



The Unwavering Red Crescent: The Lived Experiences of Nurses With Chronic Diseases in Qatar During The Pandemic, A Phenomenological Study'

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ABSTRACT: Background: COVID-19, a serious new virus, has spread across the world, including Qatar, requiring multiple frontline fighters to be deployed to combat this pandemic, specifically nurses. However, there were no exemptions whether these nurses have to fight their own battles during a pandemic because of their existing chronic diseases. Attaining researchers' aim to capture the lived experiences of nurses with chronic disease during pandemic, three significant concerns were observed namely Work Optimization, Self Preservation, and Social Obligations. Work Optimization describes how nurses perform their work, and can be categorized into Personal Productivity, Radical Adaptability, and Workload Flexibility. Self Preservation, which highlights how nurses with chronic diseases take care of themselves, talked about Endurance Ability, Well-Balanced Priority, and Physical Safety. Social Obligation describes how nurses consider the health of their families as well as the surrounding communities as Mutual Responsibility, Team Reliability, and Work Effectivity. The phenomenological study shows the difficulties that nurses with chronic diseases experienced during the COVID-19 pandemic. It demonstrates how having chronic diseases can affect the quality of their work as nurses. Understanding how to manage chronic diseases may help nurses withstand burdens while working.

Keywords: *Chronic Diseases, Experience of Nurses with Chronic Diseases, and Pandemic*

INTRODUCTION

Conditions such as asthma, diabetes, hypertension, cancer, Alzheimer's, and arthritis are some of the chronic diseases that significantly affect people living with these conditions. These affect the health of nurses with chronic diseases in various ways, one having little to no rest. Another factor that could worsen chronic diseases is COVID-19, which has been active since early 2020. People with chronic diseases are more prone to catching the virus because their immune systems are weaker than most people without chronic illnesses (Maragkis, 2021). The outbreak of COVID-19 has made frontline workers risk their health and well-being every day for the safety and needs of others (Real et al., 2021).

Nurses work in different hospitals or health facilities and tend to switch shifts with other nurses which are always filled with people who are sick and need medical attention. Nurses are always around people who are ill and not certain if a patient or a staff member is positive for the virus. People with chronic diseases are prioritized to get the COVID-19 vaccine first but even if people are fully vaccinated, there is still a chance of them getting infected by the virus. Even if nurses with chronic diseases are already fully vaccinated, it does not guarantee their safety; because their job circulates patients that are sick. Since there are a lot of nurses that suffer from chronic diseases, there are plenty of methods on how to cope with stress and self-efficacy therefore even if these are applied, it is still impossible to remove all stress from the work-life of nurses (Geddes, 2021). On a daily basis, many nurses work on the front lines providing care to patients while serving as a lifeline of information, encouragement, and education to family members of patients. (Jordan et al., 2016). Therefore, keeping nurses healthy and productive is an obvious priority for healthcare systems, especially with work-related stress. This study will look into how nurses deal with chronic illness and what they think should be done to improve their situation.

Nurses are constantly working, making them susceptible to exhaustion, contributing to their requesting days off. Going to work has exposed frontline workers to unprecedented levels of stress and pressure, jeopardizing their mental, physical, emotional, and even social well-being (Real et al., 2021). The nurses are exposed to a range of occupational dangers and accidents while working in varied surroundings, on irregular schedules, and for extended periods of time. Consequently, nurses experience increased physical illness, mental health issues, and emotional fatigue than other healthcare professionals in the overall population (Elbejjani et al., 2020).

Having plenty of patients to cater to and the non-stop movement from one room to another can cause the nurses to burn out. Burnouts also contribute to chronic diseases the nurses experience due to the excessive amount of work they do. Even though Qatar has a decent schedule for nurses, the intensity of every shift and the availability of each nurse may differ. Therefore the nurses may take excessive sick leaves and it becomes a problem in the scheduling, which is why there is a need to train registered nurses in social insurance medicine to provide high-quality nursing for patients on or at risk for sick leave (Lännerström et al., 2016). This is why this study also aims to find out if the nurses do anything related to feeling better while taking their sick leaves.

This study investigates the lived experiences of the challenges that nurses with chronic diseases in Qatar face. This study aims to answer the central question: "How do nurses with chronic diseases characterize their lived experiences while in duty during the pandemic, A Phenomenology?" with the specific question: "How does your chronic disease affect your work?" The presence of a chronic illness may represent a continuous threat to both the person affected and the people surrounding the said individual since a chronic condition affects life as a whole. It causes dramatic changes to their daily lives and lifestyles in plenty of different ways.

METHOD

The method used in this study is the qualitative phenomenological research method, this qualitative study under the phenomenological design aims to understand the lived experience of the participants. Qualitative Research is the process of collecting, analyzing, and interpreting non-numerical data. The study of phenomenology is a philosophical pursuit (Zahavi, 2021). Its purpose is not to add or expand the range of existing empirical knowledge, but rather to study the nature and foundations of this knowledge (McLeod, 2019). This study utilized the phenomenological research approach due to its qualities having the most compatibility with the research topic; therefore, making it an efficient tool for analyzing the lived experiences of nurses with chronic diseases.

Utilizing remote interviews, the data needed will be gathered and clarified before being presented as discovered themes. The interviews were conducted using appropriate questions prepared based on the complications of the nurses' professional circumstances.

Research Locus and Sample

This research was conducted at Hamad Medical Corporation (HMC) and Sidra Medicine, Doha, Qatar. The said companies work together to provide high quality healthcare for the residents in Qatar. Hamad Medical Corporation is the principal public healthcare provider, while Sidra Medicine is a private hospital for public benefit.

A total of 10 participants are nurses with experiences during the pandemic and have chronic diseases. The researchers made use of the purposeful sampling strategy in choosing the participants in order to fit the following criteria set: (1) works as a nurse in Qatar for more than 5 years; (2) has an active chronic disease. The generated criteria will be carefully observed such as their genuine views and perspective that would encapsulate their lived experiences as a nurse with chronic diseases in Qatar.

Data Collection and Ethical Consideration

Data collection began with the drafting of interview questions based on the central question and the specific question. It has been validated by the selected nurses in school that have relevant professional backgrounds. After validation, consent forms will be emailed to the chosen participants as invitations for them to partake in the study. The time and date will be scheduled according to the availability of the participants, which was conducted via Zoom Meetings.

The robotfoto and interview guide was used to interview the participants. Orientation was also given to the participants to provide them with an idea of how the interview was conducted. As for the recordings of the interviews to which the participants have consented, an integrated feature in Zoom called "Record Session" was used. The recordings were necessary for the transcription of the shared experiences of the participants. Along with the transcription of the oral responses, the interpretation and analysis of data have been utilized thoroughly as part of the qualitative research process. In the transcription, the confidentiality of the participants has been ensured, therefore, the participants will be referred to as P1, P2, P3, and so on.

Data Analysis

The data for this survey was acquired purely based on the participants' opinions and feelings. The exploration stream was then viewed by involving the accompanying strides in information examination, based on their reactions acquired during the arranged meeting: (1) Emic information record; (2) Emic to Etic record; (3) Cool to Warm Analysis; (4) recognizing and dissecting issues using the dendrogram device; and (5) connecting these topics to the simulacrum of this examination. Through this methodological approach, this study will be able to gain a thorough and in-depth understanding of the subject by thematizing the experiences of nurses with chronic diseases in Qatar. The simulacrum illustrates how the elements are related to one another and captures the theoretical background of the study. The themes and subthemes were then reinforced by the second level of data analysis through related literature and studies.



Figure 2. Simulacrum with Themes and Categories

Figure 2 shows the simulacrum centering on the three major themes: Work Optimization, Self Preservation, and Social Obligation. The themes show the significant life aspects of the nurses' with chronic diseases experiences. Furthermore, different sub-themes were specifically acknowledged which are Personal Productivity, Radical Adaptability, and Workload Flexibility; Endurance Ability, Well-Balanced Priority, and Physical Activity; and Work Effectivity, Team Reliability, and Mutual Responsibility.

RESULTS

This phenomenological study provides an overview of the lived experiences of nurses with chronic diseases in Qatar during the pandemic. It seeks to know what course of action frontliners take in order to withstand the burdens chronic diseases bring forth in their daily work activities. For that reason, it aims to answer the fundamental question, "How can the experiences of the nurses with chronic diseases during the pandemic be described?" The data resulted in the formation of three categories such as (1) Work Optimization; (2) Self Preservation; and (3) Social Obligation. The generated insights from the nurses' documented experiences are purposefully intended to address and encourage awareness of their added personal responsibilities.

WORK OPTIMIZATION

During the pandemic, nurses with chronic diseases face unique challenges that affect their work experiences. The uncertainty and chaos brought on by the pandemic have left people worldwide worried about their lives, and nurses with chronic diseases, in particular, may be at risk of complications if they contract COVID-19. The concept of Work Optimization not only encompasses the development and enhancement of quality work and performance, but also the struggles and obstacles that nurses with chronic diseases face in carrying out their duties. Work Optimization emphasizes how nurses with chronic diseases can maximize their full potential and service capabilities despite the presence of active chronic illness. This involves the exploration of three sub-themes, which are Personal Productivity, Radical Adaptability, and Workload Flexibility.

Work Optimization is an essential concept for nurses with chronic diseases during the pandemic. By adopting Personal Productivity, Radical Adaptability, and Workload Flexibility, nurses can continue to provide quality care while managing their chronic illness effectively. This approach not only benefits the nurses themselves but also improves patient outcomes and healthcare delivery as a whole.

A. Personal Productivity

Personal productivity is the ability of healthcare workers to set up their obligations, objectives, and routines to consistently and effectively complete the tasks that they consider most vital without acquiring COVID-19. During the pandemic, nurses with chronic diseases have been challenged to function efficiently and effectively despite their current state. With this kind of condition, the nurses' involvement in taking care of the patients was delicate, and their personal productivity was put at risk because of their fear that having a critical condition would lead to exposure to COVID-19, however they were still aware of their importance to take care of the patients as one of our participants verbalized:

"Balancing one's personal safety and the need to take care of the patients may be a difficult task. Yet, it is vital to take care of oneself when caring for others, because there are specific ways for avoiding illness and giving the best possible care to patients" (P4)

Moreover, it is definitely advantageous for nurses with chronic diseases to work in an environment that provides enough manpower to deliver optimum and quality service to patients. However, it is a fact that some facilities' nurses are inadequate. With that, nurses with chronic diseases have to work beyond their working hours, and exposed themselves to the virus brought about by pandemic as confirmed by our participants:

"We were understaffed and had to work beyond our working hours due to the pandemic. As a chronically ill person, I was obligated to do my duty, but was afraid to go to the quarantine facility due to the risk of infection." (P10)

Additionally, being a nurse is a sacrifice because even though they are physically exhausting, they still have to deal with patients who need the right care and support, however, the difficulties encountered along the way may still depends on they handle the workload, as revealed by one of our participants:

"It's not easy because, as a nurse, even if you are sick, you still need to work. You have to know how to balance your work and your health. But for me, it is not that hard, because it really depends on the person." (P7)

Since COVID-19 is easily spread from one person to another, medical personnel have a higher chance of getting infected immediately because they are directly exposed to patients. Despite the precautionary measures being practiced by nurses with chronic diseases, they are still being challenged by the pandemic, and personal work productivity was affected as emphasized by our participants:

"It's really difficult to work during the pandemic because you will be handling or meeting patients that could have COVID-19. I am just always tired from work" (P5)

Though this pandemic brought chaos and fear to all including nurses with comorbidities, as frontliners, their responsibilities to serve patients, their goals to stay healthy, and their routines to efficiently complete the task were still a success for them as disclosed by our participants:

"The most challenging part of providing healthcare to patients is balancing their safety with the needs of patients. There must be a balance, and protocols must be followed to ensure that you don't become infected and compromise the care you provide."(P4)

The responses of the participants in the study show that the nurses' skills have shifted into a routine in order to preserve the quality of care they provide. The nurses took steps to maintain their personal safety on an equal level with the safety of their patients. The nurses used this as one of the sacrifices they make to complete the standards of becoming a nurse. The study emphasizes the need to support nurses with chronic diseases in their work to ensure that they can provide the best care to their patients while also prioritizing their health.

B. Radical Adaptability

The COVID-19 pandemic has brought disastrous effects on the world. But it also opened opportunities for creativity and innovation. Radical adaptability is a sustainable method for teams and organizations to grow in a world of uncertainty. As nurses with chronic diseases, being able to radically adapt to the present situation helps them mobilize better through collaboration amongst other members of the team.

When the pandemic started, it was hard for the nurses to go to their respective clinics and do the consultation face-to-face. However, instead of indulging themselves in a near-impossible situation, an online appointment and consultation were created to cater the need of patients including nurses with chronic diseases, and they took this as an opportunity to have their monthly check-ups as emphasized by one of the participants:

"The challenge that we experience is that we need to follow up with our doctor, since the clinic was closed during the pandemic, we were not able to have our monthly check-ups for our chronic diseases. So, I just took an online appointment with the doctors." (P1)

Apart from following the doctor's recommendations, nurses must also observe the facility's guidelines by taking precautionary measures. These can help reduce the risk of transmission of infectious diseases. Though, this measure were new to nurses, they were able to easily adapt to the new normal as described in the participants' answer:

"As a nurse, you need to take care of yourself to protect yourself from harm. You should take your medications regularly, and wear personal protective equipment when caring for patients. You should also shower and change your clothes after work, and do hand hygiene before entering a patient's room." (P4)

Chronic conditions make nurses all the more vulnerable especially when tasked to handle numerous patients with distinctive health issues. Not only do these nurses keep in mind their doctor's advice or clinical practice guidelines, but they also heed personal safety precautions. Preparing themselves for potential hazards due to the COVID-19 pandemic is critical in order to ensure their safety and of those around them, as emphasized by our participant's answer:

"I always make sure to take medications on time, check my blood sugar, exercise, observe social distancing, wearing face masks, and hand washing." (P10)

The healthcare professionals also discussed how they dealt with their circumstances through engaging in various leisure activities after their shift or while they were not on duty maintaining their healthy lifestyle so that their body can fight against the virus. This manifestation was agreed by two of our participants:

“I usually sleep, eat and cook for my family, and watch dramas or shows that are available on Netflix.” (P7)

“I usually exercise, watch tv, and spend more time with my family.” (P10)

The responses from participants indicate that it demonstrates how nurses develop solutions in order to quickly adapt to the present circumstances. The pandemic altered the world in many ways, yet healthcare professionals continued to provide their work as usual. As nurses faced the challenge of safeguarding themselves and their patients throughout the pandemic, they also underwent a radical change to what they called "The New Normal," which included new methods of doing things like arranging medical appointments online, adapting to new safety precautions, and maintaining a healthy lifestyle.

C. Workload Flexibility

Nurses with chronic diseases were threatened by the scare that the newly found virus gave the world. Being professional healthcare workers, they have to do their duty for the community despite being more likely to catch the deadly virus. Being able to be flexible and adapt to the “new normal” is something that they had to do, as verbalized by our participants:

“Because of the possibility of acquiring the virus, a lot of us feared that we would get it so there is the presence of some stress on our side but caring for the patient is the same, only that we have to be very careful.” (P9)

During the pandemic, nurses became busier because of a new foreign virus that was fatal. Having to work with new protocols that keep changing every time was very challenging for the nurses. Nurses with chronic diseases are more likely to catch the deadly virus, as stated by one of the participants:

“There is this mentality wherein whenever you encounter a COVID-19 patient you would overthink about the possible outcomes. It is important to follow the protocols like wearing the proper PPEs. It is also important not to lose your foundation and a nurse.” (P7)

Furthermore, some nurses have recognized that time management is one of the problems in workload flexibility because of how different schedules affect the daily lives of the nurses as verbalized by one of our participants:

“Time management is a problem as a medical staff because we don't really have days off and our schedule always changes from time to time.” (P7)

Nurses' way of thinking affects their performance most, especially during the crucial period of the COVID-19 pandemic. Nurses with chronic diseases found that it was difficult working with patients who got infected with the said virus. Workload flexibility is how nurses are able to manage their time and change their lifestyle to improve their performance at work, based from the participant's response:

“To improve your performance, you have to change your lifestyle. For me, I do extra exercise, have a proper diet and take my medication regularly.” (P7)

Based on the responses, the nurses dealt with their rigorous workload flexibility: by disciplining themselves and controlling their time, which included adhering to safety regulations to safeguard their safety. The nurses also stayed attentive to their patients' health while keeping themselves healthy, this includes eating healthy food by sticking to their diet, prolonging their physical endurance by exercising, and taking their medications regularly. Some of the nurses also implemented adjustments to their schedules to ensure they receive the best remedy for their variety of chronic diseases, hence some of the nurses took online appointments to monitor their chronic disease. The nurses also made sure that they did not only work, but they also made sure that their leisure time was fulfilled and stress can be minimized by indulging in various entertainment activities such as watching movies, cooking, and spending time with their families.

In summary, the article highlights the experiences of nurses with chronic diseases during the COVID-19 pandemic and identifies three sub-themes of Work Optimization: Personal Productivity, Radical Adaptability, and Workload Flexibility. The study emphasizes the need to support nurses with chronic diseases to ensure that they can provide the best care to their patients while also prioritizing their health.

SELF-PRESERVATION

Self-Preservation pertains to the personal aspect of the nurses' lives. This highlights and discusses the precautionary measures the healthcare workers apply in preserving their health, and endurance this could include maintaining the proper diet, maintaining mental

stability despite the stressful times of the pandemic. This actively discusses how the nurses coped despite the circumstances they are working in, and the sacrifices the healthcare workers implemented in order to keep rendering the care they are expected to provide.

A. Endurance Ability

As nurses experience chronic diseases, the participants have recognized the struggles that come with being a nurse with chronic diseases. As healthcare workers, they have to keep consistency in their work, and this comes with the precautionary measures applied in their daily lives. Endurance Ability refers to how the participants endure in order to have good conditions to avoid lapses in their performance while working. This simply means taking care of themselves through strict medications as our participants verbalized:

“I take my prescriptions before going to work and keep them in my backpack as well as on my desk. Thus, if you forget them in the morning before going to work, have a spare in your bag. If you run out of medication in your backpack, keep some on your workplace desk.” (P4)

“Yes, I do take medications at work twice a day. In the morning and during on-break time when I’m not busy.” (P10)

Contracting a chronic illness can be challenging and cause anxiety or concern when deciding whether to spend time with family or friends in certain cases. The difficulty to socialize is natural when the possibility of exposure to the virus is present. As one of the participants stated:

“It could be somewhat difficult to spend time with friends when you don't know how COVID-19 will impact you, and are anxious about not infecting them since you care about them. Instead of attending group gatherings or parties, you would prefer to be alone. Enjoy your time at home as you are preventing both your exposure to others and the exposure of those who could contract the virus.” (P4)

In some instances, healthcare workers with comorbidities that have no medicine or cure use other ways to keep their endurance whilst working, because of this, they consult doctors, and the participants follow their advice and temporary solutions to strengthen their immune systems during the pandemic as two of our participants described:

“In my case with this kind of chronic disease that I have, there is no treatment. I only have to rest and eat the green leafy vegetables because there is no treatment for this disease.” (P5)

Additionally, nurses should always follow doctors’ prescriptions to avoid complications that may arise from their preexisting conditions. This includes following simple tips such as taking the prescribed medicines in order to stay healthy. As our participants verbalized:

“We should always follow the doctor’s advice with taking prescribed medicines without having any excuses. I usually take my medications before going to work after eating breakfast.” (P7)

Moreover, maintaining a balanced lifestyle, and looking closely after one’s health is all the more important in the long run. Managing chronic conditions well will more likely make it possible for individuals to have a milder to no form of infection and recover more quickly. As disclosed by one of our participants:

“If you’re able to manage your comorbidities well, your risk of having a severe infection is lessened. So as long as you take your medication regularly and do the precautionary measures, you will feel confident that you are keeping yourself safe while rendering the best of your abilities.” (P4)

Based on the responses, the nurses endured maintaining a balanced lifestyle in order to have excellent endurance ability. This is due to the fact that they frequently work long hours, including night time shifts. Nurses frequently have to take medications or prescriptions to stay awake and aware during these hours. Nurses must also enjoy their free time at home in order to recover and recharge for their next shift. Finally, in order to stay healthy and avoid burnout, nurses must follow their doctor's recommendations.

B. Well-Balanced Priority

As the demand for healthcare workers rose despite their complex schedules during the pandemic, the nurses’ constructed a schedule that worked for them. This includes even the simplest of things, such as daily food intake and medication. Thus, in Well-Balanced Priority the participants manage their responsibilities and other personal affairs. Balancing their priorities also took a toll on the healthcare workers’ mental health. The participants answered:

“During the start of the pandemic, I had to deny working because of the scare that it gave me and considering that I have a chronic disease. But I had to adjust.” (P7)

“Mostly symptoms of my chronic disease which includes headaches which causes me to not be able to think straight which affects my work especially if there's a lot to be done.” (P6)

Being nurses in different fields means that not all nurses have the same workload, and the difficulty of time management might not have experienced the same intensity as what other nurses in different fields would experience. Although the intensity was not that severe, it also affected the participants mental health. Some participants answered:

“Actually, it doesn't intervene unless I forget to take my medication on time. It makes me a bit more impatient sometimes.” (P1)

“I don't do much except cooking, watching tv, and taking a rest. So managing my time is not that challenging.” (P6)

Based on the responses, the nurses spend most of their time by doing other activities to distract themselves while they're on a break, at home or on leave. By cooking, watching tv, spending time with family and friends and resting. Since there is not much to do on break, at home or on leave, nurses tend to do various activities to abide by the time. As a result, managing his or her time is not that difficult for them.

The pandemic has also had positive impacts on nurses in terms of priority. This has challenged them to develop the skill of managing their time wisely and in a precise manner. It also enhanced the nurses' resilience and trained them to keep their work and personal life separate. A participant answered:

“By applying time management and prioritizing what you need to do on time. Also, make sure that everything was done appropriately.” (P1)

The nurses mentioned that time management and prioritization are two crucial qualities that can benefit nurses in finishing assignments in a timely manner based on the responses. Nurses will ensure that everything is accomplished correctly and on time by prioritizing their tasks and managing their time. Time management can aid nurses in performing tasks more quickly and effectively as well as reducing delay.

C. Physical Safety

Nurses with chronic diseases in general usually have a lot of commitments to consider, and nurses with chronic diseases have more responsibilities health-wise than normal nurses. These include the participants' responsibilities as an individual, as a nurse, their responsibilities as a parent, and their responsibility to take care of themselves. The participants' physical aspect was also a concern considering they work in an environment with increased risk. The participants responded:

“My hobbies were minimized during the pandemic, but communication with family was very important in coping with the stress. Because of the uncertainty of the pandemic, many people died. But having a family who communicates with you constantly and listens to your concerns is relieving. Communication during the pandemic was most important.” (P4)

“The most challenging part of providing healthcare to patients is balancing their safety with the need to do their best for them. There is a delicate balance to be struck, and procedures to help ensure that you don't become infected and compromise the care you provide.” (P4)

Nurses working during the pandemic have a lot of things to consider while working and when going home. These include the fear of getting infected by COVID-19 carriers, the chance of bringing that virus to their house, and putting their families at risk. These are the things with which they have to deal with and will need to adjust their way of approaching things. Some participants answered:

“Because of the pandemic, people have to be careful not to get the virus. We have to take a bath, and then relax. We also have to be careful not to give the children too much stress. We are not together all the time, and have little time to spend at home.” (P9)

At times, nurses, especially those who are already vulnerable by acquiring pre-existing medical conditions, were also hesitant to visit areas where there was a huge risk of contracting the virus. Without physical safety, all efforts of maintaining normalcy as well as keeping their families safe would be of no use. As such, a participant expressed:

“We were understaffed and had to work beyond our working hours due to the pandemic. As a chronically ill person, I was obligated to do my duty, but was afraid to go to the quarantine facility due to the risk of infection.” (P10)

Many nurses find themselves with a lot of responsibilities and not enough time to accomplish everything. This can be especially true for nurses who are working during a pandemic and also have chronic conditions. Some of the things that nurses are responsible for include getting enough sleep, maintaining good hygiene, wearing personal protective equipment, and staying healthy. Certain participants mentioned:

“Nurses take numerous precautions in order to protect themselves from potential harm. We take our medication regularly and wear personal protective equipment when caring for patients. We also try to maintain a good night's sleep, and follow other safety precautions.” (P4)

"It's really difficult to work during a pandemic because you know you will be handling or meeting patients that could have COVID-19. I'm just always tired from work." (P5)

As the pandemic advanced, nurses were educated on how to balance their personal health while managing the treatment they provided. They learned how to prevent getting the virus by wearing adequate PPE, keeping social distance, and, most importantly, maintaining a robust immune system. Nurses with chronic diseases must use extreme caution in order to stay healthy and prevent being ill. They must wash their hands often, avoid touching their faces, and sanitize and disinfect surfaces on a regular basis. Whenever a nurse becomes unwell, it is critical that they stay at home and away from patients to avoid spreading the sickness.

SOCIAL OBLIGATION

Social Obligation pertains to the ability of nurses to care for patients despite the nurses having comorbidities. These individuals are required to demonstrate outstanding knowledge and unbreakable composure while maintaining professionalism and withstanding the risk of compromised health in the workplace. In order to perform duties, including the nurses' personal responsibilities, these nurses must acquire trust in each assigned task.

A. Mutual Responsibility

Nurses take extra precautions in order to minimize the hazardous effects of the pandemic on both patients and healthcare workers. These measures ensure that none of the parties involved are exposed to any potential threat to the health of either. Some companies didn't give any advantages to nurses with chronic diseases, and although they do not, the nurses themselves understood that it is only they who can keep their health intact. This also involved the companies the healthcare workers work for, a mutual understanding, and a fair environment to work in. The participants stated:

"The company is aware of its nurses' chronic diseases and advises them to take their medications and appointments, if they are feeling ill. If employees do not feel well, they are given the option to take time off work. This is considered time off work." (P1)

Nurses must be equipped to handle everything from minor bruises and scrapes to life-threatening injuries or illnesses. Having the knowledge and skills on handling any medical emergency that may arise is a prerequisite they must attain. Some participants indicated:

"Being nurses, we are trained to know how to deal with emergency situations, so if there is a medical emergency, we have the competencies on how to deal with the different kinds of situations that could possibly happen." (P7)

"It is my personal problem since they know about my chronic disease and if I'm sick, I can take a sick leave." (P6)

Furthermore, the nurses also belong to various firms and have varying policies since the healthcare sector is one of the largest and most varied sectors. Specific organizations could be subject to more rules than others, which would result in varied responses. According to John some of the participants:

"They're very considerate, for example, they're not giving me patients who are very ill or infectious patients. They will not give to those nurses with chronic illnesses." (P3)

"Those most vulnerable to COVID are offered jobs in locations with lesser contact with infected people. So, it is safe to continue working despite being sick." (P4)

The nurses continue to follow safety procedures and carry out their responsibilities in light of their responses. While on the job, nurses continue to take their prescription medicines as directed by their doctors. They perform the duties of a qualified healthcare provider by providing medical care while still unwell.

B. Team Reliability

Team Reliability is essential for healthcare workers, and where they should seek a support system that would contribute to the development of each individual's resilience in such working environments, especially while living with chronic diseases. This actively demonstrates how the organization of the healthcare workers would be the core support system for them. As a team, each member must strive to collaborate in accomplishing a certain task. Especially in times of need, it is vital to extend a helping hand to a fellow nurse. Some participants stated:

"We were given a sick leave or time off. They will help us in having our regular check-up and also, they will send us to the clinic for further assessment." (P1)

"Being nurses, we are trained to know how to deal with emergency situations, so if there is a medical emergency, we have the competencies on how to deal with the different kinds of situations that could possibly happen." (P7)

Some healthcare professionals that have appointments have their appointments funded by their companies. Companies ensure that vulnerable nurses have adequate pay and medical assistance so they can manage themselves. According to one of our participants:

“The good thing about our company is that they provide free services, including medications, doctor consultations, and blood tests. If you are asymptomatic, you can get test results and support systems quickly. Unlike other companies, we also provide breaks for employees if they feel too tired or exhausted to work.” (P4)

“We are assured to go to our appointment, we are provided with transportation, reimbursement of medical bills, and are given paid sick leave on the day of our appointment.” (P10)

Based on the responses, there are many factors involved in upholding team reliability. A reliable team can help provide support and continuity of care, which can reduce stress levels and improve patient outcomes. Additionally, regular check-ups and training on how to deal with emergency situations can help nurses be better prepared for the unexpected. Some companies have allowed these nurses with free services, such as medications, doctor consultations, and blood tests, as well as breaks to go to appointments, transportation, and reimbursement of medical bills. All of these factors can contribute to a healthier work environment for nurses and better patient care.

C. Work Effectivity

In order to perform the job well, the nurses are provided with a competency-based orientation regarding policies and procedures. The respective organizations for which the participants work are aware that there are healthcare workers with certain chronic conditions that require nuanced approaches regarding work performance evaluation. The need for a more comprehensive approach to addressing the physical and mental health of healthcare workers and ensuring that they have the resources and support needed to perform work and self-care for themselves and their families. This includes access to comprehensive medical care and counseling that can help them manage the participants' health conditions and maintain their well-being during the pandemic. Due to the pandemic, many hospitals have been understaffed, so the remaining nurses must be willing to work longer hours and help each other out. This also means that they need to communicate effectively and work as a team. As disclosed by our participants:

“Since we don't have enough staff, we have to help and work together.” (P2)

Nurses are constantly instructed on the right safety measures to take especially when handling patients. They play a vital role in patient safety and well-being, and must always be aware of potential risks and hazards. Taking safety precautions such as washing hands thoroughly, wearing protective clothing, and using proper body mechanics helps nurses avoid transmitting infections and injuries to patients. By taking necessary precautions, nurses ensure that patients stay healthy and safe as well as be more productive at work and in life. As stated by the participants:

“Of course, they're always educating us. There are precautions.” (P3)

Unlike other countries, the nurses with chronic diseases living in Qatar were satisfied with the urgent response and attention the medical sector has shown in order to ensure the health of its citizens. Thanks to their efficient and effective action, Qatar's health authorities have been able to provide patients with the high level of care they deserve. As stated by the participants:

“The country is glad that it was able to get the vaccine quickly and is taking measures to ensure everyone is healthy. Vaccinations are mandatory here. The country is also happy with its personal protective equipment. Compared to other countries before the pandemic, Qatar was better prepared.” (P4)

Before beginning any type of work in a healthcare setting, it is essential that nurses receive a proper orientation such as infection control practices. This orientation should cover a wide range of topics, such as how to properly wash and sanitize one's hands, how to properly clean and disinfect equipment, and how to dispose of infectious waste. Being oriented on these practices can help improve work efficiency by reducing the spread of infection and protecting both nurses and patients. As one participants stated:

“Yes, they gave us a proper orientation at that time. Especially with the infection control practices because it was new to us. So proper orientation is really needed before you can start working during the pandemic.” (P9)

Nurses have a lot of obligations at work and in their personal lives. Not only must they take care of their own health, but that of others too. In order to meet these demands, time management must be developed, and lifestyle changes must be implemented to exemplify what it means to be an advocate for health and well-being. Nurses also have the opportunity to interact and rely on colleagues especially when they are having trouble. With this in mind, the burdens of added responsibilities can be lifted and managed, therefore producing quality care and effective nurses.

DISCUSSION

Being the first ones to come in contact with patients infected with contagious diseases, the chronic illnesses of the participants compromise the balance of work and self-preservation. Constantly put at risk, the participants are required to take extra care in order to continue as working individuals. The nurses themselves may have implemented rules and policies for them to follow, but in order for that to be effective, they also have regulations at work that they follow and connect with. There are two reasons why maintaining the policy narrative effectively is critical. First, it reduces confusion, which is a significant barrier to implementing policy. Clearly, it cannot ensure smooth application. This would depend on structural issues best described as "system capability." No matter how convincing the case is, a jurisdiction will not be well-positioned to counter a pandemic if no resources have been committed to

establishing a public healthcare system. The probability that citizens will properly comprehend the policy measures being imposed and the activities they can take to support those policy measures is improved by effective management of the policy narrative (Mintrom & Connor, 2020). The central purpose of this study is to highlight the daily experiences of immunocompromised healthcare workers and to bring light to the additional responsibilities the participants are given due to their conditions.

Work Optimization

This segment involves the provisional measures the participants handle prior to, during, and after working. The circumstances the participants were put under during the height of the pandemic gave little to no room for adjustment, resulting in hasty action toward the participants' performance of work activities. Due to the added complications of COVID-19 restrictions, health centers were heavily understaffed, and the participants were required to work overtime as a result of this (Chan, et al.). The nurses were prompted to take the vaccine as soon as it was available so as to maintain an intact immune system and protection against potentially contracting the virus.

The danger of obtaining the virus persists to this day, and especially so in 2020, when the pandemic was at its peak. The participants detail having a sense of fear of reporting to work due to the increased chance of getting infected by the nurses' chronic illnesses. Adding to this, the fear of infecting family members at home after work persists. Consequently, the participants took various precautions in order to avoid this from occurring, such as regularly taking medication and utilizing personal protective equipment that isolates the healthcare workers from patients. Practicing daily exercise and keeping up a healthy diet is essential for the participants to maintain good health. (Wakeman, 2016).

The **Personal Productivity** of each healthcare worker, taking into account the fact that they are in an environment that increases their exposure to COVID-19, is a factor that contributes to Work Optimization (Guo Y., et al.). Not only that, but they also face the challenge of maintaining consistency in their Work Efficacy. Having comorbidities would not only affect their physical state, but would also affect their mental state, and with all the challenges being conjoined, this would put pressure on the nurses' personal productivity. Also, following a worldwide health crisis that highlighted significant and systemic flaws throughout the whole care continuum, healthcare is experiencing radical change. Despite having been one of the most difficult periods in history, this protracted catastrophe has accelerated a period of sincere reflection and learning, during which the healthcare workers discovered numerous prospects for better personal productivity (Chevers, 2022).

Radical Adaptability also talks about the way nurses adapt to the "New Normal". It is a method in which individuals are expected to learn how to navigate through work and handle different circumstances independently or without the need for authority. This demands the ability to be flexible and resilient in adjusting to the environment when the situation calls for it (Irandoost et al., 2022). Being adaptable is not a trait an individual is born with, but something that can be developed overtime. During times of change, especially in the face of COVID-19, nurses such as those with chronic diseases were continually challenged with tight schedules and heavy workload, but with the aid of family and friends, these individuals were able to manage and fulfill added responsibilities by identifying and working on areas where they would be most productive and would promote sustainability while having lesser impacts on their health.

Responding to a crisis like the pandemic while already dealing with one as to acquiring a chronic disease is not an easy feat. To continue to foster change, hospitals have also adjusted and modified rules and regulations regarding control and prevention in order to fit the needs of healthcare workers. By implementing relevant and updated precautions, those administering or governing the hospital see to it that such changes will be carried out and ensure the safety and protection of the medical staff. Some of these approaches include the wearing of PPE (personal protective equipment), awareness of the exposure risk levels, safe work practices, and cleaning and disinfection. Shifting the focus on the process of leveraging the situation can assure frontliners safety and success expected in their operations (Zuino, 2022).

Enhancing the skill of adapting to changes and the need for agility had been demonstrated by medical frontliners whilst living with chronic diseases. While taking care of the patients is their main duty in the workplace, the personal responsibility of looking after themselves still remains of utmost importance. In handling patient concerns, it must be with compassion, empathy, and respect for life that the nurses keep in mind. The same goes with nurses in caring better for themselves. These frontliners have mentioned some practical steps taken in order to maintain balance and health such as keeping schedules of hospital appointments, not neglecting the prescribed vitamin intake, practicing self-care, emotion regulation, and attending enriching seminars or programs aiming to build each individual's wellbeing during the pandemic. These have been some of the ways that helped nurses cope during the ever-changing circumstances (Hofmeyer et al., 2020).

Workload Flexibility is about how the nurses manage to be flexible and having to change the way they work and live their daily lives because of COVID-19. The challenges that nurses experience like stress, emotional exhaustion, and many more, has increased at the peak of COVID-19 (Nortwich University Online, 2021). Despite having to experience more challenges and difficulties, the nurses manage to be flexible and pushed through and overcome those challenges. They changed their lifestyle and the way they work around the protocols that the government changes almost every week while still maintaining their professionalism.

Self-Preservation

Self-Preservation is an approach taken by nurses to protect themselves from any form of harm or inconvenience that may potentially take a toll on or have an effect on their pre-existing medical conditions. The proper use of nursing gear such as medical scrubs, medical gloves, and even facemasks has been strongly implemented following the rise of COVID-19, as it can significantly reduce the chances of contracting a disease or contributing to the spread of COVID-19. Due to the growth of COVID-19, facemasks and medical gloves have become more widely used in recent years. The nurses also ensure they are taking their medications regularly. Demand for health and social care services worldwide is at a historic high due to COVID-19's high prevalence in the general

population of many nations, its novelty and high communicable potential, and the associated morbidity and death statistics. This was evident in responses that highlighted commitment as one of the values they most frequently exhibited in order to deal with the daily challenges of working as a nurse with chronic diseases (Maben & Bridges, 2020).

One of the factors influencing one's Self-Preservation abilities is endurance. Self-preservation behavior comprises taking measures to lessen the possibility of suffering health-related consequences (Popova et al., 2021). The idea can also be taken literally to mean carrying a weapon of self-defense, thus, implying that the **Endurance Ability** would be the driving factor that the healthcare workers would have to hold on so they could continue to render the care that they are required to provide.

Well-Balanced Priority is about how the nurses manage their time to take care of their health as a person with a chronic disease despite having very complex schedules. This includes having time to eat a healthy homemade meal and to take their prescribed medications given to by their doctor. Nurses tend to prioritize their patients' health, which leads them to abandon their own health because it affects their work performance (Nkabinde - Thamae et al., 2022). For the nurses to render their service, they should be able to balance their health alongside their patients' health.

This segment is about the **Physical Safety** of nurses in their respective workplaces. In the course of the COVID-19 pandemic, nurses had to deal with a lot of work as they have critical roles and responsibilities. Being at the frontlines of the pandemic means nurses are exposed to plenty of possibly infected patients and hazards. Essentially, nurses are well-informed about the safety practices in their workplace. It is vital that every nurse is supported to protect themselves with specific infection prevention procedures and sufficient provision of protective gear at their practice and work settings, including ventilators, masks, robes, eye covers, face shields, and gloves (Adams & Wall, 2020).

Health workers worldwide have to wear personal protective equipment for their well-being and safety. Nevertheless, it is most challenging to be equipped with numerous protectors as some of the participants have stated. The equipment was described as discomforting and hot and staff reported finding it difficult to communicate with others who were wearing the PPE. Some participants have also stated that the temperature of all the PPEs is quite tough, especially for the person who has chronic disease (Broom et al., 2017).

The occurring global pandemic needs a strong nursing staff engagement in clinical management, awareness and knowledge exchange, and public safety. While dealing with the COVID-19 pandemic for over months nurses' workload had increased and weekend shifts escalated, additional time to manage the PPE and increased paperwork was a frequent source of stress for nurses. This led to the workers feeling fatigued and in pain when returning home another statement from a participant.

Nurses' physical safety is number one priority in this pandemic. Nurses are the key players in stopping the pandemic with adequate assistance since they are actively involved in COVID-19 interventions all the time (Chen et al., 2020). Without them the fight against the virus would be difficult. Nurses hold a vital function, as one of the most distinguished health service teams, in delivering public awareness regarding disease prevention and in decreasing the dissemination of myths regarding the pandemic (WHO, 2020).

Nurses are a vital resource for any country. However, their health and safety are crucial for the continued and safe treatment of patients as well as the containment of any disease outbreaks that may occur. On the other hand, in order to effectively support healthcare workers and provide a safe environment for them to perform their duties during critical periods, particularly the COVID-19 outbreak, it is critical to recognize their experiences, difficulties, and solutions to these issues in work situations is essential in gaining new perspectives. (Irandoost et al., 2022)

This is why Physical Safety is an essential category in nurses with chronic diseases during the pandemic. Not only does it ensure that the nurses would not be at risk, it also ensures that they serve their purposes as nurses while applying the protocols and procedures they have learned throughout their experience.

Social Obligation

This segment is about the **Social Obligation** of both the nurses and patients in dealing with the deadly virus, COVID-19. Nurses are exposed to different kinds of illnesses on a daily basis. Social obligation pertains to how the nurses and the people around them take on the responsibility of preventing the further spread of the virus. It reflects what is required of each individual that would contribute to the welfare of society and is thus accountable for the fulfillment of duties. It strives to uphold meaningful core values while extending beyond personal needs and wants. Nurses needed to be aware of individual responsibilities in order to develop commitment towards it. This entails the core of professional medical practice, which is to provide emergency service and appropriate procedures by incorporating ethical principles (Jahromi, 2020).

Taking care of one's own health is especially important for healthcare workers with chronic illnesses hence why one of the themes is **Mutual Responsibility**. The participants have a responsibility to manage their symptoms, follow their treatment plans, and prioritize their own well-being. Further, the participants entailed boundaries they set to value their own health. This includes taking breaks when needed, delegating tasks to others, or making adjustments to work schedules. In practicing these, the risk of getting infected and infecting family members is greatly reduced, and work quality and performance are not impaired.

During the pandemic, the wearing of face masks is mandatory for everyone who goes out in public. When infected patients breathe, talk, cough, or sneeze, respiratory droplets are inhaled, which is the main way that COVID-19 spreads (Brooks & Butler 2021). The wearing of face masks at all times in public areas minimizes the risk of droplets spreading. Using face masks is necessary as it acts as "source control" by preventing others from catching the virus, especially from the droplets coming from another person while

talking (Bai, 2020). It also promotes good hygiene, especially when an individual is exposed to a high-risk situation (Washington-Harmon, 2022).

Additionally, demonstrating fundamental values while performing medical practices and duties is critical to treating the job with high regard. By promoting health, and alleviating ailments, nurses strive to apply the standards of ethical conduct, which include moral obligations such as acquiring compassion for patients as well as possessing integrity in the workplace. This also conveys the nurses' respect for human rights, and the necessary action to be performed with regard to the patient's request and concerns (Griffith, 2021).

Nurses have a professional duty to advocate for patients. By accepting the personal responsibility granted to these frontliners, each individual would be held accountable for nursing judgment, and oftentimes the accountability would be extended or delegated to other colleagues if the situation called for it. Reliability and cooperation on the part of each nurse ensure success during operations or other nursing duties, which is why open and active communication is strongly encouraged between team members. By acquiring oneness in values and morals, nurses strive to achieve specific goals in mind. Another duty that nurses must acquire is acquiring sufficient knowledge on different health issues, having the flexibility to handle a wide scope of patients' concerns, and being up to date with the current news regarding health outbreaks (Reid, 2018).

Team Reliability plays a crucial part in working as a healthcare worker since handling all the work alone can take a toll on their well-being. A nurse has to have team reliability since this means that the person can demonstrate responsible behaviors at work. With the health and lives of patients on the line, it is very important that the person's co-workers know that they have these competencies. Team reliability is important in the healthcare industry because the patient's life depends on every health care worker. The nurses must be informed that it is most critical to recognize that competent teams must collaborate and communicate well to coordinate this diversity collectively towards a common end (Lingard, 2016).

Effective coordination in the delivery of healthcare can instantly and positively impact patient safety and outcomes. To attain this purpose, team members' motivation should be supported by methods and useful abilities in order to meet objectives and overcome obstacles. The need for high-quality patient care necessitates concurrent professional health care growth with a strong emphasis on patient-centered cooperation. Only by putting the patient at the center of treatment and by adhering to a broad set of social and cultural norms can this be successfully fulfilled. This will make it easier to create and grow an efficient team that can provide patients with utmost care. (Paediatr et al., 2014)

Work Optimization is an essential asset to a worker, especially nurses. **Work Effectivity** is how a person comes up with solutions to problems in order to achieve the best possible outcome in a short amount of time. This allows them to react to problems faster which helps nurses save more lives because time wasted is limited to little or none.

Although effectiveness itself helps nurses with their performance while working, there is also efficiency while working. But being effective and efficient are two different aspects to consider while working, especially as a nurse. But both of these aspects lead to productivity. Efficiency is a popular remedy for low productivity (Moore, 2019). Employees can make the most of their time if they can work more productively. This specifically applies to nurses because nurses have a lot of work responsibilities, they have to take care of and being efficient with everything helps their performance while working.

The quality of the results we obtain is measured by effectiveness. When a person is effective, they consistently meet goals and objectives such as producing high-quality work or making sales (Moore, 2019). Certain results like how nurses provide assistance to the doctors, how nurses assist patients with their personal needs and their other duties while working especially during the pandemic where their workload is increased, being effective with their work will greatly increase their productivity and will increase the quality of the service they provide.

Several recommendations for improving the quality of nursing work life were made. But they did not outline the specific actions that should be taken. (Lee et al.) suggests that nurse supervisors offer efficient measure to enhance the respect and independence components of nursing work life quality. As well, (Faraji et al.) considers implementing a successful strategy by fostering a positive workplace culture to raise the standard of nursing work life. (INSC, 2018)

Nurses, nursing services, and organizations are all impacted in different ways by the quality of nursing work life, several research showed a connection between the quality of nursing care, productivity at work, job burnout, job satisfaction, performance barriers, and the quality of nursing work life. When organizations assess nursing work life, it can help them understand how work design, work environments, societal influences, and work and home life balance impacts nurses, and therefore impact organizational productivity. By assessing the quality of nursing work life, organizations will know which areas of work life need to be improved.

CONCLUSION

The lived experiences of nurses in Doha, Qatar, who had chronic illnesses during the pandemic are examined in this study. Having received the necessary training and information to evaluate and monitor patients' health as well as give care and assistance, when necessary, nurses play a crucial role in the treatment of patients. The phenomenological method can provide light on the distinct viewpoints of nurses about how illness impacts their professional and personal lives, how they handle difficulties, and how they interact with patients.

The experiences of the nurses with chronic disease during the pandemic have been described as challenging but manageable. The nurses have had to deal with the additional stress of handling patients while also managing their chronic disease. However, they have been able to manage both their chronic disease and the stress caused by the pandemic. These nurses have found that the key to

managing their chronic disease during the pandemic is to stay calm and focused. They have also found that it is important to have a support system in place to help them manage their responsibilities.

Nurses work tough shifts and may be available on call around the clock. The role of being in charge of a patient's well-being is not simple. One of a nurse's primary responsibilities is to put the needs of the patient first. This calls for the capacity to manage both personal obligations and patient demands. Even if it's not simple, nurses must be able to complete this task with a suitable approach and care for their health.

While continuing to work and provide treatment, healthcare staff must take special precautions to safeguard both themselves and others from COVID-19. It may be challenging to constantly adhere to infection control procedures once susceptible to the virus owing to regular exposure to individuals who might be infected and have a chronic condition. To enable these nurses to properly execute responsibilities on a daily basis without endangering their health, it is crucial to establish obligations, targets, and routines.

Nurses have to deal with uncertainty and change all the time throughout the pandemic. Nevertheless, they must be able to change swiftly and successfully in order to give patients the best treatment possible. Colleagues must work together to come up with the best potential solutions when presented with new issues. This calls for original thought, adaptability, and a willingness to try new things. Hence, adaptability is not only necessary but also a sustainable way for nurses to advance in a world of unpredictability.

There are many things that nurses have done to increase their performance and workflow. By taking the proper precautions, they can avoid many common mistakes that can lead to errors in the delivery of care. One of the most important things the participants have done is to keep up to date on their knowledge of the current situation and actions to be taken in the medical field. Additionally, nurses should always be aware of the potential for errors in their own work and take steps to mitigate these risks. By taking these precautions, nurses can ensure that they are providing the best possible care to their patients.

Frontliners are skilled at juggling numerous jobs at once and have been trained to operate both alone and collaboratively. Without practicing workload flexibility, this can be demanding and cause burnout. To better manage their workload and enjoy a more flexible lifestyle, nurses' everyday approaches have changed as a result. They include planning daily or weekly routines and making an effort to adhere to them as closely as you can in order to avoid being overwhelmed. It's also a good idea to delegate duties wherever you can and set aside some time each day for yourself, even if it's just for a few minutes.

It is required of nurses with chronic illnesses to maintain a high degree of physical and mental stamina. Working long hours transporting and treating patients requires being able to accomplish tasks successfully and efficiently without any performance gaps. They keep a rigorous medication schedule, engage in frequent medical consultations, and practice stress management in order to be able to think clearly and act quickly in emergency circumstances. Fatigue is frequently caused by complicated schedules and priorities. The sense of having too much work and not enough time to do it can result in errors, missed opportunities, and discontent. Nurses must be well-organized and possess strong time management skills in order to meet these expectations.

Chronic disease can affect performance and workflow during the pandemic. Patients who require more care can put a strain on nurses. In addition, chronic diseases can make it difficult for nurses to care for patients with other diseases, as they may be more susceptible to infection. Nonetheless, nurses play a vital role being the first point of contact for patients.

In order to keep chronic disease under control, these nurses have to take prescribed medications. Because of this, they have to be very careful about when and where to take medications. Fortunately, most of the nurses' supervisors are well-informed about their condition and are understanding enough to make sure that they take the medication at the correct time, and at the correct dosage.

There are several ways nurses have reacted when experiencing difficulties working with patients who are positive with the COVID-19 virus. Many were shocked, but still went on with their daily tasks. It is good to note that these nurses remembered to take care of themselves. This means eating well, getting enough sleep, managing your stress, and most importantly, taking their prescribed medications regularly. They strived to reach out to their support systems, whether it be family, friends, or colleagues. Additionally, they try to stay up-to-date on the latest information about COVID-19 and how it affects patients, and are not hesitant to ask for help when faced with numerous responsibilities.

Nurses have obligations to not just themselves as healthcare providers but also to their patients and coworkers. This sense of obligation essentially spreads outside the confines of the for all intents and purposes hospital or clinic and into the household and neighborhood. Therefore, nurses always for the most part bear in mind the importance of being trustworthy and dependable, always looking out for the best interest of their patients and colleagues.

Nurses with chronic conditions are able to manage their time effectively, despite the challenges posed by their condition. These hardworking healthcare professionals were able to juggle the demands of their job with the needs of their condition, and are often able to find creative solutions to the problems posed by their conditions. As motivation, nurses often found a strong support network of family and friends to help them cope with the challenges of their condition.

Numerous difficulties faced by nurses in a COVID-19 facility had an effect on their bodily, mental, and emotional well-being. This can refer to nurses' fear, workload, working in a new setting and environment, and the practice of wearing personal protective equipment. New regulations and procedures required nurses to adjust. The majority of the nurses explained that in addition to the virus's incomplete scientific understanding, the abrupt shift in roles and responsibilities caused a great deal of stress. Due to a diagnosed chronic disease, nurses must continue to worry about his or her own personal health.

The study's conclusions offer a framework for further investigation into the lived experiences of nurses who have chronic illnesses, particularly during the COVID-19 pandemic. The results indicate that managing several tasks at work while managing a chronic disease is difficult, but there may be solutions to reduce stress on nurses. Future studies should focus on identifying measures to increase the nurses' well-being, such as through education and training. Moreover, the findings of this study may be expanded upon in order to gain a better understanding of the lives of nurses living with chronic illnesses, and what can be done to alleviate their additional duties. Through this, it is hoped that the wellness of nurses can be improved and that they can be better equipped to deal with the demands of their job.

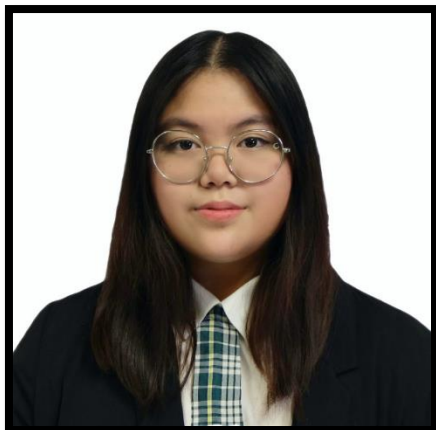
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BIOGRAPHICAL SKETCH



Aayah E. Ulod is the leader of this research group and is currently in the Senior High School (SHS) department and in the General Academic Strand (GAS) Grade 12. She has been a student of PSD since 2008, making her 14 school years in PSD and was a former member of the PSD Rondalla Club and has performed in various events of PSD. In S.Y. 2019-2020, she participated in various formal class debates and won the 'Best Speaker' award. She has also participated in a singing competition called "PSD Idol" and won 4th runner-up. She has been a consistent honor student throughout Grades 11 and 12 and a class council member throughout Grades 7 to 12. When the subject Arabic was released in the PSD curriculum, she consistently achieved the award 'Best in Arabic' from Grade 8 to Grade 10. Aayah aspires to complete a Doctorate degree in the medical field.



Kyla Grace C. Flores is currently a Senior High Senior (SHS) student in Philippine School Doha (PSD) in Qatar under General Academic Strand (GAS). She has participated in many extra-curricular activities like being part of PSD's Drum Corps since she was grade 4 to grade 10 and performing in and out of school, including participating in Qatar National Day and church events. She is part of PSD's Senior Varsity Volleyball team and Xpats Volleyball which she has received Mythical 6 and MVP awards for. She has also been a consistent class council member from grade 9 to grade 12 who performs her duty well. She is a consistent achiever in her class making it into the top 10 every grade when she was in Junior High School (JHS) and is still a constant achiever in SHS making it into the top 5 of her class.



Earl Ceejay A. Carrios is currently a Senior High School (SHS) student who is studying at Philippine School Doha (PSD) in Qatar under the General Academics Strand (GAS). He has been involved in a variety of extracurricular activities, such as being a member of the Volleyball Varsity team from Grade 9 through Grade 12. Furthermore, he has participated in the Intramurals basketball and volleyball, where his team has reached the finals both times. He has achieved the status of being a member of the Mythical 6 in the Volleyball Intramurals and is currently a member of the Al Arabi volleyball club. In addition to this information, he is also a member of the Qatar Scouts and a member of the C.A.T. program.



Russel Ellis N. Hernandez is currently a Senior High School (SHS) Grade 12 student under the General Academic Strand (GAS) at Philippine School Doha (PSD) and has been studying at Philippine School Doha for 12 years. He likes to explore his capabilities in many different fields, he has been joining writing and sports competitions from a young age and continues to hone his abilities to achieve greater heights. Apart from that, he is also a member of the Qatar Scouts.



Isabella Rain C. Enad is currently attending Philippine School Doha where she is a Senior High School Student in the GAS stream. Consistently since her admission in 2018, she has been a member of the school's vocal ensemble 'Chorale' and has participated in interscholastic and intramural performative competitions and won champion in the 'Kundiman Performance Competition' in 2019. She is a consistent class achiever; maintaining a spot within the top 10 students in her class as well as a recipient of the 'Best Debater' award in Literature, Philosophy, and Discipline in Social Sciences subjects. She achieved an award of 2nd place for her directing, editing, and production skills in the 'Pagbigkas ng Tula' video production competition for Buwan ng Wika 2022. She has performed in national events such as Qatar National Day, Qatar Sports Day, and intramural events such as the yearly founding anniversary of Philippine School Doha.



Julia Nicole B. Jimenea is currently studying at Philippine School Doha as a 12th grade student under the General Academic Strand (GAS). In grade school, she graduated as valedictorian, and had been the editor-in-chief of their school paper, 'The Guiding Echo'. Outside school, she had also taken The Associated Board of the Royal Schools of Music and passed with distinction in Practical Violin exams multiple times in a row. She was a former member of PSD's Jr. Math Club during the S.Y. 2017-2018. In 2018, she performed several intermission numbers ranging from Kundiman songs to violin performances during school events. Julia has also participated as a Chorale member during the S.Y. 2019-2020. She has been awarded as the 'Bookworm of the Year' during PSD's Book Week Celebration 2019, and has gained a Significance Award for her Research Paper during the S.Y. 2021-2022. She is a constant achiever, earning a place within the top 3 of her class, and is a member of 'The Link' as a Photojournalist for S.Y. 2022-2023.



Murewa G. Saibu is a Nigerian who happened to study at Philippine School Doha (P.S.D.) from grade 9-12 (S.Y. 2019-2023). Murewa has always been somewhat introverted most of his childhood, up until he joined P.S.D: He's been friends with fellow researcher: **Russel Ellis N. Hernandez** since 2019. Murewa has been a drummer since he was about 6 years old and is still an active drummer. Not too long ago, he picked up the hobby of photography. Murewa aspires to be a future Fashion Designer and is ready to do all it takes towards pursuing his dreams of going to Paris, France. Murewa is a melomaniac, he grew up in a Christian home with a dad that loves music too. He loves any genre of music ranging from Saxophone-Jazz to Rap/Emo-rap and even French music as far as it sounds good in his ears.



Elijah Joshua V. Benito is currently a senior high school student under the General Academic Strand (GAS) of Philippine School Doha (PSD) and has been studying at Philippine School Doha for 12 years. He enjoys trying something new and learning something new. He used to be a basketball player, but due to injuries, he switched to volleyball and is now dedicated and motivated to making a name for himself as a libero in the game of volleyball. Since 7th grade, he has always participated in the Intramurals volleyball games. He was also a member of the drum corps when he was in sixth grade.



Franzian D. Sarmiento is currently studying at Philippine School Doha as a 12th-grade student under the General Academic Strand (GAS). She used to study in her home country the Philippines up until nursery to grade 4. When she was in elementary, she joined competitions such as Science Quiz Bee, Spelling Quiz Bee, and Social Studies Quiz Bee. In Grade 8 she also joined to be her class representative in Social Studies Week to parade her section. She also joined the Mr. and Miss Intramurals in her current year of studying. She enjoys trying something out of her comfort zone. She has gained a Significance Award for her Research Paper during the S.Y. 2021-2022



Cindy Marielle F. Salac is currently studying at Philippine School Doha as a 12th grade student under the General Academic Strand (GAS). In the beginning of 2017, she passed the entrance exam of Science Curriculum (SciCur) program of Kidapawan City National High School (KCNHS) ranking 98 among 500 exam takers. In addition, from the year 2017-2018, she was also an achiever in her class and a part of a voluntary group in her school on planting trees around the city. Furthermore, for more than 5 years in grade school she was a member of the Girls Scouts of the Philippines (GSP) and joined regional camping's across Central Mindanao. Cindy was a member of the dance club in Philippine International School-Doha (PISQ) in the year 2019. In addition, she was also a member of drum and lyre in fifth grade.

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For this study secondary data has been collected. From the website of KSE the monthly stock prices for the sample firms are obtained from Jan 2010 to Dec 2014. And from the website of SBP the data for the macroeconomic variables are collected for the period of five years. The time series monthly data is collected on stock prices for sample firms and relative macroeconomic variables for the period of 5 years. The data collection period is ranging from January 2010 to Dec 2014. Monthly prices of KSE - 100 Index is taken from yahoo finance.

I. TYPE STYLE AND FONTS

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3.1 Population and Sample

KSE-100 index is an index of 100 companies selected from 580 companies on the basis of sector leading and market capitalization. It represents almost 80% weight of the total market capitalization of KSE. It reflects different sector company's performance and productivity. It is the performance indicator or benchmark of all listed companies of KSE. So it can be regarded as universe of the study. Non-financial firms listed at KSE-100 Index (74 companies according to the page of KSE visited on 20.5.2015) are treated as universe of the study and the study have selected sample from these companies.

The study comprised of non-financial companies listed at KSE-100 Index and 30 actively traded companies are selected on the bases of market capitalization. And 2015 is taken as base year for KSE-100 index.

3.2 Data and Sources of Data

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3.3 Theoretical framework

Variables of the study contains dependent and independent variable. The study used pre-specified method for the selection of variables. The study used the Stock returns are as dependent variable. From the share price of the firm the Stock returns are calculated. Rate of a stock salable at stock market is known as stock price.

Systematic risk is the only independent variable for the CAPM and inflation, interest rate, oil prices and exchange rate are the independent variables for APT model.

Consumer Price Index (CPI) is used as a proxy in this study for inflation rate. CPI is a wide basic measure to compute usual variation in prices of goods and services throughout a particular time period. It is assumed that rise in inflation is inversely associated to security prices because Inflation is at last turned into nominal interest rate and change in nominal interest rates caused change in discount rate so discount rate increase due to increase in inflation rate and increase in discount rate leads to decrease the cash flow's present value (Jecheche, 2010). The purchasing power of money decreased due to inflation, and due to which the investors demand high rate of return, and the prices decreased with increase in required rate of return (Iqbal et al, 2010).

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I. RESEARCH METHODOLOGY

The methodology section outline the plan and method that how the study is conducted. This includes Universe of the study, sample of the study, Data and Sources of Data, study's variables and analytical framework. The details are as follows;

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Exchange rate is a rate at which one currency exchanged with another currency. Nominal effective exchange rate (Pak Rupee/U.S.D) is taken in this study. This is assumed that decrease in the home currency is inversely associated to share prices (Jecheche, 2010). Pan et al. (2007) studied exchange rate and its dynamic relationship with share prices in seven East Asian Countries and concluded that relationship of exchange rate and share prices varies across economies of different countries. So there may be both possibility of either exchange rate directly or inversely related with stock prices. Oil prices are positively related with share prices if oil prices increase stock prices also increase (Iqbal et al, 2012). Atallah (2001) suggested that oil prices cause positive change in the movement of stock prices. The oil price has no significant effect on stock prices (Dash & Rishika, 2011). Six month T-bills rate is used as proxy of interest rate. As investors are very sensitive about profit and where the signals turn into red they definitely sell the shares. And this sensitivity of the investors towards profit effects the relationship of the stock prices and interest rate, so the more volatility will be there in the market if the behaviors of the investors are more sensitive. Plethora (2002) has tested interest rate sensitivity to stock market returns, and concluded an inverse relationship between interest rate and stock returns. Nguyen (2010) studies Thailand market and found that Interest rate has an inverse relationship with stock prices.

KSE-100 index is used as proxy of market risk. KSE-100 index contains top 100 firms which are selected on the bases of their market capitalization. Beta is the measure of systematic risk and has a linear relationship with return (Horn, 1993). High risk is associated with high return (Basu, 1977, Reiganum, 1981 and Gibbons, 1982). Fama and MacBeth (1973) suggested the existence of a significant linear positive relation between realized return and systematic risk as measured by β . But on the other side some empirical results showed that high risk is not associated with high return (Michailidis et al. 2006, Hanif, 2009). Mollah and Jamil (2003) suggested that risk-return relationship is nonlinear perhaps due to high volatility.

3.4 Statistical tools and econometric models

This section elaborates the proper statistical/econometric/financial models which are being used to forward the study from data towards inferences. The detail of methodology is given as follows.

3.4.1 Descriptive Statistics

Descriptive Statics has been used to find the maximum, minimum, standard deviation, mean and normally distribution of the data of all the variables of the study. Normal distribution of data shows the sensitivity of the variables towards the periodic changes and speculation. When the data is not normally distributed it means that the data is sensitive towards periodic changes and speculations which create the chances of arbitrage and the investors have the chance to earn above the normal profit. But the assumption of the APT is that there should not be arbitrage in the market and the investors can earn only normal profit. Jarque bera test is used to test the normality of data.

3.4.2 Fama-McBeth two pass regression

After the test statistics the methodology is following the next step in order to test the asset pricing models. When testing asset pricing models related to risk premium on asset to their betas, the primary question of interest is whether the beta risk of particular factor is priced. Fama and McBeth (1973) develop a two pass methodology in which the beta of each asset with respect to a factor is estimated in a first pass time series regression and estimated betas are then used in second pass cross sectional regression to estimate the risk premium of the factor. According to Blum (1968) testing two-parameter models immediately presents an unavoidable errors-in-the variables problem. It is important to note that portfolios (rather than individual assets) are used for the reason of making the analysis statistically feasible. Fama McBeth regression is used to attenuate the problem of errors-in-variables (EIV) for two parameter models (Campbell, Lo and MacKinlay, 1997). If the errors are in the β (beta) of individual security are not perfectly positively correlated, the β of portfolios can be much more precise estimates of the true β (Blum, 1968).

The study follow Fama and McBeth two pass regression to test these asset pricing models. The Durbin Watson is used to check serial correlation and measures the linear association between adjacent residuals from a regression model. If there is no serial correlation, the DW statistic will be around 2. The DW statistic will fall if there is positive serial correlation (in worst case, it will be near zero). If there is a negative correlation, the statistic will lie somewhere between 2 and 4. Usually the limit for non-serial correlation is considered to be DW is from 1.8 to 2.2. A very strong positive serial correlation is considered at DW lower than 1.5 (Richardson and smith, 1993).

According to Richardson and Smith (1993) to make the model more effective and efficient the selection criteria for the shares in the period are: Shares with no missing values in the period, Shares with adjusted $R^2 < 0$ or F significant (p-value) > 0.05 of the first pass regression of the excess returns on the market risk premium are excluded. And Shares are grouped by alphabetic order into group of 30 individual securities (Roll and Ross, 1980).

3.4.2.1 Model for CAPM

In first pass the linear regression is used to estimate beta which is the systematic risk.

$$R_i - R_f = (R_m - R_f)\beta \quad (3.1)$$

Where R_i is Monthly return of this security, R_f is Monthly risk free rate, R_m is Monthly return of market and β is systematic risk (market risk).

The excess returns $R_i - R_f$ of each security is estimated from a time series share prices of KSE-100 index listed shares for each period under consideration. And for the same period the market Premium $R_m - R_f$ also estimated. After that regress the excess returns $R_i - R_f$ on the market premium $R_m - R_f$ to find the beta coefficient (systematic risk).

Then a cross sectional regression or second pass regression is used on average excess returns of the shares and estimated betas.

$$\hat{R}_i = \gamma_0 + \gamma_1\beta_i + \epsilon \quad (3.2)$$

Where $\lambda_0 =$ intercept, \hat{R}_i is average excess returns of security i , β_i is estimated beta coefficient of security i and ϵ is error term.

3.4.2.2 Model for APT

In first pass the beta coefficients are computed by using regression.

$$R_i - R_f = \beta_{i1}f_1 + \beta_{i2}f_2 + \beta_{i3}f_3 + \beta_{i4}f_4 + \epsilon \quad (3.3)$$

Where R_i is the monthly return of stock i , R_f is risk free rate, β_i is the sensitivity of stock i with factors and ϵ is the error term.

Then a cross sectional regression or second pass regression is used on average excess returns of the shares on the factor scores.

$$\hat{R}_i = \gamma_0 + \gamma_1\beta_1 + \gamma_2\beta_2 + \gamma_3\beta_3 + \gamma_4\beta_4 + \epsilon_i \quad (3.4)$$

Where \hat{R}_i is average monthly excess return of stock i , $\lambda =$ risk premium, β_1 to β_4 are the factors scores and ϵ_i is the error term.

3.4.3 Comparison of the Models

The next step of the study is to compare these competing models to evaluate that which one of these models is more supported by data. This study follows the methods used by Chen (1983), the Davidson and MacKinnon equation (1981) and the posterior odds ratio (Zellner, 1979) for comparison of these Models.

3.4.3.1 Davidson and MacKinnon Equation

CAPM is considered the particular or strictly case of APT. These two models are non-nested because by imposing a set of linear restrictions on the parameters the APT cannot be reduced to CAPM. In other words the models do not have any common variable. Davidson and MacKinnon (1981) suggested the method to compare non-nested models. The study used the Davidson and MacKinnon equation (1981) to compare CAPM and APT.

This equation is as follows;

$$R_i = \alpha R_{APT} + (1 - \alpha)R_{CAPM} + e_i \quad (3.5)$$

Where $R_i =$ the average monthly excess returns of the stock i , $R_{APT} =$ expected excess returns estimated by APT, $R_{CAPM} =$ expected excess returns estimated by CAPM and α measure the effectiveness of the models. The APT is the accurate model to forecast the returns of the stocks as compare to CAPM if α is close to 1.

3.4.3.2 Posterior Odds Ratio

A standard assumption in theoretical and empirical research in finance is that relevant variables (e.g stock returns) have multivariate normal distributions (Richardson and Smith, 1993). Given the assumption that the residuals of the cross-sectional regression of the CAPM and the APT satisfy the IID (Independently and identically distribution) multivariate normal assumption (Campbell, Lo and MacKinlay, 1997), it is possible to calculate the posterior odds ratio between the two models. In general the posterior odds ratio is a more formal technique as compare to DM equation and has sounder theoretical grounds (Aggelidis and Maditinos, 2006).

The second comparison is done using posterior odd ratio. The formula for posterior odds is given by Zellner (1979) in favor of model 0 over model 1.

The formula has the following form;

$$R = [ESS_0/ESS_1]^{N/2} N^{K_0-K_1/2} \quad (3.6)$$

Where ESS_0 is error sum of squares of APT, ESS_1 is error sum of squares of CAPM, N is number of observations, K_0 is number of independent variables of the APT and K_1 is number of independent variables of the CAPM. As according to the ratio when;

$R > 1$ means CAPM is more strongly supported by data under consideration than APT.

$R < 1$ means APT is more strongly supported by data under consideration than CAPM.

IV. RESULTS AND DISCUSSION

4.1 Results of Descriptive Statics of Study Variables

Table 4.1: Descriptive Statics

Variable	Minimum	Maximum	Mean	Std. Deviation	Jarque-Bera test	Sig
KSE-100 Index	-0.11	0.14	0.020	0.047	5.558	0.062
Inflation	-0.01	0.02	0.007	0.008	1.345	0.510
Exchange rate	-0.07	0.04	0.003	0.013	1.517	0.467
Oil Prices	-0.24	0.11	0.041	0.060	2.474	0.290
Interest rate	-0.13	0.05	0.047	0.029	1.745	0.418

Table 4.1 displayed mean, standard deviation, maximum minimum and jarque-bera test and its p value of the macroeconomic variables of the study. The descriptive statistics indicated that the mean values of variables (index, INF, EX, OilP and INT) were 0.020, 0.007, 0.003, 0.041 and 0.047 respectively. The maximum values of the variables between the study periods were 0.14, 0.02, 0.04, 0.41, 0.11 and 0.05 for the KSE- 100 Index, inflation, exchange rate, oil prices and interest rate.

The standard deviations for each variable indicated that data were widely spread around their respective means.

Column 6 in table 4.1 shows jarque bera test which is used to check the normality of data. The hypotheses of the normal distribution are given;

H_0 : The data is normally distributed.

H_1 : The data is not normally distributed.

Table 4.1 shows that at 5 % level of confidence, the null hypothesis of normality cannot be rejected. KSE-100 index and macroeconomic variables inflation, exchange rate, oil prices and interest rate are normally distributed.

The descriptive statistics from Table 4.1 showed that the values were normally distributed about their mean and variance. This indicated that aggregate stock prices on the KSE and the macroeconomic factors, inflation rate, oil prices, exchange rate, and interest rate are all not too much sensitive to periodic changes and speculation. To interpret, this study found that an individual investor could not earn higher rate of profit from the KSE. Additionally, individual investors and corporations could not earn higher profits and interest rates from the economy and foreign companies could not earn considerably higher returns in terms of exchange rate. The investor could only earn a normal profit from KSE.

Figures and Tables

Place figures and tables at the top and bottom of columns. Avoid placing them in the middle of columns. Large figures and tables may span across both columns. Figure captions should be below the figures; table captions should appear above the tables. Insert figures and tables after they are cited in the text. Use the abbreviation "Fig.1" in the text, and "Figure 1" at the beginning of a sentence.

Use 10 point Times New Roman for figure labels. Use words rather than symbols or abbreviations when writing figure-axis labels to avoid confusing the reader. As an example, write the quantity "Magnetization", or "Magnetization, M", not just "M".

Table 1 Table Type Styles

Table Head	Table Column Head		
	Table column subhead	Subhead	Subhead
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IV. ACKNOWLEDGMENT

The preferred spelling of the word "acknowledgment" in America is without an "e" after the "g". Avoid the tilted expression, "One of us (R.B.G.) thanks..."

Instead, try "R.B.G. thanks". Put applicable sponsor acknowledgments here; DONOT place them on the first page of your paper or as a footnote.

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