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The lived experiences of nuclear medicine technologists during Covid-19 pandemic

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**THE LIVED EXPERIENCES OF NUCLEAR MEDICINE TECHNOLOGISTS
DURING COVID-19 PANDEMIC**

An Undergraduate Thesis Presented to
the Faculty of the College of Medical Imaging and Therapy
De La Salle Medical and Health Sciences Institute
City of Dasmariñas, Cavite

In Partial Fulfillment
of the Requirements for the Degree
Bachelor of Science in Nuclear Medicine Technology

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APRIL 2022

ABSTRACT

This study presented the lived experiences of the nuclear medicine technologists (NMTs) during the COVID-19 pandemic. The participants of this study are nuclear medicine technologists working in healthcare facilities before and during the COVID-19 pandemic. A qualitative research design was used, specifically the phenomenological qualitative approach. The participants were chosen through purposive and snowball sampling.

Based on the findings, it can be concluded that the experiences of the NMTs is an interplay of fear, sadness, and happiness. Fear of contacting COVID and/or spreading it to others has become a driving force to be more mindful of the infection control measures, specifically on the use of PPEs and appropriate physical distancing measures. The sadness, happiness, and fear felt by the participants have seemed to balance and helped the participants to cope with the pandemic. There had been notable changes in the personal-social (isolation from family and friends) and professional (workload change, redeployment) lives of the participants. Adaptation to the changes brought about by the pandemic has been evident in the participants. These reflect the resilience of the participants in the midst of the pandemic.

APPROVAL SHEET

This undergraduate thesis entitled, *The Lived Experiences of Nuclear Medicine Technologists During COVID-19 Pandemic*, prepared and submitted by Julia Irish C. Camagay, Reniel De Guzman, Myrh Abigail A. Dulay, Nathan J. Kure, Ann Joane V. Manacpo, in partial fulfillment of the requirement for the degree of Bachelor of Science in Nuclear Medicine Technology, has been examined and is recommended for acceptance and approval for final oral defense.


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The Researchers

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Chapter 1

THE PROBLEM AND ITS BACKGROUND

Background of the Study

The Coronavirus Disease 2019 (COVID-19) pandemic is continuously affecting not only the lives of everyone, but also the healthcare workers. According to Sintema (2020), different countries all throughout the world are affected by the outbreak due to COVID-19 (cited in Chhetri & Pokhrel, 2021, p.134). In the United Kingdom, a study by McGlinchey et al. (2021) discussed how working during the COVID-19 pandemic affected the mental health and well-being of healthcare workers. The results showed different challenges that the healthcare professionals experienced such as infection concerns, impact on patient interpersonal care, isolation from their loved ones, personal protective equipment (PPE) shortage, and redeployment. Despite being at risk of being exposed to the virus, medical departments such as nuclear medicine continue to facilitate and be of service to the patients in order to provide a useful diagnosis and good treatment for them.

Over the years, nuclear medicine has become helpful in the diagnosis of various diseases and treatments and is now being suggested in detecting early signs of inflammation. As stated by Juengling, Maldonado, Wuest, and Schindler (2020), nuclear medicine can detect early signs of inflammatory components of an infection in COVID-19 that might need anti-inflammatory treatment to patients at risk by using Positron Emission Tomography/Computed Tomography (PET/CT) scans. Nuclear medicine is a specialized branch in radiology that utilizes radioactive materials that facilitates the diagnostic and

therapeutic procedures in a variety of processes of disease (European Association of Nuclear Medicine [EANM] Committee, 2017).

Nuclear medicine in the Philippines is one of the emerging fields of expertise in radiology. As stated by Bautista and San Luis (2016), as of 2016, around fifty-eight (58) nuclear medicine centers are available all throughout the Philippines with around two hundred and fifty (250) nuclear medicine technologists (NMTs), radiopharmacists, radiochemists, and medical physicists, ninety-five (95) nuclear medicine physicians with board certifications, seven (7) nuclear medicine training institutions that are certified, as well as a regional index in the Philippine Journal of Nuclear Medicine (Bautista & San Luis, 2016).

Currently, De La Salle Medical and Health Sciences Institute (DLSMHSI) is offering a four (4) year degree program of Bachelor of Science in Nuclear Medicine Technology (BSNMT) in the Philippines. The pioneering batch of NMTs is expected to graduate in 2023. The curriculum for this program develops future NMTs for the preparation and administration of radioactive materials, radiation safety, quality assurance, and quality control, as well as in using highly specialized imaging equipment to produce images that can be used in visualizing pathologic situations and discern the physiology of various organs to aid in diagnostic and therapeutic operations (“College of Medical Imaging and Therapy”, n.d.). Moreover, the present practicing nuclear medicine technologists are not originally graduates of BSNMT but are endorsed and approved licensed healthcare professionals who have a Bachelor of Science degree in courses

related to allied health including, but not limited to radiologic technology, medical technology, nursing, or pharmacy.

According to (Philippine Nuclear Research Institute [PNRI], 2014) under Section 41 of the Code of PNRI Regulations (CPR) Part 13, upon the endorsement and approval of Radiation Safety Committee (RSC), the designated NMTs are those licensed healthcare professionals who hold a Bachelor of Science degree in allied health courses such as, but not limited to nursing, medical technology, pharmacy, or radiologic technology; and/or fulltime certificate, diploma or degree courses in nuclear medicine; and are duly licensed by the Philippine Professional Regulations Commission (PRC). The NMTs also completed 200 hours of PNRI-approved classroom and laboratory training in basic radionuclide handling techniques applicable to the medical use of radioactive material; and has at least six (6) months of relevant, full-time work experience in nuclear medicine activities at a medical institution under the supervision of a nuclear medicine technologist in a PNRI license.

Nuclear medicine departments and nuclear medicine technologists in the Philippines are also affected by the pandemic as part of the healthcare system. In Cagayan De Oro City, Northern Mindanao, some NMTs are made to work on a skeletal workforce. A number of nuclear medicine services have also been closed down. Due to the influence of the pandemic in the area, hospital staff employees were being relocated to different sectors, including triage areas and logistics in several government hospitals (Bom, Pascual, Choudhury, & Al-Ibraheem 2021).

According to the publication released by (International Atomic Energy Agency [IAEA], 2020), the world's central intergovernmental forum for scientific and technical cooperation in the nuclear field, the exposure of nuclear medicine departments to the coronavirus takes place in the reception room, during patient processing, transcribing of patient's history, physical examination, patient transport, and imaging diagnosis.

Therefore, the goal of this research is to gain a deeper understanding of the NMTs' lived experiences as they belong to the category of healthcare workforce that are likely to be exposed in COVID-19. The result of this research study will contribute in raising awareness about the lived experiences of NMTs during the COVID-19 pandemic that are working in healthcare facilities. The experiences of the nuclear medicine technologists can be of help for future generations if ever a pandemic will occur once again. This can also be used not only as a reference for future researchers, providing insights as to how the present NMTs handled their personal lives and work throughout the COVID-19 pandemic, but also to increase everyone's understanding about the practice of NMTs in the Philippines.

Purpose Statement

This study seeks to know the lived experiences of NMTs during the COVID-19 pandemic. A phenomenological qualitative research design with the grand tour question, "What are your experiences in working as a nuclear medicine technologist during the COVID-19 pandemic?" was used to accomplish this purpose.

Scope and Limitation of the Study

The researchers focused on (1) nuclear medicine technologists, (2) working in healthcare facilities before and during the COVID-19 pandemic, (3) being able to articulate their experiences, and (4) willing to be a participant in the research study. According to the (Philippine Society of Nuclear Medicine [PSNM], 2015), as of 2015, there are fifty-six (56) accredited nuclear medicine departments in the Philippines. All healthcare facilities within the Philippines that offer nuclear medicine services were set as a target setting.

There are nine (9) participants involved in this research study. The data saturation was reached after interviewing the ninth (9th) participant. When the majority of the participants' answers shared the same specific phrase, idea, or thoughts and no new ideas were obtained in the interview, the referrals were no longer required, and the researchers' data collection was put to an end.

The data was gathered through one-on-one interviews through audio and video recorded meetings using Google Meet and Zoom Cloud Meeting. The limitation of this study is that it has no intention of generalizing on all of the experiences of the NMTs in the Philippines.

Definition of Terms

Lived Experience. According to McIntosh and Wright (2018), this refers to the presentation and perception of a researcher or a researcher participant's personal experiences, perception, options, and how those circumstances affect an individual's insight of understanding. In this study, it refers to the experiences that the participants

went through when working as NMTs in healthcare facilities during the COVID-19 pandemic.

Nuclear Medicine. Based on EANM (2017), nuclear medicine is a medical specialty in which radioactive materials are used for diagnosis by imaging and non-imaging techniques and for therapy in many disease processes. In this study, it refers to the specialized area of the participants.

Nuclear Medicine Technologist. As stated in the Bureau of Labor Statistics (2021), it pertains to a healthcare professional that handles and prepares radioactive drugs and administers them to patients for imaging and treatment purposes. Also, they give technical support to the physician or to others who diagnose and treat patients. They are the participants of this study.

Chapter 2

METHODOLOGY

This chapter presents the research design and the procedures that have been done for this study. This covers the explanation regarding phenomenological qualitative research approach as the research design, the assumptions of qualitative research, roles of researchers, the sample and sampling method, data collection, and the data analysis procedures.

Research Design

A qualitative type of research design was used as it describes the lived experiences, people's behavior, the function of an organization, as well as the interaction between people to form relationships (Teherani et al., 2015). Phenomenological approach was implemented to get the needed information to obtain the goal of the study. According to Neubauer, Witkop, and Varpio (2019), phenomenological research is a method that explores the point of view of those who experienced the nature of a phenomenon in order to narrate the importance of a particular event. Even though its nature can be overwhelming to the researchers, it is nonetheless an effective strategy in research for tackling difficult issues in the field. The objective of phenomenology is to determine the experience of the participants, both in what and how it happened. New meanings and appreciations might be formed by evaluating an experience as it is subjectively lived, in order to reorient or inform how people perceive such an occurrence. Using this research design, the researchers described and explored the lived experiences of their participants based on their answers in the interviews.

Assumptions of Qualitative Research Design

Assumptions are described by Simon and Goes (2013) as the beliefs that are important to conduct the research study. Assumptions must be direct, and that the quantity of assumptions is enough to describe the phenomenon at hand. Furthermore, processing and analysis of assumptions are more crucial in research methods used to test the theories (Nkwake, 2013).

Epistemological assumption refers to all that counts as knowledge claimed to be justified and expresses the relationship between the researcher and the participants. In order to obtain evidence of subjective viewpoints of the participants, the researchers reduced the distance between them and their participants ("Philosophical Assumptions and Interpretive Frameworks", 2018, p. 20). This was carried out by conducting interviews via various online platforms and establishing relationships with the participants by building a comfortable environment for them to open up and share their experiences as nuclear medicine technologists that are living and working during the pandemic.

The ontological assumption is described as the connection of the nature of reality and its features ("Philosophical Assumptions and Interpretive Frameworks", 2018, p. 20). Upon the creation of the research, the researchers acknowledged the idea that there are multiple realities. In this study, the researchers asked follow-up questions based on the participant's answers to further understand their perspectives. The different answers from different participants have moved the way the researchers view things differently. The researchers presented the multiple perspectives of reality by utilizing the actual words of their participants and from the themes they developed in their findings.

In axiological assumptions, it characterizes how the diversity of values causes bias (“Philosophical Assumptions and Interpretive Frameworks”, 2018, pp 20, 35-36). According to Dudovskiy (n.d.), these values affect how the research was conducted and what the researchers value in their results. The different values of the researchers may distort the results of the study which may lead to wrong interpretations. Thus, the researchers discussed their biases and acknowledged that anyone with different values can have different analyses of the same set of data. The researchers discussed the values that influenced the narratives of the participants and put their interpretation along with it.

The methodological assumption is recognized as rational, emerging, and is formed by the researcher's participation in gathering and analyzing data (“Philosophical Assumptions and Interpretive Frameworks”, 2018, p. 21). According to Dave (2013), the researchers followed the inductive method where the original data text is compressed into a format that is short and condensed. Since qualitative research is inductive and emerging, there are times where changes may occur. Thus, the researchers generated follow-up questions which they modified based on the different answers of the participants during the interview in order to better understand the problem in the research. This assumption was also used by the researcher to thoroughly describe the context of their study.

Roles of the Researcher

The researchers' role in this study is to know and have a better understanding of the lived experiences of the NMTs during the COVID-19 pandemic. To do so, the

researchers should position themselves in the study. To better understand, as stated by Wolcott (2010), the researchers must show their background to the readers to show their capability in interpreting the information and what insights they have gained from the study (cited in Creswell, 2018).

According to Creswell and Poth (2018), the researchers are the primary instrument in qualitative research. The researchers recorded the participants' audio-only or video type of interview session. During the interview, the researchers exhibited their good listening and communication skills as they paid attention to the experiences that their participants had shared. Austin and Sutton (2014) stated that in qualitative research, to comprehend the perspective of the participants, the researchers will let them speak for the majority of the time.

The researchers collected all the necessary data through taking notes, observing the subject, and conducting interview. They also formulated questions that further explored the answers of the participants. The research reflected on the different perspectives of each of their participants in the study. Follow-up questions were asked because the researchers opt not to rely on a single piece of data to avoid biases and to analyze the information needed, making it more organized, easy to review, and categorized.

The researchers proficiently transcribed the data, which helped them to achieve accuracy and be as precise as what the participants shared. The transcription was made easier with the aid of having the ability to use and navigate through the Microsoft Word application. In addition, the researchers kept the collected personal information of the

participants confidential and analyzed the data and formulated an ample explanation of the experiences of the participants during the COVID-19 pandemic. Afterwards, it was transcribed into word format after the interview and analyzed the data accurately.

Sampling Method

The participants in this study were selected using purposive sampling and snowball sampling. Purposive sampling is a sampling method wherein the researchers would choose their participants based on the participants' proficiency and knowledge with the phenomenon of interest (Etikan, Musa, & Alkassim, 2015). Meanwhile, snowball sampling is one of the most favored techniques in a qualitative study. The researchers began with inviting a small group of people who fit in with their criteria to participate in the study (Geddes, Parker, & Scott, 2019). The initial participants were chosen by the researchers based on the criteria of the study as it is within the purposive sampling. Afterwards, they were asked to refer to other participants who are suitable for this research study. The referred participants were evaluated by the researchers to know whether they fit within the criteria. The recommended participants continued this cycle until data saturation was met.

The participants of the research study were chosen based on the following criteria: (1) nuclear medicine technologists, (2) working in healthcare facilities before and during the COVID-19 pandemic, (3) able to articulate their experiences, and (4) willing to be a participant in the research study.

Data Collection and Analysis

After the approval of the Dean of the College of Medical Imaging and Therapy and the Chair of Research and Development on January 24, 2022, the researchers started their data collection. On the 1st of February 2022, Google Forms containing the informed consent and the letter to the participants was sent to the potential participants. The informed consent was signed by the participants after getting their approval to participate in the study. The researchers then scheduled an interview with their potential participants after acquiring their approval and consent to be part of the study through Google Forms.

The interviews were conducted from February 2 until March 3, 2020, through Zoom Cloud Meeting and Google Meet. The researchers were able to interview nine (9) participants. The first (1st) participant referred one (1) possible participant to be interviewed. The researchers then asked for referrals and found three (3) prospective participants where one of them referred two (2) more participants. Later on, the sixth (6th) participant referred two (2) other participants. The data saturation was met in the ninth (9th) participant. Overall, seven (7) of the participants agreed to have their cameras turned on during the interview and two (2) were interviewed with audio only. The number of researchers present during the interviews varied based on the preferred number of interviewers that the participants answered in the Google Forms.

During the interview, the researchers asked for consent if they would allow the researchers to record the interview as one of the certain specific parts that the researchers reiterated from the consent form even though it was already indicated. After

acquiring their permission, the researchers then moved on with the discussion of the context of the informed consent to the participants to reiterate certain points and entertain any questions from the participant if they have any. During the initial interview, the grand tour question asked was, "What are your experiences in working as a nuclear medicine technologist during the COVID-19 pandemic?". For clarity, the main interviewer used an open-ended type of questions that were based on the provided answers of the participants.

While some of the researchers were tasked to interview the participants, the rest were assigned to transcribe the interview itself word by word. According to Stuckey (2014), it is crucial to convey how the participants respond to questions because their inflection and tone are significant in the transcription. The researchers must be mindful of how the intonation of the participants affects the analysis to be able to manage the data to attain the purpose of answering the research question.

The data gathered from the interviews were stored in a retrievable format, specifically in Google Drive, that is only accessible exclusively to the research members. The researchers encrypted the transcription of answers of the participants to keep their data confidential and secured. The researchers were tasked with storing data for three (3) to five (5) years, as stated in the College of Medical Imaging and Therapy (CMIT) Thesis Manual 7th edition by Crudo, Molon, and Olavidez (2021).

Follow-up interviews with the participants were scheduled by the researchers after their initial interview and transcription of data to verify the transcribed data and for

further clarifications and additional questions. This helped the researchers to have a more detailed and accurate interpretation of the data.

The researchers followed thematic analysis for their data analysis procedure. Maguire and Delahunt (2017) described thematic analysis as a process of identifying themes and patterns within the qualitative data and utilizing them to address an issue in the research. The researchers conformed to Braun and Clarke's six-step framework in doing their thematic analysis.

Once the researchers finished gathering their data, they started their data analysis procedure by becoming familiar with their data. This was achieved by reading and reviewing their transcripts. This was done to make sure that the researchers know their data.

It was then followed by the generation of the initial codes. The researchers assigned preliminary codes to a portion of the data that was relevant to the research question. The researchers used descriptive coding to make sure that they understood all of the important details from their transcript.

After getting the initial codes, the researchers proceeded in searching for the themes. A theme is a pattern that describes something important about the data acquired and the research question (Maguire & Delahunt, 2017). The researchers then studied the codes to see if they fell under a certain theme. The researchers made a table that contained the codes from the responses of the participants to easily organize them into categories and themes.

According to Bree and Gallagher (2016), it is helpful to collect all the data that is connected to each theme. It is simply done by making use of the 'cut and paste' function in any word processing package or with the aid of Microsoft Excel (cited in Maguire & Delahunt, 2017). In this step, the researchers evaluated, adjusted, and developed the initial themes that were recognized after searching for the themes. The researchers were able to find sixty (60) significant statements in their transcripts. The researchers looked through the significant statements related to each theme and examined whether it supported the theme.

Afterwards, the researchers considered whether the themes fitted in the whole data set. Upon reviewing the themes, some themes were removed, and some themes created subthemes. The researchers formed four (4) themes and three (3) subthemes. The researchers named and characterized each of the themes into songs that showed continuity of thoughts or events as mentioned by the participants. The researchers named their themes as (1) emotional rollercoaster, (2) hard times, (3) start of something new, (4) rise up. These are all based on song titles that described the experience mentioned by the participants.

After naming the themes, the researchers then explained each theme and subthemes that they had created. This was done to identify the meaning and relationship that each theme and subtheme had, which then helped the researchers in sorting and understanding their data further.

Chapter 3

FINDINGS OF THE STUDY

This chapter presents the findings, conclusion, and recommendations of this study. It starts with the introduction of the participant's profiles, followed by the thematic discussion of the participant's lived experience during the COVID-19 pandemic, as well as the conclusions and recommendations after that.

Results and Discussion

There are nine (9) participants in this study. Most of the participants are in the young adult stage, with the majority in their twenties (20's). The number of years that the participants are working as an NMT ranges from two (2) to seventeen (17) years. Four (4) participants have the least number of years working as an NMT, with over two (2) years of working experience. One (1) participant has three years (3) of working experience as an NMT. Two (2) participants have five (5) years of experience in working as an NMT. One (1) participant has a working experience of ten (10) years as an NMT. Lastly, one (1) out of the nine (9) participants has seventeen (17) years of working experience as an NMT.

The following are thematic discussions of the lived experiences of nuclear medicine technologists during the COVID-19 pandemic. There are sixty (60) significant statements identified which are clustered into four (4) themes and three (3) subthemes.

Theme 1: Emotional Rollercoaster

This theme presents the different emotions that the participants felt while working in the healthcare facilities during the COVID-19 pandemic namely sadness, fear, and happiness. Their experiences in working during this pandemic is similar to a song

performed by Green, V (2002), entitled “Emotional Rollercoaster”, the song lyrics goes, *“Yesterday, I told myself I was gonna be okay, gonna start a new day, be truly happy, I was gonna take control of me, but eventually reality hit me mentally, physically, emotionally”*. The participants felt a variety of emotions as the reality of working during this pandemic hit them. It was like a rollercoaster ride of emotions to them as sometimes, they feel sad because of the effects of the pandemic. Despite all of these, they still managed to be optimistic about their situation.

Overall, the participants exhibit how their emotions are related to their experiences working this COVID-19 pandemic. As reported by Ardebili et al. (2020), the COVID-19 pandemic made the healthcare workers experience different kinds of emotions.

Listed below are the three (3) subthemes under the theme, emotional rollercoaster.

Subtheme 1: Sadness

“... ang na-feel namin, of course, na-sad, hindi ba? Kasi we are not used to that kind of situation, we are not used to seeing each other the entire day. We are used to seeing and treating the patients regularly, pre-pandemic. So, na-sad. Na-sad lang din...”

“... iyong feelings ko talaga for this pandemic, of course, na-sasad ako kasi I also lost people (resigned co-workers) during this pandemic, and siguro eye opener na rin iyon para maging mas careful ako doon sa work ko...”

“... medyo sad kasi you have to move away from your family, then, I was thinking why do I have to this extent na I have to move out...”

“... iyon na lang kasi parang pahinga mo sa situation lately, na dapat magkikita-kita kayo, pero since, iyon nga, nag-popositive iyong mga kaibigan namin, medyo nakakalungkot lang...”

“... parang noong ako, nagka-COVID ako, parang I feel bad kasi quarantine rin sila. So, hindi nila makita iyong anak nila, hindi sila

makauwi sa family nila, hindi ba, parang, alam mo iyon, nakakalungkot. Nasabi nila, "Hindi, okay lang iyan, okay lang kami dito, huwag mo kami isipin." Pero, syempre, nakaka-sad pero mabuti naman negative sila, hindi sila nahawa..."

"...iyong naramdaman ko noong may lack of communication ako with my family ay lack of sleep, lack of appetite, at saka sadness na rin."

This subtheme focuses on the sadness that the participants felt while working in healthcare facilities during the COVID-19 pandemic. The moments in which the participants felt sad included the times when they had to move away from their family, when their friends tested positive for COVID-19, when they were still not used to the changes in treating the patients, when they felt that they still lack experience, when they lost people they know, when they cannot see their family, and when there is a lack of communication with their family. Based on the results, each participant has their own causes of their sadness. Most of the causes of their sadness involved their work, friends, and family. Since they are part of the frontliners, the pandemic affected their work and the time spent together with their family and friends, and it gave rise to the participants feeling sad.

In China, Huang et al. (2020) investigated nurses' emotional responses and coping styles, and also conducted comparative study with nursing college students. A total of 850 questionnaires were provided to the participants, and the results revealed that frontline nurses showed anxiety, fear, sadness, and anger. This result of the study is similar to the experiences of the NMTs, as shared by one of the participant that has been working as an NMT for 2 years, *"... noong umpisa kasi, syempre, bago ako...parang 2020 ako na hire, January, so 2 months palang na normal iyong world... medyo na-shock ako*

at saka nalungkot din kasi kulang pa iyong experience ko (working experience as an NMT) ...kasi...kumonti iyong pasyente... bihira na lang iyong mga special procedure..."

Furthermore, as mentioned by Huang, Lei, Xu, Liu, and Yu (2020) during COVID-19 outbreak, nurses are subjected to psychological stress. They were exposed to severe psychological stress due to factors such as unfamiliarity with new specialized working environments and procedures, as well as the separation from their family. Thus, it is clear that the factors that Huang, Lei, Xu, Liu, and Yu stated in their study were also present in the NMTs.

Subtheme 2: Fear

"Nagkaroon ako ng fear noon kasi hindi kasi ako ma-interact talaga na sa mga pasyente. So, hindi naman sa hindi ka marunong kumausap. Kasi, syempre, lalo na noong pandemic, naging mas sensitive iyong mga tao dahil nga, syempre, kapag nakikita kasi nila na hindi mo alam iyong ginagawa mo..."

"... there will always be that sort of— Of course, fear that since you work in the hospital, you are still quite at the risk for contracting these kinds of diseases, hindi ba? So, of course, some of us were very paranoid (feeling scared) during the pandemic, iyong kasagsagan niya, and actually some of us opted to just resign."

"... as a healthcare worker, takot din kami na ma-expose, kahit na kaunti iyong patients, still, may patients pa din na hindi mo alam kung carrier ng COVID..."

"... since I am also a medical technologist by profession, I guess you know naman na medical technologists are the people din na frontline when it comes sa collection ng swabs ganoon... Ako kasi, napull-out ako from nuclear medicine, doon sa time na sobrang pati mga medtech (medical technologist) sa main laboratory nagkakasakit na ... first thing is natakot ako kasi, biruin mo, nag-work as nuclear medicine tech (NMT) tapos ibababa ka (pull out). May mga maiisip ka na parang dito sa nuclear medicine, kakaunti lang ang hinaharap ko, sa baba (laboratory), kabundok na mga pasyente because of COVID, ganoon... Basically, ang

kinatokot ko lang kasi is mas mataas iyong risk ko na ma-contact iyong COVID, because medical technologist, they handle from collection, processing, tapos sila mismo iyong alam mo iyon (in the frontline)?..."

"... I am always paranoid (feeling scared), I am always conscious kung sino iyong mga nakakasama ko, wherein during that time pa nga, bongga tayo magsuot ng mga N-95 mask natin, as in, kasi sobrang takot na takot..."

"...iyong first time ko, asymptomatic lang ako. Tapos, noong time na iyon, 14 days pa iyong quarantine, and thankfully naman, vaccinated ako. Noong una, natatakot ako kasi iyong quarantine facility ng (name of hospital) for the staff is sa (room used for quarantine), so, mga classroom siya... tapos sa isang room, apat kami. Syempre, nakakatakot kasi mga kasama mo may symptoms, tapos ako, asymptomatic..."

"Unang una syempre takot, scared talaga of going out or mingling out with your hospital friends or co-workers ganiyan. So iyon iyong one factor na talagang nagbibigay talaga ng emotional scare sa amin."

"... sobrang nakakatakot pumasok kasi hindi mo sure kung sino iyong positive or kung sino iyong hindi... kailangan namin protektahan iyong sarili namin like full gear na PPE, like wearing face shield, PPE, and N-95..."

"... iyong boyfriend ko rin, radiologic technologist (RT) siya, and then, nag-positive siya last year. Tapos, syempre, nagkikita kami... So, syempre, sobrang natakot ako na parang "Hala! Exposed ako", but then, you know what? Hindi ako nag-positive..."

"... syempre, everybody is scared of the pandemic noong unang dating niya (COVID virus) dito. Like dati kahit wala akong patient may hinawakan lang akong something dito sa loob ng office, humawak lang ako ng phone, tatawag lang ako sa floors, feeling ko ang dumi na ng kamay ko..."

"... pero nakakatakot pa rin kasi what if, iyon nga, magkaroon pa rin ng hawaan, tapos, imagine mo, naka-full gear pa kami noon na PPE..."

"... habang tumatagal naman, syempre, nandoon naman iyong fear na magkaroon ka ng COVID, ma-aquire mo siya, hindi lang sa staff, kundi pwede mo kasi siyang— Syempre, umuuwi ka sa family mo, what if

family member mo may mag-positive? Or hindi mo alam, ikaw iyong mag-uwi ng COVID sa family mo, hindi ba?”

“... noong first na nagkaroon ng pandemic dito sa Pilipinas, nagka-COVID kasi ako. Parang nasa hundreds pa lang iyong COVID noon—COVID positive, then, kabilang na ako doon. So, sobrang nakakatakot kasi hindi pa prepared iyong hospital sa kung anong treatment, or kung ano mang aksyon iyong gagawin nila...”

This subtheme focuses on the fear that the participants felt on the instances in which there is a risk of being exposed to COVID, contracting the virus, high volume of patients, patient interaction, going to work, hospital preparedness for COVID-19, and mingling with others made the participants feel fear while they are working in the healthcare facilities before and during the COVID-19 pandemic.

According to the answers of the participants, most of their fears involved their work and their social interaction with other people. As a member of the frontline, the participants feeling scared is normal. As described by Cawcutt, Starlin, and Rupp (2020), fear is a negative thought that causes people to avoid certain stimuli because they are regarded to be dangerous. Fear is a natural reaction in many situations, and it can lead to a reduction in risky action. Apparently, as described in the literature, it is indeed true that fear can affect one's action. Just like what the 22-year-old participant with two (2) years of experience working as an NMT reported, *“... nagka-COVID kasi ako... so sobrang nakakatakot... kaya ngayon doble ingat na ako, na hindi na ako masyado lumalabas...”*. The fear that she had experienced during the pandemic made her more careful when it comes to leaving the house and interacting with other people.

The findings revealed that based on the statements of the participant, some of them experienced fear in their workplace. For instance, fear made a 24-year-old nuclear medicine technologist participant with two (2) years of experience adjust her working practices, which she finds a difficult thing to do. Moreover, a 26-year-old nuclear medicine technologist with five (5) years of working experience as an NMT said he and his coworkers were cautious because they were fearful of contracting the virus. The fear resulted in some of his coworkers opting to resign.

The recency of the virus has also caused fear to one of the participants. A 22-year-old participant with two (2) years of experience as an NMT shared about the fear that she felt when she was tested as COVID positive. She stated that since she was one of the first Filipino who tested positive during the early days of COVID, she was scared because she felt that the hospitals were not yet ready for treating those kinds of patients.

Overall, the participants' fear played a role in their overall experience. COVID-19 is said to cause fear and panic in some people, according to Satici, Kayis, Satici, Griffiths, and Can (2020). These feelings can be heightened by fears of becoming ill, contaminating others, death, as well as the passing of loved ones. Worries about not being able to receive essential medical care or the prospect of losing one's work as a result can also weigh heavily on one's thoughts. However, based on the statements that the participants have shared, it can be seen that the sources of their fear are multi-faceted, but such fear has also led to a positive behavior on the part of the NMT as some of them used the fear they felt as a way to change their way of working.

Subtheme 3: Happiness

“... nakakatouch and nakakatuwa. Kasi when you are in this job as a frontliner, hindi mo maiiwasan iyon kung hindi ka man mag-positive, magiging patient under investigation (PUI) ka, or kung hindi mo man alam, ma-eexpose ka... so having that kind of support system (family, friends, and workmates) is nice.”

“... of course, matutuwa ka, parang lalakas iyong loob mo na pumasok, mag-suot ng scrub suit, mag-work ganoon. Lumalakas iyong loob mo and mas na-oovercome noon iyong fear kasi alam mong parang may sort of camaraderie or peers talaga during that time...”

“Syempre, matagal na isolated, matagal na walang social interaction, kaya iyon, masaya na maka-hang out ulit, maka-meet with friends ulit.”

“Masaya kapag nag-uunbox ka ng gusto mo, nabibili mo iyong gusto mong merch, and parang nawawala iyong pagod mo sa work...”

“Ako, happy naman ako... na-eenjoy ko siya (benefits that the healthcare workers acquired) kasi parang, alam mo noon, noong mga 2020, na parang masyadong pine-praise ang mga healthcare workers. Sige, priority— May mga nagdo-donate ng pagkain, wala kang traffic, walang coding. Sa grocery, hindi ka na pipila, may frontliners’ lane...”

“... but you know, it is a big emotion of happiness sa puso mo if you are able to serve the patient...”

“...sa totoo lang, medyo masaya ako kasi medyo na-less na iyong ka-toxican (patient number)...”

“At first, masaya. Kasi syempre iyong workload na sobrang dami, na sabay-sabay hindi mo alam saan mo sila ilalagay. Masaya kasi limited, hindi madami iyong patients...”

This subtheme focuses on the happiness that the participants felt while working in the healthcare facilities during the COVID-19 pandemic. The events wherein the participants felt happy included when they receive support from their family and friends, when they unbox things they wanted, when they are able to serve their patients, when

they have a camaraderie in their workplace, when they are able to enjoy the benefits of being a frontliner, and when the number of patients were diminished.

Based on the statements that the participants mentioned, it showed that even through the stressful times, they are able to feel joyous. As shared by a 26-year-old participant with five (5) years working experience as an NMT, currently working as an NMT during COVID-19 outbreak, “... of course, *matutuwa ka, parang lalakas iyong loob mo na pumasok, mag-suot ng scrub suit, mag-work ganoon. Lumalakas iyong loob mo and mas na-overcome noon iyong fear kasi alam mong parang may sort of camaraderie or peers talaga during that time...*”, it shows that even through the pandemic, they are able to feel happy because of the moral support provided by their family or friends and that emotion influence their drive to go to work. For the participant, camaraderie was important to him as for him, it became a tool to overcome the fear that he had experienced during the pandemic.

In China, according to the study of Mo et al. (2021), be it positive or negative, people can experience both emotions at the same time, even under the most challenging situations. According to the findings of their study, Chinese health workers were happier because they felt more linked to their colleagues and personal support groups. The findings of Mo, Layous, Zhou and Sedikides are similar to what participants PA and PE mentioned in their statements.

As the NMTs are part of the frontline, they felt happiness when a sense of camaraderie is present with their colleagues and when they felt the support that their

personal support groups offer. Thus, the finding of Mo et al. (2021), is also applicable to the health workers, such as NMTs, working in the Philippines, not only those in China.

The participants also expressed that they found happiness in different things, such as those related to material things, or even those in connection with the benefits of being a frontliner. They also felt happy when they are able to serve their patients, and when they are able to meet-up with their friends. Also, for a participant who works as an NMT in a healthcare facility for seventeen (17) years, even though she felt drained because of the discomfort of wearing the PPE, her working experience was not greatly affected by the PPE, and she found delight in serving her patients. However, some of the participants also felt happiness when the number of patients decreased in the department. They were happy because in their perspective, less number of patients means that it decreases their workload, just like what the two (2) other participants expressed in their statements.

Theme 2: Hard Times

This theme presents the difficulties that the participants experienced while working in the healthcare facilities during the COVID-19 pandemic. A song entitled, "Hard Times" composed and sung by Paramore (2017), with a line saying, "*All that I want is to wake up fine, tell me that I'm alright, that I ain't gonna die*" reflects the experiences of the participants while working during this pandemic. As a healthcare worker, they always strive to perform their respective duties all the while trying to survive these hardships. They try to serve their patients as best as they can, however, the pandemic makes it difficult for them to do so. A study in Bangladesh by Razu et al. (2021), about the

challenges faced by healthcare professionals during the COVID-19 pandemic, stated that throughout the world, the pandemic has raised significant difficulties for healthcare providers. Nasrabadi et al. (2021) described that the healthcare staff are dealing with increased stress and workloads as the prevalence of COVID-19 rises.

“Well mas mahirap na siya kumpara doon sa pre-pandemic since ayon ang dami mong iniinput (details about if patients have covid symptoms). Like for example, sa mga patients na hina-handle ko ngayon is iyong iba talaga iyong hindi siya carrier ng COVID...”

“... so, ang hirap mag plano, mahirap magplano ng resources mo, noong materials (Radioactive Materials) mo pero gagawa ka ng paraan para magkaroon ka ng contingency kung paano pagaganahin iyon...”

“So iyon iyong naging struggle talaga dito sa amin sa situation namin kasi parang hindi pa nakakapag bigay iyong Department of Health (DOH) ng team to assist, kasi hindi ba nagkaroon ng workforce? Parang this workforce will be used to assist during pandemic pero we are tough initially kasi wala pa namang ganoon. Nabago nga lahat hindi ba? So wala pa din nung team na naha-hire ang DOH. So, kumuha siya sa mga empleyado niya. So, mga ganoong bagay. But we are able to conquer it naman because, syempre, kahit papaano, may background ka on how to handle specimens. But isa ding mahirap, na tough, syempre, iilan lang naman ang mga medical technologist to do that, hindi ba? Since syempre, nasa medical field ka, even though hindi kami medical technologist, we were taught to do so...”

“As an NMT, the very first few months of the pandemic was actually very difficult, it was difficult to the point na you have to adjust everything (family, budget, and work) ”

“Sa simula lang medyo mahirap. Sa simula, for sure ako medyo nahirapan ako pati iyong mga kasama ko. Nahirapan sila mag-adapt, nahirapan sila mag-schedule and everything kasi nga may mga finollow na protocols...”

“... iyon iyong peak of pandemic and we were all scared, hindi ba? Then, ang mahirap kasi doon, you have to be completely geared, aside from the overall, meron pang isang nilalagay na gown, and then you have to wear these goggles along with your face shield, tapos nakacover ka,

hindi ba? Para kang astronaut... so, it was really a draining experience, and sobrang init, and then, you have to do it during morning until afternoon, so, talagang pawis na pawis ka, ganiyan. Pwede mo nang pigain iyong damit mo, iyong short mo, ganiyan. So, iyon iyong naging struggle talaga dito sa amin sa situation namin kasi parang hindi pa nakakapagbigay iyong Department of Health (DOH) ng team to assist... so, mainit. Mainit siya. Iyong doon sa loob kahit na naka open iyong air conditioner natin. So, iyon iyong difference kasi medyo draining because iyong movement mo, when you are wearing this overall type of PPE, it was like, draining, kasi unang una, mainit talaga, and you have to stay for like an hour. Actually, more than an hour pa kapag nag-extend pa iyong imaging procedure noong patient.”

“... ang hirap din gumalaw, tapos especially mag position ka ng patient, pero iyong face shield mo nag-momoist, so, mahirap mong makita iyong screen. Mahirap mag-suot ng PPE.”

“One, mask. It affects in a way na it is hard to talk to patients kasi iyong mask. Hindi ka nila masyado maintindihan, marinig.”

“Then, iyon din, face shield. Sobrang hirap kasi minsan mabigat tapos kakain ka. Syempre, everyday mo pa iyon idi-disinfect before and after shift, so, ang hassle. Tapos, syempre, kakausap sa patient, magposition ka, alam mo iyong bababa siya, parang ang hirap makahanap ng perfect na face shield.”

“... kapag naka-gloves din, hirap din kami sa pag-assist sa patient, and sa pag gamit ng computer kasi kailangan mo magtanggap ulit ng gloves then suot ulit...”

“... tapos PPE, iyon din, ang hirap na hindi mo kasi siya pwedeng tanggalin after. Kailangan, the whole day ka doon... sobrang hirap ng movement mo lalo ...”

As part of the frontliners, some of the participants revealed the difficulties they encountered when it comes to their work in healthcare facilities during the pandemic. Based on the statements of the participants, it can be seen that working during the pandemic is much more difficult than the pre-pandemic, the aftermath of the impact of pandemic can be viewed on their work. As stated by Nasrabadi et al. (2021), due to the

increasing cases of COVID-19, healthcare workers are faced with additional workloads. Similarly, there were three participants who also experienced difficulties while working in healthcare facilities during the COVID-19 pandemic. According to one participant working as an NMT for two (2) years, the number of patients' information to be inputted increased. He found it more difficult than pre-pandemic.

The other participant who has ten (10) years of experience as a NMT also experienced a hard time in planning the radioactive sources because they have to make a solution for the contingency of it due to its half-life and because of limited transportation during lockdown. Thus, seventeen (17) years in practice as a nuclear medicine technologist mentioned that she experienced re-deployment to other facilities as a substitute for medical technologist during the first few months of COVID-19 because of insufficiency of employees which she finds difficult. Their statements also supported the statement of the literature, and these statements show that a change in their workload has occurred in nuclear medicine, thus making it difficult for them.

For the statements shared by the three other participants, it shows that it was difficult for them to adjust during the first few months of the pandemic due to the changes of protocols.

Some of the participants also expressed the difficulty they experienced in wearing their PPEs at work. As stated by Liu et al. (2020), working with PPE for a length of time was a major physical and professional challenge. By reason of watertight protective clothing, they break out in a sweat as their clothing becomes soaked.

It is also stated by Lui et al. (2020) that caregivers were weighed by the PPE as their action was fumbling and their safety goggles faded quickly which made the work much more burdensome. It is shown in the statement of one of the participants that NMTs also experience this kind of burden. It is stated that the participant was experiencing difficulty in visualizing the monitor screen as their face shield became moist. In addition, a participant expressed the inconvenience of disinfecting the face shield before and after the shift, as well as determining the proper face shield size, which was addressed by a 26-year-old with 5-years of working experience as an NMT. This statement supports the study of Alzunitan et al. (2021), about healthcare worker perceptions of face coverings during the COVID-19 pandemic. They have conducted a survey of staff at an academic medical center in the United States and examined the comfort and acceptability of face shields and face masks, as well as the benefits and drawbacks of it.

The findings revealed that healthcare workers changed or disinfected their face shields more frequently than face masks after each use. Despite the fact that they made it easier to breathe, they were also found to be less comfortable to wear. The experience of the healthcare workers in the study of Alzunitan et al. (2021) was similar to what one NMT participant experienced.

A participant that has been working as an NMT for 2 years showed that she is having a hard time in putting on PPE, like gloves, in assisting the patient and when using the computer.

In addition, a participant that has been working as an NMT for 5 years expressed that it is difficult to move freely while wearing PPE the whole day, especially when they

only wear what is being donated to them even if it is not in their sizes, since she mentioned that their PPEs are limited only.

Theme 3: Start of Something New

This theme presents how the participants adjusted to the changes that they experienced while working in the healthcare facilities during the COVID-19 pandemic. The experiences of the participants can relate to the lyrics of the song Start of Something New performed by Efron and Hudgens (2006), in the line *“I never knew that it could happen till it happened to me I didn't know it before, but now it's easy to see, It's the start of something new”* illustrates the experiences of the participants having difficulties in adjusting and adapting to the changes at the beginning of the pandemic. As time went by, they learned to get accustomed and cope with the changes.

“The very first few months of the pandemic was actually very difficult. It was difficult to the point na you have to adjust everything, I moved out, so I adjusted myself from my family, and my budget. Second, I adjusted my work. Dahil nag-close ang nuclear medicine, I have to help the other sections, I have to help the CT out, the X-ray, the ultrasound, and the reception in which I lack practice of. Kasi hindi naman ako doon, hindi ba? So, I have to adjust and learn them instantly so that I could help the department.”

“... so, I learned, hindi naman sa hindi ko kakausapin (people who the participant interacts with) pero I learned to put healthy boundaries iyon nalang. I learned to put healthy boundaries kasi before siguro napaka-friendly kong tao, lahat-lahat kinakaibigan ko pero ngayon I hand-picked people na I want to interact with.”

“... overall naman, kahit nagkaroon kami ng adjustments... sa ngayon naman, okay naman na iyong flow namin, so, we are having a good workflow iyong mga schedule namin sa patients...”

“Actually, bago palang kasi ako... parang 2020 ako na hire.. so ngayon... naka-discover na ako ng new techniques ko— kung paano gumawa ng

procedure, kung paano mas mapapabilis iyong pag gawa ng procedure...

“... during pandemic, nagka-additional challenge since need mo ng PPE, need mo mag-mask, tapos iyong increasing number of patients na no-notice mo na additional challenge siya for us. Pero you can adapt it naman as time goes by.”

“... sa simula, for sure, ako medyo nahirapan ako, pati iyong mga kasama ko. Nahirapan sila mag-adapt, nahirapan sila mag-schedule and everything kasi nga may mga follow na protocols. Pero kapag ginawa mo kasi siya almost every day, makukuha at makukuha mo naman siya, until umabot doon sa point na “okay, ito ang normal para sa atin”...”

“... gradually, iyong adjustment na yon is kumokonti na kasi nasasanay ka na, nagiging routine na siya with everybody...”

“Siguro sa nadala na rin kasi almost 3 years na rin iyong pandemic, so nag-adjust na rin kami, nakapag-adjust na rin kami sa araw-araw naming pag-duduty, nakapag-adjust na kami doon sa dami ng pasyente...”

“... hindi ko masyadong iniisip na ngayon iyong COVID. Siguro kasi sanay na ako na— Nasanay na ako, siguro, kasi 2 years na lang din. Pero, iyon nga, parang nakaka-miss lang din iyong mga life mo before and after na mas masaya iyong interactions mo sa bawat isa...”

In a study by Frenkel et al. (2022) about the stressors faced by healthcare professionals and coping strategies during the early stage of the COVID-19 pandemic in Germany, healthcare practitioners cited that the mandatory use of masks and social distancing, social support, experience, and information exchange, along with training as beneficial coping methods throughout the pandemic in their findings. It is somehow similar to the experiences of the healthcare workers here in the Philippines based on some statements the participants have shared.

In addition, the statement that was told by the 22-year-old participant with two (2) years of working experience as an NMT, she reported that she adjusted to the changes

that she experienced through discovering new techniques that made her do nuclear medicine procedures much quickly. Based on Benner's novice to expert model, she is a competent NMT. According to Davis and Maisano (2016), someone can be considered as competent when a worker has been working on the job for two (2) or three (3) years; thus, she can be considered as someone who is competent. As a competent NMT and with her two (2) years of experience, she was able to adapt and adjust to the changes that happened to her work.

Based on the answers that the participants have shared, the adjustments that they have made helped them to improve and become familiar with the changes in their working experience in healthcare facilities during the COVID-19 pandemic. However, while it may be true that the participants have developed a certain degree of adaptation, there are still interactions that they miss and would like to return to.

According to the study of Ardebili et al. (2021) that due to the certainty that there is no specific end to this pandemic, the healthcare workers had practiced themselves for the long term-living under pandemic conditions in utilizing the required precautions, such as learning preventive routines, putting up with isolation, keeping a distance when interacting with patients and co-workers and mitigating the fear of being exposed to COVID. At first, the adaptation regarding the mandatory precautions and in the following protocols was tiring for the participants. As time went by, the participants consciously adapted the changes they experienced in their work in healthcare facilities.

Theme 4: Rise Up

This theme presents the realizations that the participants perceived while working in the healthcare facilities before and during the COVID-19 pandemic. A song entitled, “Rise Up” by Day (2015), with a line saying, “*And I’ll rise up, I’ll rise like the day. I’ll rise up, I’ll rise unafraid*” best described the realizations that they have. The “rise up” reflects the realizations that the participants made along their journey. These insights broadened their perspectives and encouraged them in becoming better versions of themselves. As stated by Jayakumar et al. (2020), the crisis happening globally has taught the people several things that are useful if ever the world faces a similar tragedy in the future. Apparently, it is similar to what a participant mentioned in his statement “... *ginawa niya (COVID pandemic) akong meticulous sa trabaho ko, mas detail-oriented, mas careful doon sa work ko mismo. Hindi na ako nag-lax sa pagsususot ng mask and your gloves and everything.*” the global crisis, in his case, the pandemic, has made him more meticulous and more careful in his work and he realized the importance of wearing his mask, gloves, and such. Thus, the literature by Jayakumar, Brohi, and Zama that implied that the pandemic provided lessons for humanity can be applied to the NMTs.

“... in two years of being in a pandemic situation, 2020-2021, one thing that I realized is that whatever road, whatever hardship it is that you will be going through, nandoon pa rin iyong ano, nandoon pa din iyong hope that everything will be okay, that everything will be served...”

“... kailangan mong maging strong, kailangan mong maging positive— Except sa COVID syempre, hindi ba?...”

“Realization is life is short, iyon talaga, parang you need to value each moment na you are with your family, with your friends kasi ayon life is

short hindi mo alam kung hanggang kailan na lang sila, so try to enjoy the moment, try to focus on the positive side.”

“... na-experience ko na, pag gawa ng mga procedure na mag-isa ka lang, so, nabu- build ko yung confidence ko na kaya ko pa lang mag-solo kahit wala iyong senior ko...”

“... and I guess lumawak iyong perspective mo na mas marami kang pwedeng matulungan dahil sa alam mong expertise, and mas maging open tayo sa pakikipag-collaborate.”

“Iyong feelings ko talaga for this pandemic, of course, na-sasad ako kasi I also lost people during this pandemic, and siguro, eye opener na din iyon para maging mas careful ako doon sa work ko...”

“... I actually became chief nuclear medicine technologist...una kong ginawa talaga is to really build a solid foundation with my staff, so, iyon kasi iyong pinaka-importante. Kapag kasi nagtatrabaho ka na mag-isa, na hindi mo kino-consult iyong mga staff mo, syempre, nagkakaroon kayo ng differences, nagkakaroon kayo ng conflicts...”

“... ngayon medyo confident na ako and happy na, so far, ganoon na kalayo iyong nalalaman ko sa nuclear medicine.”

“So, I think na one thing na people should exercise and should always do is to eat healthy and you do exercises. Tapos, you boost your immunity. Kasi, I think that is the best thing to battle covid with— Is your immunity, not just the protection, but yourself part. Kasi to think na I was exposed, like bare exposed but still hindi nag-positive. I think it is more of the immunity so keep safe.”

Based on the findings, the participants had different realizations as they went through their experiences. Some of the participants had realizations regarding their own self. The statements of the participants that have been working as an NMT for 17 years, 5 years, and 2 years indicates the realization they had about the mindset they applied to themselves to cope up with the pandemic.

For some participants, the realizations they had were about their work. As mentioned by Jayakumar et al. (2020), the global crisis taught people lessons that they can use in the future. The statements of the participants show the lessons they learned throughout this pandemic that helped them at their work.

As for the participant that has been working as an NMT for 3 years, the pandemic made her realize the importance of a healthy lifestyle and immunity. Based on her statement, she never experienced testing positive for COVID. According to the study of Tavakol et al. (2021), increased physical exercise and a nutritious diet may help to minimize the impact of COVID-19. Thus, the statement of this participants proved that the study of Tavakol et al. can be applied to NMTs, as well.

Conclusions

Based on the findings of this study, it can be concluded that the NMT participants working in healthcare facilities during the COVID-19 pandemic had a variety of experiences. This generated different type of emotion, where the experiences of the NMTs is an interplay of fear, sadness, and happiness. Fear of contacting COVID and/or spreading it to others has become a driving force to be more mindful of infection control measures, specifically on the use of PPEs and appropriate physical distancing measures. The sadness, happiness, and fear felt by the participants have seemed to balance and help the participants cope with the pandemic.

There have been notable changes in the personal-social (isolation from family and friends) and professional (workload change, redeployment) lives of the participants.

Adaptation to the changes brought about by the pandemic has been evident in the participants. These reflect the resilience of the participants in the midst of the pandemic.

Recommendations

The following are recommended if ever the COVID-19 pandemic continues or if a better lived experience for nuclear medicine technologists are considered in the future:

1. To the community, to be more obedient and understanding of the situation of healthcare workers, such as NMTs, and to promote awareness about the importance of following safety rules and regulations. Following guidelines minimizes not only the number of COVID positive patients, but also the dread of contracting the virus and the risk of exposure.

2. To the current nuclear medicine technologists to feel validated in regards to the experiences they went through as this will help them feel a sense of solidarity seeing there are also those experiencing the same things, and feeling the same things as they do. Thus, not only will it help them feel validated, but they will also gain confidence to face the difficulties and strive to move forward. Furthermore, they can gain coping mechanisms and life lessons shared by the researchers to adapt to their own lives.

3. To the future nuclear medicine technologists, to have a background knowledge about the problems that NMT's are facing while working in healthcare facilities during pandemic and know how NMT's are able to resolve it. It helps them to widen their perspectives about the situation of nuclear medicine technologists and use it as a guide to be prepared once another global pandemic occurs.

4. Mental health advocates should continue conducting webinars and seminars that raise mental health awareness to help eliminate the mental health stigma that causes many people to suffer in silence. Establish interventions that help to prevent and treat mental health distress in healthcare workers must be developed and carefully evaluated in terms of timing, effectiveness, and acceptability. The longer you wait to intervene with mental health care, the more serious the problems will become. These mental health issues can be avoided if the problem is diagnosed and treated early by the use of interventions.

5. Family and friends should continue supporting healthcare workers, like NMTs, they personally know. Having a support system can lessen the emotional distress that a person is facing. This will be a protective factor against mental illnesses, it helps them to be happier, to have greater coping abilities, and to live a longer and healthier life.

6. For healthcare facilities, to facilitate safe and effective workplace conditions, the employers must provide adequate safety equipment to their employees, such as PPEs. Good quality PPEs are recommended as it could help to lessen the risk of exposure of the workers to the virus. Furthermore, in case of redeployment of healthcare workers to another facility, the hospital needs a re-evaluation of their employees for the specialized job and multiple specialization is recommended.

7. For malls and stores such as grocery stores, to retain the priority lane for frontliners. Having a separate line for frontliners will make paying easier due to the huge line of purchasers. It can also be considered as a show of gratitude for the frontliners'

constant risking of their life and for their inspirable determination just for the sake of the people.

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