchers who will take significant interest in this particular study. Leverage platforms like Twitter, LinkedIn, or other academic networks to share key findings, engage with the community, and increase visibility.

**Researcher/s:**

  
 ALIYAH KRIS P. GARZON  
 Signature Over Printed Name

Date: 06/07/2024

**Adviser:**

  
 ALVIN JOHN H. GUSTILO, MAN. RN  
 Signature Over Printed Name

Date:06/07/2024

## APPENDIX M

## Plagiarism Scan Chapter 1-5



REVIEW, CONTINUING EDUCATION and CONSULTANCY CENTER

Central Philippine University

Jaro, Iloilo City

Tel. No. 329-1971 local 1008 email: [rceccsec@cpu.edu.ph](mailto:rceccsec@cpu.edu.ph)

Website: [rcecc.cpu.edu.ph](http://rcecc.cpu.edu.ph)

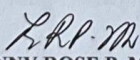


May 20, 2024

## CERTIFICATION

This is to certify that the paper entitled “Lived Experiences of COVID 19 Survivors Using Steam Inhalation in the Management of Infection” by **Rezza Gift K. Gallardo, Christine Denise R. Ganuelas, Reje Mae F. Garbosa, Aliyah Kris P. Garzon, Benedicto Jr. M. Gascon, and Ana Cristine N. Geralo** have undergone Turnitin Similarity Checking/Plagiarism Scanning with a passing percentage of 19% and have passed the requirements (Chapters 1-5).

Prepared by:

  
**LENNY ROSE P. MUCHO, EdD.**  
Director, CPU-RCECC



## APPENDIX O

### Schedule of Activities

<b>Research Activities</b>	<b>Dates</b>
Consultation with Research Adviser	December 20, 2022 - January 2, 2023
Revision of Papers	January 27 - March 2, 2023
Approval from Adviser	March 10, 2023
Submission for Pre-oral Defense	March 20, 2023
Pre-oral Defense	May 1, 2023
Revision of Papers (Post-Pre Oral)	May - July 2023
Ethics Review	August 2023- February 2024
Data Gathering	January-February 2024
Data Analysis	January-February 2024
Consultation with Research Adviser	January-February 2024
Expected Final Defense	February 2024