APPROVAL

We certify that we have read the thesis submitted by **Oripah Nyasha Kalumo** titled **"Determining the impact of COVID-19 on the quality of life of Africans living in the Northern Cyprus"** and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Nursing specialized in public health (MSc Nursing)

Examining Committee	Name-Surname	Signature
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NEAR EAST UNIVERSITY
INSTITUTE OF GRADUATE STUDIES
DEPARTMENT OF NURSING

DETERMINING THE IMPACT OF COVID-19 ON THE QUALITY OF LIFE OF AFRICANS LIVING IN THE NORTHERN CYPRUS

M.Sc. THESIS

ORIPAH NYASHA KALUMO

Nicosia
June 2022

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DECLARATION

I hereby declare that all information, documents, analysis and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.

06/21/2022
Oripah Nyasha Kalumo

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Firstly, my sincere gratitude goes to God almighty for his endless mercy on me. Without him, all this would have been impossible. This journey was a tough and bumpy road but he showered his grace over me and made me conquer.

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Lastly, a heartfelt thanks goes to all my friends and everyone that took part in helping me with my research.

Oripah Nyasha Kalumo

ABSTRACT

Determining the impact of COVID-19 on the quality of life of Africans living in the Northern Cyprus

Kalumo Oripah Nyasha

Near East University Institute of Graduate Studies, Faculty of Nursing, Department of Public Health Nursing Masters Thesis, June 2022, 79 pages

Objective: This study was conducted to determine the impact of Covid-19 on the quality of life of Africans living in the Northern Cyprus.

Materials and Methods: This research utilizes a cross sectional descriptive quantitative research design and a survey method was adopted as the most suitable method of collecting information from the study participants. The research targeted Africans (N=2 14) who attend the Seventh Day Adventist church in Northern Cyprus and it was carried out in January 2022 over a timeframe of 15 to 20 minutes.

Data Collection: To collect data, a google form link was sent over to participants to answer a survey. The survey contained the socio demographic form, the scoring areas affected by COVID-19 scale and lastly the QoL scale. It focused on analyzing the participants quality of life based on their physical, social, sexual, emotional, economic wellbeing before and after lockdown.

Data Analysis: The data gathered through Google Forms was transferred to SPSS for statistical analysis which was used to present the demographic as well as clinical characteristics of the participants. After the analysis, information was presented using tables. The demographic characteristics were analyzed using descriptive statistics such as mean, frequency and percentage. A correlation test of distributions of the demographic information of the participants was carried out and an ANOVA t-test was conducted to determine the relationship between the variables.

Results and Discussion: Conforming to the study results, COVID-19 had the most negative impact on the economic domain of wellness, with the second most affected being mental health and social status of life, then

finally physical and sexual health respectively. As reported by the one-way ANOVA results, there was no statistically significant difference in the demographics of participants during the COVID-19 first lockdown and the last seven days after being recorded. The findings discovered evidence that COVID-19 had a variable effect based on demographic factors such as gender, job status and educational level. Males occupied a larger proportion of the sample group, with 61.2 % denoting that COVID-19 had a greater impact on their QoL than women. University students had a percentage of 62.1 % on the educational level, implying that this group was also impacted more, while 56.7 % of the participants reported to be unemployed and this could also be seen as a great influence on mental distress and other dimensions of wellness as everyone required money to meet their needs during the lockdown.

Conclusion and Recommendations: The findings leave us with a conclusion that during the lockdown more participants were negatively impacted on their QoL with great impact on economic status and less sexually. Based on these findings, policymakers can better manage the COVID-19 pandemic's impact on the African community's health and well-being, particularly among the vulnerable population. It is suggested that the PHN implements ideal mental health programs for all Africans in order to assist them in dealing with stressful situations. It is also recommended that initiatives seek to identify Africans, meet their needs through direct involvement, and provide COVID-19 advice in a familiar language such as English, as well as notify them of changes in healthcare services during the pandemic through multimedia. Lastly it is suggested that the government assist Africans in Northern Cyprus by including them in social welfare programs in response to COVID-19, implementing food stamps during the pandemic, and beginning to provide free or low-cost diagnosis and treatment for this group.

***Key Words**:* Covid-19, foreign, life quality, Northern Cyprus, African

ÖZET

COVID-19'un Kuzey Kıbrıs'ta yaşayan Afrikalıların yaşam kalitesine etkisinin belirlenmesi

Kalumo Oripah Nyasha

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Amaç: Bu çalışma, COVID-19'un Kuzey Kıbrıs'ta yaşayan Afrikalıların yaşam kalitesine etkisini belirlemek amacıyla yapılmıştır.

Gereç ve Yöntem: Bu araştırmada kesitsel tanımlayıcı nicel araştırma tasarımdadır. Araştırma, Kuzey Kıbrıs'taki Seventh day Adventist kilisesine katılan Afrikalılarla (N=214) yürütülmektedir.

Veri Toplama: Veri toplamak amacıyla, katılımcılara bir anketi yanıtlamaları için bir google form bağlantısı gönderildi. Anket, sosyodemografik formu, COVID-19 ölçeğinden etkilenen puanlama alanlarını ve QoL ölçeğini içermektedir. Katılımcıların karantina öncesi ve sonrası fiziksel, sosyal, cinsel, duygusal, ekonomik refahlarına dayanarak yaşam kalitelerini analiz etmeye odaklandı. Veri toplamak için hazırlanan google formu doldurmak 15-20 dakika sürmüştür.

Veri Analizi: Google Form aracılığıyla toplanan veriler, katılımcıların demografik ve klinik özelliklerini sunmak için kullanılan istatistiksel analiz için SPSS'ye aktarılmıştır. Analiz sonrasında tablolar kullanılarak bilgiler sunulmuştur. Demografik özellikler ortalama, sıklık ve yüzde gibi tanımlayıcı istatistikler kullanılarak analiz edilmiştir. Katılımcıların demografik bilgilerinin dağılımlarının korelasyon testi yapılmış ve değişkenler arasındaki ilişkiyi belirlemek için ANOVA t-testi yapılmıştır.

Sonuçlar ve Tartışma: Çalışma sonuçlarına göre, COVID-19 sağlıklı yaşamın ekonomik alanı üzerinde en olumsuz etkiye sahipti, ikinci en çok etkilenen zihinsel sağlık ve yaşamın sosyal durumu, ardından sırasıyla fiziksel ve cinsel sağlıktı. Tek yönlü ANOVA sonuçları tarafından bildirildiği üzere, COVID-19 ilk kilitlenmesi sırasında ve kaydedildikten sonraki son yedi gün boyunca katılımcıların demografisinde istatistiksel olarak anlamlı bir fark yoktu. Bulgular, COVID-19'un cinsiyet, iş durumu ve

eğitim düzeyi gibi demografik faktörlere dayalı olarak değişken bir etkiye sahip olduğuna dair kanıtlar buldu. Erkekler, örneklem grubunun daha büyük bir bölümünü işgal etti ve% 61,2'si COVID-19'un QoL'leri üzerinde kadınlardan daha büyük bir etkiye sahip olduğunu belirtti. Üniversite öğrencilerinin eğitim düzeyinde% 62,1'lik bir yüzdesi vardı, bu da bu grubun da daha fazla etkilendiğini ima ederken, katılımcıların% 56,7'sinin işsiz olduğunu bildirdi ve bu, zihinsel sıkıntı ve sağlığın diğer boyutları üzerinde büyük bir etki olarak görülebilir, çünkü herkes karantina sırasında ihtiyaçlarını karşılamak için paraya ihtiyaç duydu.

Sonuç ve Öneriler: Bulgular bize, karantina sırasında daha fazla katılımcının QoL'lerinde olumsuz etkilendiği, ekonomik durum üzerinde büyük ve daha az cinsel etki yarattığı sonucuna varmamızı sağlıyor. Bu bulgulara dayanarak, politika yapıcılar COVID-19 salgınının Afrika toplumunun sağlığı ve refahı üzerindeki etkisini, özellikle de savunmasız nüfus arasında daha iyi yönetebilirler. PHN'nin stresli durumlarla başa çıkmalarına yardımcı olmak için tüm Afrikalılar için ideal zihinsel sağlık programlarını uygulaması önerilmektedir. Ayrıca, girişimlerin Afrikalıları tanımlamaya, doğrudan katılım yoluyla ihtiyaçlarını karşılamaya ve COVID-19 tavsiyelerini İngilizce gibi tanıdık bir dilde sunmaya ve pandemi sırasında sağlık hizmetlerindeki değişiklikleri multimedya aracılığıyla bildirmeye çalışmaları önerilir. Son olarak, hükümetin Kuzey Kıbrıs'taki Afrikalıları COVID-19'a yanıt olarak sosyal refah programlarına dahil ederek, pandemi sırasında gıda damgaları uygulayarak ve bu grup için ücretsiz veya düşük maliyetli tanı ve tedavi sağlamaya başlayarak yardımcı olması önerilmektedir.

Anahtar Kelimeler: Covid-19, yabancı, yaşam kalitesi, Kuzey Kıbrıs, Afrika

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ARDS: Acute respiratory distress syndrome
CDC: Centers for Disease Control and Prevention
CoV: Coronavirus
COVID-19: Coronavirus 2019
CSSE: Center for Systems Science and Engineering
DASS-21: The Depression, Anxiety and Stress Scale - 21 Items
EQ-5D: European Quality of Life Five Dimension
EQ-VAS: European Quality of Life Visual Analog Scale
FDA: Food and Drug Administration
HRQOF: Health-Related Quality of Life
HCoV: Human coronavirus
MCS: Mental component score
MERS: Middle East Respiratory Syndrome
MERS-CoV: Middle East Respiratory Syndrome Related Coronavirus
PCS Physical component score
QoL: Quality of life
RNA: Ribonucleic Acid
SARS: Severe Acute Respiratory Syndrome
SARS-CoV: Severe Acute Respiratory Syndrome Coronavirus
SARS-CoV-1: Severe Acute Respiratory Syndrome Coronavirus 1
SARS-CoV-2: Severe Acute Respiratory Syndrome Coronavirus 2
SD: Standard deviation
SNS: Social Networking Service
SPSS: Statistical Package for the Social Sciences
TRNC: Turkish Republic of North Cyprus
UK: United Kingdom
WHO: World health organization
WHOQOL-BREF: World Health Organization Quality of Life

CHAPTER I

Introduction

Background

In 2019, a deadly disease sprung up from the Wuhan province of China, spreading across the globe towards the end of the year (Khan et al., 2021). The COVID-19 virus caused the pandemic of severe acute respiratory syndrome coronavirus 2 (SARS-COV2). The coronavirus is very deadly and it has resulted in 416,614,051 confirmed cases and 5,844,097 deaths globally (World Health Organization, 2022). The pandemic is notorious and infamous because of its highly contagious nature and speed in transmission. The virus constituted a major public health disaster. Hence, the World Health Organization consequently declared it a Public Health Emergency of International Concern and, a pandemic, on 30th of January and, 11th of March, 2020 respectively (Repišti et al., 2020; Tran et al., 2020).

The pandemic was met by pandemic preparedness and proactive measures in a bid to limit the speed of transmission of the virus. Physical and mobility restrictions have been effected globally thereby confining people temporarily and regulating human behavior in a bid to reduce physical interactions (Pinzaru, Zbuchea & Anghel, 2020). Social distancing, partial or complete border closures, lockdown measures, travel bans and quarantines are adopted globally. These measures, although, safe and effective (Gautam, 2021), has its effects on lives of people globally. The new normal in social, economic and health interactions have as much effect as the pandemic itself on people especially on mental health and Quality of Life (Tran et al., 2021).

Quality of life (QoL) has enjoyed wide exploration in the past decade, primarily in research and literature on non-communicable and chronic diseases (Algahtani et al., 2021). According to (Heraldstad et al., 2019), QoL refers to a patient's subjective view and perception of the effect of an illness, disease or medical condition on different domains which can include physical, psychological, social and occupational lenses (Heraldstad et al., 2019). In essence, QoL describes how a patient and people around them

relates to an illness. The identification and examination of QoL from different domains subsequently provides ease in analyzing the different range of problems that can affect and influence people's everyday lives. Research has suggested that there is a significant relationship between QoL and persistence in overall health and well-being (Fayers & Machin, 2015 cited in Algahtani et al., 2021).

According to (Hadjicharalambous, Demetriou & Erotocritou, 2021), empirical evidence generated from researches showed that the pandemic as well as the strict measures adopted to contain and limit the speed of transmission and spread of the virus has effects on the general functioning, well-being and quality of life of affected populations (Mazza et al., 2020). Qui et al., (2020); Yezli & Khan, (2020) posited that outbreak of infectious diseases normally affects the physical, social, economic and psychological life of individuals and the society at large. The coronavirus is also a type of infectious disease and a study from Morocco has demonstrated a negative relationship between COVID-19 pandemic and Health Related Quality of Life (Mucci, Mucci & Diolaiuti, 2020). These effects were just as unexpected as the pandemic itself. In lieu of this, researches have been conducted in a bid to unravel the effects of COVID-19 on the Quality of Life of selected study participants (Pulvirenti et al., 2020; Repiśti et al., 2020; Zhang & Ma, 2020; Hadjicharalambous, Demetriou & Erotocritou, 2021).

QoL was conceptualized by the World Health Organization to mean "an individual's perception of their position in the life in the context of the culture in which they live and in relation to their goals, expectations, standards and concerns" (WHOQOL Group, 1995). Global health, economic and social security is threatened by the novel virus. The Coronavirus pandemic has provoked unprecedented changes in the lives of people all around the world (Ravens-Sieberer et al., 2021).

The virus is easily transmitted from a carrier to an uninfected person. For this reason, in addition to the medical responses like testing and treating of patients, countries globally have effected physical and mobility restrictions thereby, confining people temporarily and regulating human behavior in a bid to reduce physical interactions (Pinzaru, Zbuchea & Anghel, 2020). Quarantine, travel and mobility restrictions, complete or

partial border closures and social distancing are adopted globally in order to slow the transmission speed of the virus (Gautam, 2021). These measures have turned out safe and effective in slowing the speed of transmission of the coronavirus (Gautam, 2021). However, the proactive approaches such as entry restrictions from affected countries, social and physical distancing, quarantine of contacts and lockdown measures has its effect on many aspect of lives of people globally (Tran et al., 2021).

The pandemic disrupted normal conditions of living. For instance, millions of jobs were lost as a result of global economic shut down, more than 1.5 billion students were also affected by the closure of educational institutions, (Tran et al., 2020 citing UNESCO, 2020), there is heightened fear-induced aversion to work places and public places. In addition to the severe economic and educational devastation caused by COVID-19, according to (Repiśti et al., 2020), evidences generated from large-scale health pandemics in the past suggest that an event like the outbreak of COVID-19 has severe impacts on physical health. However, the impacts are not limited to physical health but also affect the mental health and quality of lives of people (Holmes et al., 2020). It is important to note that the strain on mental health and quality of lives affects the people considered as healthy just as much as it affects vulnerable classes of people (Zhang & Ma, 2020).

The pandemic is a genesis for negative effect on quality of life of people (Tran et al., 2020). A study in Italy, utilizing a questionnaire to measure Health-Related Quality of Life (HRQOL) of adults with Common Variable Immune Deficiency showed that the COVID-19 pandemic had negative effect on HRQOL (Pulvirenti et al., 2020). In order to examine and identify the effects of the coronavirus pandemic on QoL and mental health, Zhang and his colleague performed a cross-sectional study utilizing an online survey of respondents who are local Chinese resident, aged 18 years old and above. According to the authors, the pandemic was associated with mild stressful impact on the respondents (Zhang & Ma, 2020). Similarly, in a survey conducted by Gloster and colleagues, the researchers suggested that study participants were moderately mentally healthy during the period of the total lockdown (Gloster et al., 2020). Hoang et al., in a study using 36-item short form survey, determined that participants with COVID-19 had a lower

health-related quality of life score compared to those without COVID-19 (Nguyen et al., 2020). Repiśti et al., (2020) developed a scale to measure participants' perceptions on impact of COVID-19 on quality of life. The scale was called The COVID-19- Impact on Quality of Life (COVID19-QoL). Results showed that how the participants perceived and what they thought of their quality of life was the area most affected by the outbreak.

Quarantined individuals and other individuals during the pandemic are at an increased risk of experiencing a wide spectrum of negative emotions like anger, fear, guilt, loss of control and stress (Algahtani et al., 2021). It has become imperative to understand the repercussions of physical health, restrictions on social interactions and, psychological state of people during the outbreak.

Aim of the study

The aim of the study is to explore and determine the overall impacts of COVID-19 on the quality of life of Africans living in the Northern Cyprus.

Statement of the research problem

The effect of the coronavirus pandemic is so drastic and critical to the extent that it is said to have posed one of the greatest challenge globally within 75 years since World War II (Tran et al., 2020). Globally, millions of lives have been lost to coronavirus. (Holmes et al., 2020; Khan et al., 2021) The virus spread like wildfire until measures were taken in order to limit its spread. A specific cure for the virus is still lacking, however, critical responses and measures have been taken in a bid to control the spread of the virus. The effect of the virus is felt in every sphere of life and relationships between people. The pandemic caused a sudden shift in existing social and economic life while introducing the new normal which is accentuated by drastic changes in inter-personal, human relationships (Calbi et al., 2021).

What this means in essence is that the outbreak did not only pose health risks, it had severe economic effects like aggravating the dwindling economies of some countries, while also shuttering small businesses and entrepreneurial ventures because of the Staying home and staying safe and,

other lockdown directives. (Hart & Halden, 2020) (Atalan, 2020) The strain on health, finances and social relationships has had impact on the mental health and quality of life of people all around the world. As said, many problems can be attributed to the coronavirus outbreak, but this research focuses on the specific problems and effects on quality of life of selected participants. In a bid to address the research problem, the research also aims to answer the following research questions:

Research questions

- Does Covid-19 have an effect on the quality of life of Africans living in Northern Cyprus?
- Do socio-demographic characteristics have an effect on the change in the quality of life of Africans living in Northern Cyprus due to Covid-19?

CHAPTER II

Literature review

Coronavirus definition

Coronavirus is also known as SARS-CoV-2 which is an illness that has the potential to cause what clinicians call an infection of the respiratory tract. It can also be acknowledged as COVID-19, coronavirus 2, or new coronavirus. (Bherwani et al., 2020). It may have an impact on upper or lower respiratory system causing pneumonia, inability to breathe, heart disease, septic shock even death. At times people that have been infected by the virus will develop little to no respiratory problems and recover without the need of medication. When appearing under the electron microscope the virus matches the solar corona with spherical particles and a projection rim which resembles a crown hence the name corona which has the same meaning in Latin. In the 1960s, it was discovered to be caused by a single stranded, enclosed, positive sense RNA viruses. The Coronaviridae group is known to be a cause of mild respiratory illnesses in humans and coronavirus is a part of it. (Sudipta Dhar ChowdhurY et al., 2020).

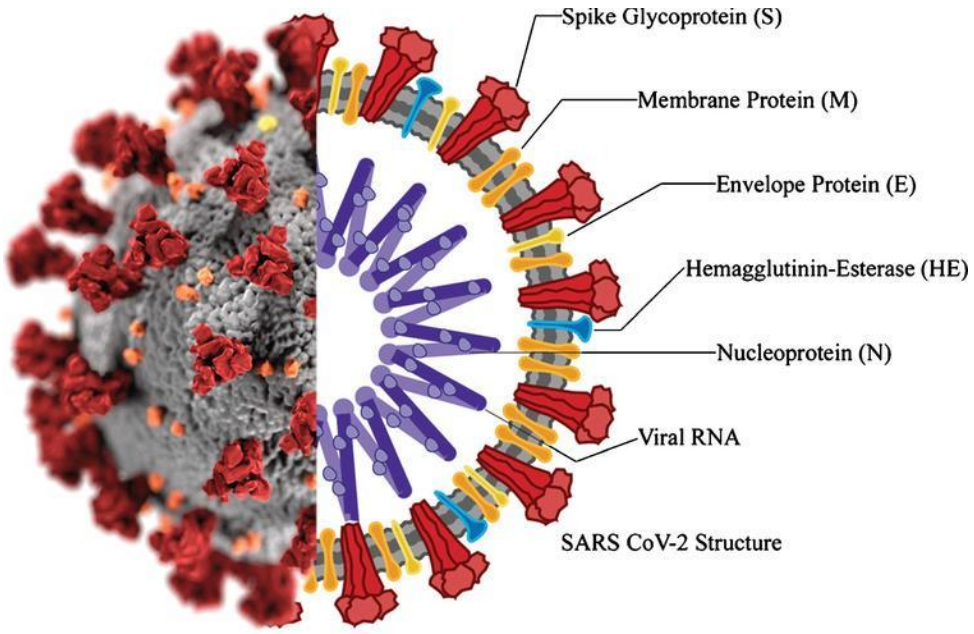

Figure 1.*Structure of the coronavirus*

Origin of the COVID-19

In 1965 scientists discovered the corona, a single-stranded, enclosed, positive-sense RNA virus that causes coronavirus. The very first case of human coronavirus became acknowledged in the mid-1960s. A couple other coronaviruses in humans (HCoV) were observed, with 4 being endemic and the rest being epidemic. The world experienced the first fatal coronavirus induced symptoms in 2002, known as severe acute respiratory syndrome. The very first identified case of SARS-CoV that was associated with respiratory failure was recorded in late 2002 in a city called Foshan which is in China. (Zhong, N.; Zheng, B.; Li, Y.; Poon, L.; Xie, Z.; et al., 2003). Ever since, the disease's outbreak has spread dramatically to different countries across the world, which triggered the World Health Organization (WHO) to declare the disease as an international health threat. Within a few months of the disease's onset in mainland China, there were 300 confirmed cases, with the vast majority of them being workers in healthcare sector. (WHO, 2003).

Because infected people kept travelling, the disease rapidly spread to other countries throughout Asia and North America, among others (Guan et al., 2004; Drosten et al., 2003). To combat the outbreak, the WHO collaborated with various vast networks of research institutions worldwide in March 2003 to help find the SARS pathogenicity. They evaluated patients who were infected by the disease in the same year and discovered that a new variant of the coronavirus might well have induced SARS. The virus's genetic analysis, which revealed its innovation, affirmed that it is only genetically linked to established coronaviruses. This same SARS-CoV pandemic did not only cause a public health concern, however, it additionally triggered socioeconomic upheavals, particularly in China (Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., Zhang, L., Fan, G., Xu, J., Gu, X., Cheng, Z., et al 2004). Initially, it was thought that the SARS-CoV may spread across the globe and result a severe crisis in the economy. Nevertheless, the immediate measures implemented by the officials relating with the epidemic, for instance alienating patients, infection prevention and control, and quarantine steps, aided to successfully regulate the disease. After a record of 8096 infection cases and 774 deaths the pandemic ended in July 2003. (WHO, 2003).

The coronavirus' potential to spread from animals to humans as well as among humans through air particulates makes it a zoonotic virus. At the end of 2003 to January 2004, a couple of SARS cases were disclosed as a consequence of transmission of zoonotic pathogens probably associated with civet cats. Even so, there were no new human confirmed cases of SARS had been identified since then. Despite the fact that SARS had a low death rate and low amount of infection rate within the population, the health ramifications of the SARS crisis desist to affect only those who were infected with the virus. The discovery of the causative virus, the ability of rapid hospital acquired transmission, and how the healthcare workers in hospitals were vulnerable, all contributed to widespread fear. (WHO, 2003).

However, one coronavirus, SARS-CoV-1, one that prompted the 2003 SARS outbreak, was discovered to may have a close link with other coronaviruses coming from bats. All the variants of coronaviruses from the first one to the current COVID-19 have close relationships genetically, proposing that all of them emerged in bats populaces. Several of the coronaviruses can transmit in a variety of animal categories. The first SARS-CoV-1, for instance, the civet cats were infected first and later on the humans, whereas the virus that induced the Middle East Respiratory Syndrome (MERS-CoV) was discovered to be coming from camels and since 2012 it has been infecting people (WHO, 2020). June 2012, in Saudi Arabia, there was a recorded case of acute pneumonia and respiratory fever, which was a couple of years following the existence of SARS-CoV. A result made with distinguish from a patient's sputum, stated that MERS-CoV, was linked to death. Nevertheless, before the scientific breakthrough of the first MERS crisis, in April 2012, there was an outbreak of acute respiratory disease in a public hospital in Zarqa, Jordan. (Zaki et al., 2012).

In late 2019, the birth of a new pandemic affiliated by an old viral hazard has yet again confirmed the world's weakness in dealing with quite a large-scale pandemic. Out of all the 3 breakouts of the coronavirus, since the 1960s, COVID-19 is the third largest coronavirus pandemic, and it has substantiated being the worst among all the previous outbreaks. COVID-19's first cases were recorded by the Wuhan Chinese officials in in late 2019 and they observed human cases that began exhibiting symptoms (Zhu et al.,

2020). A wholesale food market in this area had a relation to several of the earliest documented cases, whilst others did not. Individuals that owned stores in the market, as well as the market employees or regular purchasers at the market were among the majority of the first people to be infected by the virus. Ecologic tests conducted in December 2019 within this market came back positive for Severe acute respiratory, insinuating that the market was the origin of the pandemic or rather it contributed in the initial expand of the outbreak. (WHO, 2020) .It was acknowledged as a national crisis by WHO in early 2020 as it had spread to different countries over the world. New cases of infected people and death was recorded every day and quarantine measures were implied to infected people as well as travelling restrictions between countries, continents and cities. The mandatory use of face masks social distancing and hand sanitization was adapted in all countries to reduce the spread of the virus. In conformance with the Center for Systems Science and Engineering at John Hopkins University, approximately 1,400,000 cases had been reported worldwide as of April 7th, 2020 (JHUoMCr center *Journal.* 2020). By September 2021, the recorded cases were over 200 million across the globe (Badr et al., 2020).

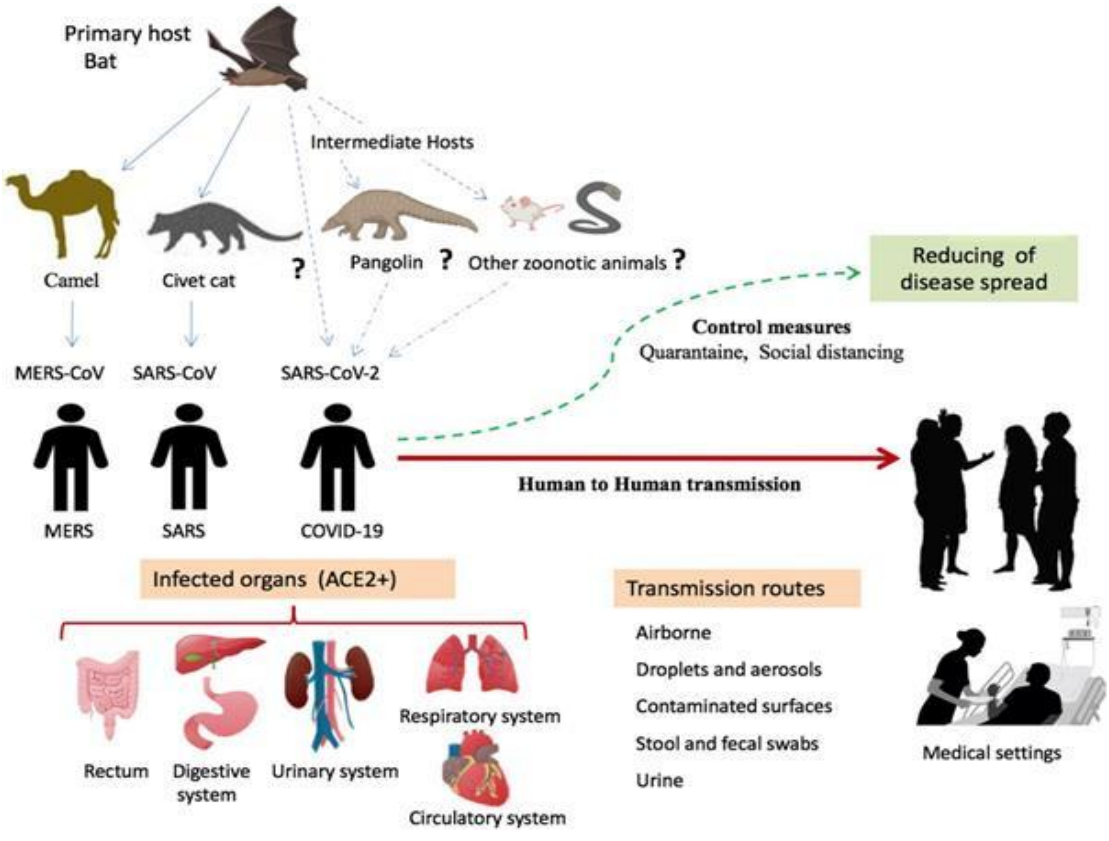

Figure 2.*Origin of Coronavirus*

Epidemiology

Because the 3 types of coronaviruses are not well adapted to human maintenance, they are more capable of spreading through other zoonotic reservoirs, with a sporadic outbreak in the vulnerable individuals, possibly through the use of an intermediate host. (2016) (Su S et al). Xu J and other researchers stated that, the novel coronavirus, in particular, has a high rate of human-to-human transmission, resulting in a broad range of clinical signs and symptoms in patients who are infected with the virus. Within a month of the disease's emergence, Guan et al for instance, conducted an in depth evaluation of the nature and symptoms of the virus from patients who were hospitalized, and the results came from a total of 552 hospitals in about 30 provinces in China. Out of 1099 patients 48 percent were male. Due to the diverse array of symptoms, it was initially difficult to diagnose the illness. In almost 44 percent of the cases studied at the time of presentation, fever was present among the patients, but later increased to 88.7 percent after hospitalization. Upon being admitted to a hospital, a certain percentage of the hospitalized patients developed serious symptoms (Guan W, 2020). Regardless of the high mortality rate linked to coronavirus, SARS-CoV-2 seems to have a lower rate of causalities than SARS-CoV and MERS-CoV combined. Officials in the public health sector and federal bodies, came up with regulations to obstruct the rapid transmission of the virus, they took measures never before attempted such as restricting travelling both national and international, imposing large-scale curfews, isolating and quarantining individuals that are infected by the virus, and so forth. (Khan, M., Adil, S. F., Alkhathlan, H. Z., et al., 2020).

With the dramatic rise of COVID-19 transmission across the globe, the increasing number of cases indicates that the virus is still spreading. A seafood market in the Wuhan province was confirmed to be where numerous cases of COVID-19-associated acute pneumonia emerged from. Since that time, beginning of March 2022, the number of people who had caught the virus around the world had spiked to over 400 million, which may still be an underestimate due to untraced exposures and asymptotic individuals. The causative agent has been identified as a new pathogen of the previously recognized form of coronavirus based on sequence analysis of patient

isolates. Furthermore, innovation sequencing and other technological techniques have greatly aided in accurate detection of the virus. (Shereen, M.A.; Khan, S.; Kazmi, A.; et al., 2020). Subsequently, anyone that had a connection with the sea food market, whether by selling or buying food prepared by the contaminated animals, was said to be infected by the virus. Additional investigation and close monitoring of interactions between the infected people disclosed that a percentage of individuals who had no record of visiting the seafood market also tested positive for the illness. As suggested in the findings, over 200 countries worldwide reported that the coronavirus could be passed down from person to person. The likelihood of transmitting COVID-19 between humans was validated in an empirical evaluation of infected people in a family cluster in which some members visited Wuhan, but one member did not. (Chan et al., 2020). The emergence of SARS-CoV-2 infection at epidemic tiers in Shenzhen, China was reported from other studies. (Liu et al., 2020). This national survey established that transmission of the virus through social groups and inside family households were the main causes of SARS-CoV-2 rapid spread around the country. The transmission of COVID-19 through Person to is mostly common when an infected person coughs or sneezes their respiratory droplets into the environment where non infected people are. Through the nasopharyngeal passage, the tiny particles can get into the lungs through breathing in. Just like other respiratory infections, SARS-CoV-2, is spread through particles that vary in sizes. If the droplet particle has a diameter of greater than 5 to 10 μm it is typically referred to as respiratory droplet, while the nuclei is the one with diameters less than 5 μm. (WHO, 2014). After large droplets evaporate in the air, the remaining nuclei droplets that contain the virus spreads the disease and the process is commonly called airborne transmission. Those certain airborne particles hang in the air for an extended period of time and can be passed onto people standing more than a meter apart. SARS-CoV-2, on the contrary, primarily, can be passed onto each other through respiratory droplets and close interactions. Undoubtedly, no evidence of airborne transmission was found in a comprehensive review of COVID-19 victims in China (WHO, 2020).

SARS-CoV-2 droplet transmission occurs when a person is within 1 meter of another person who is experiencing symptoms of the respiratory system for instance, coughing as well as sneezing. Infected droplets from a highly contagious person may be able to pass the infection via their mucosae on mouth and nose or conjunctiva of the eyes. Despite the fact that mucosae transmission of the virus is the more popular, conjuctival transmission is far less common. (Peng, Y.; Zhou, Y.H, 2020). Furthermore, SARS-CoV-2, comparable with other coronaviruses, has the potential to cause nosocomial outbreaks via atmospherical contamination as a transmission mechanism. Moreover, the approach and breadth of contamination of the atmosphere must be looked into further. There are recent studies on a variety of airborne particles from patients who were placed in very well protected isolation rooms, as well as samples collected from the surfaces that were touched and used by the infected individuals, personal protective equipment samples, and swabs, among other things. According to the studies, environments that are contaminated by infected patients via respiratory droplets or through fecal matter could pose a threat to disease transmission (Ong et al., 2020).

Symptoms

The respiratory system is what COVID-19 targets the most, consequently, it also has an impact on other different organs. (Huang C, et al., 2020). Lower respiratory tract infection related symptoms, for instance, high fever accompanied by a dry cough, and dyspnea were noted during the first phase, in the preliminary case series from Wuhan. Subsequently, reports of throwing up, diarrhea, headaches, dizziness, generalized weakness were recorded. It is now widely verified that the respiratory symptoms of coronavirus are extremely heterogeneous, varying from minor symptoms to severe oxygen deprivation with acute respiratory distress syndrome. Respiratory symptoms may develop quickly hence the timeframe between the appearance of symptoms and the advancement of ARDS is little as 9 days. The latter symptoms has the potential to be life threatening. (CDC, 2019), (WHO, 2020).

Many patients around the world have succumbed to severe diseases and the number keeps growing. Individuals over 65 are at an elevated likelihood of serious illness from COVID-19, and as you grow older the risk increases as well. Individuals that already possess health conditions seem to be at an increased potential of contracting coronavirus. (MA, 2020). Among the life threatening health conditions are, people who suffer from cardiomyopathy, heart failure, coronary artery diseases, all types of cancer, chronic obstructive pulmonary disease, type 1 or type 2 diabetes, obesity, people who are addicted to smoking, chronic kidney disease, sickle cell disease or thalassemia, people that have a weakened immune system from HIV, solid organ transplants or bone marrow transplants, pregnant women, asthmatic individuals, cystic fibrosis or pulmonary hypertension, liver disease, dementia, down syndrome, brain and nervous system conditions such as strokes, substance use disorders and the list goes on. (CDC, 2019), (WHO, 2020).

For someone who is showing symptoms of the virus or have engaged with an infected person, they should actively sought emergency medical attention. Their doctor will most likely advise them to take a test for the virus. (CDC, 2019), Symptoms such as persistent chest pressure, breathing difficulties, inability to remain awake, confusion, pale gray colored skin, lips, or nails, are considered to be emergency symptoms of the coronavirus, seek medical attention right after you notice them. If you require hospitalization, you have to tell the hospital ahead so that the care providers take necessary precautions to protect others. (WHO, 2020).

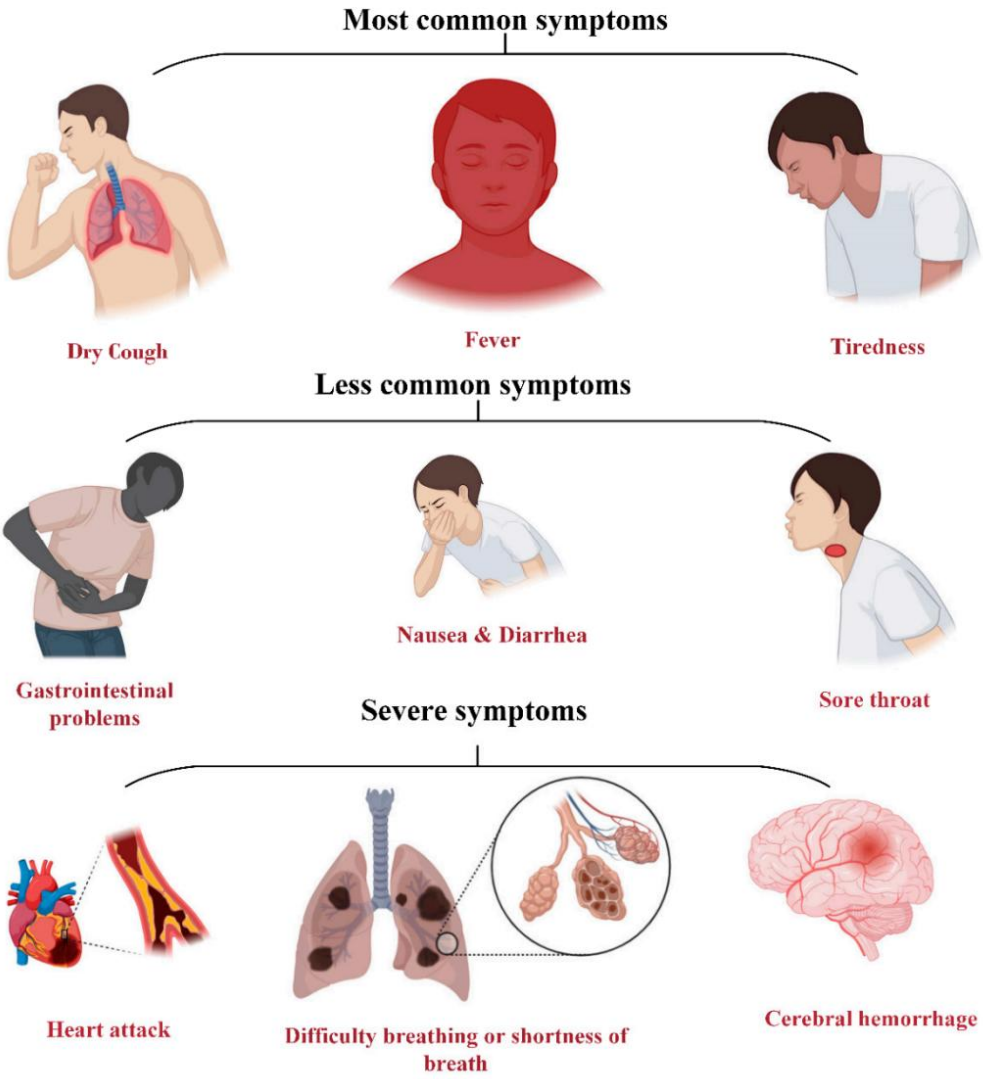

Figure 3.*Symptoms of Coronavirus.* Adapted from (Salahshoori, I et al., 2021)

Prevention

The (CDC) Center for Disease Control and Prevention together with the World Health Organization (WHO) proposed a series of guidelines to prevent, manage and mitigate the spread of COVID-19. (CDC, 2019), (WHO, 2020). Individuals were advised to:

Get vaccinated and keep your COVID-19 vaccinations updated

Vaccination against COVID-19 is an efficient method of preventing the virus's proliferation and keeps you healthy.

The vaccines prevent serious illness, hospitalization, and death. The most efficient measure of decelerating the spread of SARS-CoV-2, is to get vaccinated. The CDC suggests that people who are eligible, including

immunocompromised patients, keep their vaccines updated. The FDA authorized the Pfizer COVID-19 vaccine, to inhibit COVID-19 and strengthen the immune system in people that are aged 16 and older. The Moderna vaccine, now known as Spikevax, was also approved by FDA to inhibit COVID-19 from people who are 18 years going up. The vaccine could either keep you from getting the virus or prevent you from being seriously ill if you however manage to get it. Correspondingly, COVID-19 vaccination gives better protection which is better than getting sick with the virus. (CDC, 2019), (WHO, 2020).

People who have not received vaccination but are already infected by the coronavirus, as stated by a recent developed study, they are more likely as the people that have received full vaccination to become infected again. Upon getting the vaccine, people can resume to do many normal tasks that they may not have been able to do due to the coronavirus crisis in a more secure manner. Nevertheless, if you reside in a specific location where there are a substantial percentage of COVID-19 patients and new cases of coronavirus, it is advised by the CDC that the public should keep their masks on in indoor crowded areas. A fortnight upon obtaining the second dose of a COVID-19 vaccine or two weeks after receiving a single dose of the Janssen COVID-19 vaccine, you are taken into account to be fully vaccinated. (CDC, 2019), (WHO, 2020).

When individuals become eligible, it means that they are now updated on their vaccination status, meaning that they have received all the COVID-19 vaccination shots that are recommended and this includes the booster shot as well. For the individuals that still have a weak immune response even after taking the vaccination, an additional COVID-19 vaccine primary shot is proposed. On the contrary, a booster dose is recommended for individuals that have received vaccination but their immune response has weakened over time. According to studies, by receiving a booster shot of COVID-19, might reduce one's risk of infection and life threatening illness. For people whose immune system is moderately or severely compromised, they have to receive an additional shot as well as a booster shot. (CDC, 2019), (WHO, 2020).

Put on a mask

Whether you are vaccinated or not, everyone should wear a fitting mask indoors of public areas and also in areas where the contamination level of COVID-19 is high. Wear the mask that provides great fit, comfort as well as protection against contamination. For people that are 2 years and older, should wear a mask indoors in public, if they reside in an area with a high COVID-19 contamination level. Masks should be worn if an infected sick person wants to be around others or if care is being administered to someone who is infected with COVID-19. If you are in a high risk situation of severe illness, also if you share your home with or keeping company someone who is, talk to your doctor on the case of wearing masks in highly contaminated areas. (CDC, 2019), (WHO, 2020).

When one is coughing or sneezing they should cover their mouths, they can either cough or sneeze into their mask if they are wearing one. As quickly as possible, you ought to wear a new, clean mask and in addition you should wash your hands thoroughly with soap. If one is not putting on a mask, when the sneeze or cough they should make a courtesy of making use of tissue or paper towel to cover their nose and mouth or rather use inside of your elbow or clothes. Immediately after use dispose the tissues you used in the trash. For a minimum of 20 seconds right after sneezing or coughing in your hands you should wash your hands thoroughly with soap and water. If there is no readily available soap and water, hand sanitizer that contains over 60 percent of alcohol is required to disinfect the hands. (CDC, 2019), (WHO, 2020).

Wash your hands frequently and sanitize

Frequent hand washing for a minimum of 20 seconds with plenty soap and water, particularly after some time around many people in a highly infected area or when someone has sneezed, coughed or blown their nose. If you have not washed your hands you are not supposed to touch your mouth, nose or scratch your eyes. Clean commonly touched surfaces on a regular basis or as required, as well as right after having a visitor in your house which includes spots like tap handles, door handles light sockets, mobile phones, computers, toilets and on top tables and counters

as examples. Frequently touched surfaces should be disinfected if someone is sick or has been diagnosed with COVID-19. Make use of a household disinfectant. Individuals are supposed to clean the locations with soap and water if the areas are too dirty to disinfect. (CDC, 2019), (WHO, 2020).

Keep a 6-foot distance between yourself and others and avoid crowds with poorly ventilated areas

If someone is sick inside your house, you should by all means avoid close association with them if possible. If at all possible, the distance that you are supposed to keep in your household between the sick person and other family members should measure up to 6 feet. If you are caring for someone who is sick, keep in mind to take care of yourself by wearing protective wear which is putting on a mask and gloves as well as following other measures. Prior to being vaccinated, especially for individuals that are at a greater risk of being infected by the coronavirus, when you enter inside public buildings you ought to bring in fresh air by opening windows and doors as well as staying 6 feet away from other people in the same building. (CDC, 2019), (WHO, 2020).

To prevent infections to others, conduct a test and maintain a daily health check

SARS-CoV-2 tests determine whether or not you are infected at the time of the test. These types of tests is known to be viral tests, since it searches for a viral illness. Regardless of the type of test used, if you get a positive result, it indicates that you have the viral infection and for others not to contact it from you, one has to isolate and notify family members or friends along with everyone you frequently get in contact with so that the infection will not be spread to them. There are tests which can be found over the counter (OTC) and are called self-tests, these viral tests are handy in that they can be used at any location providing instant results. These self-test kits are available to anyone, whether the individual is vaccinated or not or whether you have coronavirus symptoms or not. The coronavirus self-tests are listed as another way to reduce the risk of contamination spread, among others like getting vaccinated, frequent use of masks, as well as physical distancing. Individuals should keep an eye out for the main

symptoms of the virus and amid these are fever, cough, shortness of breath, etc. If one develops symptoms of the virus they should check their temperature immediately and frequently. Temperature should be measured at least half an hour after exercising or after consuming medications that may lower your temperature, such as acetaminophen. Observing symptoms is especially important when traveling, going into the work place, or in situations where it is nearly impossible to keep the coronavirus social distance length. (CDC, 2019), (WHO, 2020).

Implement the quarantine recommendations and take precautions when traveling including isolation guidelines

For people that are not up to date with their vaccination against coronavirus, and they have interacted with someone who is infected with the virus, should immediately quarantine themselves. The above entails individuals who have not received full vaccination. 5 days is the minimum number of days that one is required to stay isolated away from people after the last encounter with a coronavirus carrier. Day 0 begins on the date of your exposure. As well as inside the home, if possible, the isolated individual is required to keep on their mask around others. In a 10 days duration after a close association with an infected individual you ought to keep an eye out for fever, as well as coughing/shortness of breath among other symptoms of coronavirus. If symptoms develop, tests should be conducted right away and isolation should follow suit till results are out. If you test positive, isolate yourself immediately for a minimum of 5 days that is if your symptoms are not showing yet. However, if the symptoms start to develop one should isolate for 5 days and day 0 should be counted as the period on which the symptoms appeared. You can only leave your residence if you have tested negative for the virus, but at the same time you ought to continue putting on a mask when you interact with others at home as well as in crowded areas, which is 10 days from your last encounter with someone who is infected with the virus. (CDC, 2019).

Treatment

Coronavirus treatment is still being explored by scientists in all parts of the globe as there is none yet. Ideal supportive care includes oxygen that is for severely ill hospitalized patients and patients that are at risk of severe diseases, along with more innovative respiratory care, for instance ventilation, which is for patients that are critically ill. Dexamethasone is a form of corticosteroid which can help patients that are diagnosed with severe and life-threatening illnesses to reduce the time that they are on a ventilator which saves their lives. (WHO, 2020). WHO reported that a couple of drugs like interferon, hydroxychloroquine as well as remdesivir, did not show any effects in patients that had been hospitalized for a timeframe of 28days which is a mortality period or the in-hospital course of COVID-19.

In contrast to that, WHO does not advocate self-medication in any case with certain medication, and that includes antibiotics, for COVID-19 treatment as well as its prevention. Antibiotics are only effective against bacterial infections, not viruses. Because COVID-19 is caused by a viral infection, and this makes antibiotics to be ineffective. They must be avoided for use against COVID-19 prevention or treatment. Antibiotics are sometimes used in hospitals to prevent or treat some symptoms and bacterial secondary infections which are caused by side effects of coronavirus in patients who are critically ill. Their use should only be under the supervision of a doctor to treat a bacterial infection. Despite this, a number of vaccines have been developed to aid in the fight against COVID-19 by boosting the immune system. (WHO, 2020).

Effects of lockdown and isolation on the QoL of the general population

According to a Lancet article, people in quarantine have an increasing incidence of emotional turmoil and psychological disorders, and some of these symptoms appear to persist long after quarantine. People will need to pay closer attention to those who are affected and those who have co-morbidities, as well as fit and active people who may be more frustrated by the quarantine restrictions. This type of recognition can assist health-care

systems in prioritizing those who may have a bigger effect during this health emergency. (Wang C., et al).

There are no available evidences of the impact of COVID-19 on the QoL of Africans living in Northern Cyprus. Most researchers conduct the research based on a particular target population. For instance, (Hadjicharalambous, Demetriou & Erotocritou, 2021) conducted their research on students in Cyprus during the pandemic. Findings showed that the lockdown and social isolation measures had significant negative impact on the participants who showed increased symptom of anxiety and social dysfunction. Also, loss of jobs or decrease in family income no communication with friends and family and this had negative impact on QoL of students who had to handle more mental health issues (Hadjicharalambous, Demetriou & Erotocritou, 2021).

Pulvirenti and colleagues conducted their study of HRQOL of respondents in Italy. According to the findings, the female gender was linked to higher levels of anxiousness, depressed moods, and stress. This exploration is consistent with preceding research that has discovered a link between then female gender and higher mental distress. That discovery could as well be associated to findings in the international literature that the female gender is more vulnerable to stress and developing post-traumatic side effects. The personality territory of negative effect and disassociation, as well as female gender, were discovered to be related to extreme levels of anxiety, sadness, and stress inside the study. A further finding was a link among a background of strenuous scenarios and higher levels of psychological distress. The finding is consistent with study results indicating that people that have a background of trauma experience long consequences of the trauma, mostly in the form of mental symptoms that flare up or reappear during times of mental unpredictability, for instance the recent COVID-19 crisis. (Pulvirenti et al., 2020).

Niyati Agrawal & Hasna Ashraf conducted a survey on ‘COVID-19 Impact on Daily Life’ in India and the results of the study stated that as earnings decline, households continue to experience significant distress, as evidenced by skipping meals or medication due to a lack of resources and canceling hospital visits. With limited income, welfare transfers play a

critical role in assisting these households. (Niyati Agrawal & Hasna Ashraf, 2020).

Another study conducted by Zhang and his colleagues was a research on local Chinese residents. Zhang and his colleague conducted a cross-sectional study with an online survey of respondents who were aged 18 and up. According to their study, the pandemic had a mildly stressful effect on the respondents. (Zhang & Ma, 2020).

A research from Morocco has demonstrated a negative relationship between the coronavirus pandemic and HRQOL. These effects were just as unexpected as the pandemic itself. The findings revealed that the general health of people in quarantine has a negative impact on their quality of life, especially if they have chronic health problems. There were insignificant differences in some aspects of body pain, physical health, and psychosocial adjustment, as people who had not been directly affected by the virus would not differ significantly in these aspects. The findings emphasize the importance of social connections in mitigating the COVID-19 pandemic's negative impact on psychological health and physical wellness. (Mucci, Mucci & Diolaiuti, 2020).

However, the global impact of the COVID-19 disease outbreak as a whole has been devastating, affecting not only the health sector but also the QoL among other aspects of people's lives and the most affected areas include:

Mental health

Throughout the COVID-19 pandemic, people reported anxiety symptoms and mental anguish. Such mental illnesses were reported in many of the affected regions across the world, but also they may not speak of all the individuals in other parts of the world. Because of this, the coronavirus pandemic's recorded cases and death rates had a detrimental effect on mental wellbeing. (Horesh, Kapel LevAri, & Hasson Ohayon, 2020)The pandemic's impact on mental health and wellbeing has been profound (Lades, Laffan, Daly, & Delaney, 2020) (McElroy et al., 2020) (Pierce et al., 2020) While elevated mental anguish is a natural and uncanny coincidence for many people in these trying times, the

repercussions and effects caused by COVID-19 pose clinically significant anxiety and depression risk factors (Holmes et al., 2020).Based on the most recent preliminary findings from the study by (Atalan, 2020), lockdown is linked to human psychology. The primary causes of mental distress during confinement are the length of the lockdown, nosophobia, feeling frustrated and loneliness, inadequate house supplies, and insufficient knowledge. As a result quarantined individuals are likely to be in the midst of a perilous personal journey consisting of psychological contemplations concerning whether or not they will fall ill or a risky prediction about the world and its future path that, in susceptible people, might ultimately result in anxiety, aggression, hallucinations or compulsive thoughts and in the worst cases, complete psychosis. (Atalan, 2020).

At the beginning of lockdown people were compelled to remain inside the house because of regulations, there were many repercussions for different types of people and families, there was food shortages in stores due to panic buying. Big families suffered a lot since school and offices were closed and everyone was in the same house. Parents who were used to being away from their children had a hard time adjusting. Low income families who lived from pay cheque to pay cheque were reported to have suffered a lot from mental health issues since there was no way to sustain themselves. Many people lost their jobs and many borders were closed for travelling. The world went on a big break and it caught many people off guard.

Physical wellbeing

As a result of restricted permission to walk outside of homes, during the first lockdown period, vulnerable populations reported doing less than 30 minutes of moderate to intense physical exercises each week. (Naughton et al., 2021). (Wedig et al., 2020) Sedentary behavior, such as long durations of sitting, has also increased as a result of government authorities curfew mandates to stay at home. According to a UK survey, (Spence et al., 2021) 57 % maintained or increased their physical action levels throughout the lockdown. Just 33% fulfilled the suggested physical exercise regulations of 2 hours 30 minutes of moderate to intense physical exercise

each week. Many people suffered from cardiovascular complications due to inactiveness and depression.

Economic

Countries' reactions to the pandemic have led to a dramatic economic distress. (Hart & Halden, 2020). (Atalan, 2020). Businesses were closed, flights were restricted and international trade operation fell precipitously because of the worldwide economic downturn, exacerbating the severity and its scope of the economic upheaval. There was a pause in the imports and exports of goods in and out of the countries which exposed their vulnerabilities. Approximately 90 percent of the population has been displaced from their various occupations which might result in a long-term problematic labor market damage, with a big portion of the working population being incapable or unwilling to come back to their jobs and sectors that they used to work before the pandemic. (Dodd, 2021) Employees who were laid off during the pandemic were reported to be considering getting back to their previous jobs and trying out different options, and this could slow the speed with which the economy is getting back to place.

Likewise, economic growth may encounter lengthy expenses due to students being denied face to face schooling for more than 12 months, which may cause low performance in academics and lesser rates of graduating, as well as deferred entrance into the working population. The pandemic had a substantial effect on the economy's diverse industries and employees who are in those segments. This include specific sectors of the work force, such as females, minorities, as well as employees in lower level occupations. Work from home opportunities grew as sections of the working population changed from working in person on sites to working from home. Some workers are questioning the essence of them returning back to their former jobs before the pandemic after a long period of working off-site. Unless emerging economies start to taper off low-interest-rate monetary policies, emerging economies may encounter increasing recapitalization expenses for acquired debts. (James K et al., 2021).

Education

With domestic violence and child labor on the rise, COVID-19 pandemic and the shutdown of institutions not only compromised the student's wellbeing and safety, but also had a significant impact on student learning. According to a report, countries with different levels of economic development, the proportion of children who live in educational deprivation which was by now higher than 50% prior to COVID-19 might rise to 70%, as a consequence of extended school closures and the comparative inefficacy of online learning. In certain, learning losses in low and middle-income countries are approximately dependent on the length of the closures, implying that in each period of closing schools, it resulted in a month's worth of learning losses, despite the valiant attempts of policymakers, teachers and households to sustain learning consistency. (Ellinore A et al., 2022).

Whereas the majority of countries have been unable to quantify educational losses, data across multiple nations, combined with more significant evidence of inequalities in access to e - learning and support from home, demonstrates that the recession has aggravated educational disparities worldwide. Students from low-income families, students who are disabled as well as female students were far less likely to participate in distance learning because of lacking electric power, computers, internet access, and accessible technologies, as well as stereotypes on social and gender standards. (Ellinore A et al., 2022).

School children that are younger had little to no access to age suitable distance learning and they suffered from a setback from learning, more than students of older age. Preschool going toddlers are at a critical juncture in their education and development, which came across multiple drawbacks because they had been frequently excluded from remote learning and school reopening plans. Students with lower socioeconomic status experienced greater learning losses in a variety of countries, in different parts of the world. Whilst research into the stereotyped effect of school closures on education is nevertheless in its early stages, preliminary evidence suggests that girls suffer greater learning losses, particularly in the Southern of Africa and Mexico. (Ellinore A et al., 2022).

For that reason, such children prospect lacking on a significant portion on the benefits that learning environments can equip to their life as a whole as well as their wellness. To prevent growing educational inequalities, the learning retrieval response must object aid to those who require it mostly. In addition to education, corroboration is mounting that the closure of schools have a negative impact on the general wellbeing of the school children which includes their state of mind, health, nutrition and safety, emphasizing a critical part that education environments play a crucial role in delivering broad care and resources to students. (Ellinore A et al., 2022).

Impact of covid-19 on the Quality of life of immigrants

Specific patterns of vulnerability among immigrants and migrants frequently intersect with class, race, and status. They are overrepresented among low-income and discriminated-against minorities, and face unique challenges as a result of their lack of entitlement to health care, exclusion from welfare programs, and fear of stigmatization, arrest, and deportation. (Bivand Erdal et al., 2020)

Many immigrants were stranded and helpless as a result of the sudden closure of borders and flight bans. Most foreigners suffered greatly as a result of the lockdown, missing their families and jobs. Numerous foreigners migrated to various countries around the world in search of greener pastures, the majority of whom were on visas that were about to expire. Many people experienced mental distress as a result of losing their jobs and being unable to feed their families hence their QoL was reduced.

In a bid to shed light on the impact of COVID-19 on the general health of immigrants across the globe, a few studies have touched on the impact of COVID-19 on Africans in certain countries but also unfortunately no studies have been published on the impact of COVID-19 on the quality of life of African students living and studying abroad. A Study by Webb Hooper M, Nápoles AM, (2020) have found out that COVID-19 manifested in different geographic areas with racial and ethnic differences, resulting in higher

mortality in African Americans and severe economic disruption in lower socioeconomic classes.

Ekwonye, A. U., Ezumah, B. A., & Nwosisi, N. (2021) conducted a study on Meaning in life and impact of COVID-19 pandemic on African immigrants in the United States. According to their findings the basic significance supplies of the African community living in United States, which they rely on for life satisfaction, personal growth, and healing, were undoubtedly jeopardized by the COVID-19 pandemic. The pandemic had an impact on their social relationships, religion, personal wellbeing, personal life goals etc. However, different emerging technologies aided in alleviating the situation by allowing participants to participate, albeit virtually, in most activities that have a positive impact on their lives.(Ekwonye, A.U et al., 2021).

In an attempt to contain the virus the international public health imposed new rules and regulations across the globe such as imposing lockdown, curfew, isolation, social distancing and mandatory wearing of masks (WHO, 2020).

Meanwhile, national authorities frequently lack an accurate picture of the number and distribution of immigrants in their authority. This makes it difficult to include them in public health efforts and collect precise information on affected individuals, as well as monitor and trace the outbreak's progression. And hence this particular group does not often receive the health benefits and care as they suppose which results on more health impacts (Guadagno, L., 2020).

CHAPTER III

Methodology

Research design

Research design presents a structure that guides action plans for a research and how methods adopted in the research are executed (Sovacool, Axsen & Sorrell, 2018). There is a plethora of methodological approach that can be utilized in conducting research works. This research utilizes a descriptive quantitative research design. A survey method was adopted as the most suitable method of collecting information from the study participants. Survey research entails the collection of information from a sample of individuals by measuring their responses and perception of questions (Story & Tait, 2019). The research therefore adopts the survey research method in obtaining quantitative data from the study participants. It aids the exploration of how covid-19 affects their quality of life.

Time and place of study

The area of study is Northern Cyprus. Particularly only the Seventh Day Adventist Church was adopted in terms of cost and time. The research targets Africans who applied to the Seventh Day Adventist Church. The data collection took place in January 2022 at a timeframe of 15 to 20 minutes.

Questionnaire survey

Questionnaire survey is a very efficient method of accessing wide range of data and responses from a large number of respondents. Series of questions form a questionnaire and they are answered by respondents in order to give information about a given topic.

The questionnaire was designed via an online software known as Google Docs Forms, for data collection, collation and further survey analysis. Google Docs Form is an online resource that provides a straightforward and user-friendly format to be used for effective presentation of survey questions. Google Docs has been utilized effectively in previous research pieces and it offers ease in collecting and organization of bulky

information as well as easy transfer for further statistical analysis. An additional perk is that it is possible and relatively easy for the researcher to stop collecting responses once the target number of research respondents have been attained.

A link to the survey was made accessible to participants and their responses were recorded after accessing the link. The link was sent to participants via SNSs (WhatsApp and Facebook) and e-mail.

Online survey

Online surveys or internet surveys is a commonly adopted data-collection mechanism. Survey questions in form of questionnaire are made accessible to the targeted study participants. Responses are provided over the internet compared to the conventional questionnaire survey. Online survey is highly beneficial (Evans & Mathur, 2018). This method allows for wide-range of inputs, easy accessibility to respondents and they are more respondent-friendly since respondents can provide answers to the questionnaire at a convenient time and place. This method is also less prone to errors compared to the conventional survey method (Ball, 2019).

Research instruments

Socio-demographic form

This form was developed by the researcher and it aimed to anonymously record the demographic information of the participants. It recorded information such as age, gender, marital status, educational level, etc. The socio-demographic variables assist the researcher in segmenting their target into sub-groups. You can group responses with similar socio-demographic characteristics together to have a better picture of your intended audience.

COVID-19 Quality of Life scale 2021

The researcher created the *COVID-19 Quality of Life scale 2021.* This research instrument had questions that covered the areas of quality of life of respondents. The instrument first measured responses on participants' health on a scale of 0-10 where 0 indicated "Not at all" while

10 indicated "A lot". The items *Physical health, Mental health, Social health, Sexual health and, Economic status* were measured utilizing the scale *(0-10).* The instrument then measured 6 items utilizing a 5-point Likert scale (*1-Completely Disagree to 5- Completely Agree).* In this section, responses to statements like *"I think my quality of life is lower than before" "I think my mental health has deteriorated"* were measured.

Sample and Sample techniques

The population of the research consists of Africans (N=214) who applied to the Seventh Day Adventist Church. Since it is impossible to access all Africans living in Northern Cyprus this study group was chosen as a sample to represent all Africans living in Northern Cyprus which was the target population of the research.

Inclusion criteria

The criterion for inclusion of subjects in the study is the condition of being an African living in Northern Cyprus for the past year.

Exclusion criteria

Persons under the age of 18 were not included in the study

Research Variables

The research has a dependent variable, an independent variable and demographic variables. A dependent variable as the name implies depends or relies on other variables in the research. This means that the independent variable has considerable effect on the dependent variable. This study aims to determine the impacts of Covid-19 on the quality of life of respondents. Therefore, the variable quality of life (QoL) is the dependent variable in this research. This is because the QoL of respondents is measured by the effects of Covid-19 and, is dependent upon the pandemic. That means Covid-19 has an impact on QoL.

On the other hand, the Independent variable in the research is Covid-19. The pandemic is an independent variable because it can either lead to a

positive or negative change in the dependent variable which this research aims to determine.

The demographic variable stands for the features and attributes of all the respondents. Demographic variables are necessary because the demographic features can influence how respondents will perceive the questions presented in the questionnaire. The demographic variables considered in this research are: age, gender, marital status, education level and, employment.

Data analysis techniques

Data gathered via Google Forms was transferred into the Statistical Package for Social Sciences (SPSS) version 20.0 for analysis. Google Forms allows the collection and collation of data submitted to the website and the researcher could access the survey data by logging in. The data obtained was subsequently analyzed and information was presented with the aid of tables. It allowed for further analysis as is described in Chapter 4. The descriptive analysis was used to present the demographic and clinical characteristics of participants and, further statistical analysis was carried out on SPSS. A mean, frequency and percentage analysis of gathered data was calculated and a correlation test of distributions of the demographic information of the participants was carried out. An ANOVA t-test was conducted to determine the relationship between the variables.

Research Ethics

The research was granted permission by the Near East University Health Sciences Ethics Committee in writing. Moreover, this research does not involve any harmful materials and will be under the consent of the school and the participants. No force of action will be applied in the research as the purpose of the study is to evaluate with authenticity. Participants will be advised that they could withdraw from the study at any time without penalty if they don’t feel like proceeding with the trial and their personal information will be kept confidential.

Research Limitations

The research is limited to Africans living in Northern Cyprus. Studies show that the coronavirus pandemic affected the Quality of Life of people all around the world. However, for the purpose of specificity, the research was limited to Africans living in Northern Cyprus. Another limitation of this study was the lack of baseline pre-pandemic data, so it was unclear whether the QoL impact was caused by COVID-19.

CHAPTER IV

Findings and discussion

Demographic variables

Table 1.
Demographic variables (n=214)

Variable		Frequency n	Percent %
Gender	Male	131	61.2
	Female	83	38.8
	Total	214	100.0
Marital status	Single	60	28.0
	Married	154	72.0
	Total	214	100.0
Educational level	Secondary school	1	.5
	University student	133	62.1
	Graduate/Postgraduate	80	37.4
	Total	214	100.0
Job status	Yes	92	42.3
	No	122	56.7
	Total	214	100.0
Being in Northern Cyprus During Covid-19	Yes	200	93.0
	No	14	7.0
	Total	214	100.0
Household	Alone	61	28.6
	Friend	61	28.6
	Family	92	42.9
	Total	214	100

Age (Average)	Min: 19
	Max: 45
T	Mean: 27.36
	SD: 5.08

Table 1 represents the demographic variables of the whole study. The variables presented in the analysis were age (average), gender, marital status, educational level, and job status, being in Northern Cyprus during covid-19 and who they live with in their household. Participants voluntarily responded to the anonymous questionnaire which was indicated by their approved consent in the survey. The total number of participants in the study summed up to 214 with the male gender dominating 61.2% of the sample group which was 131 out of 214 participants. Women who participated in this group were *n*=83 (38.8%) which had the possible consequence that more men in this sample group were affected by COVID-19 more than women. In relation to the results presented in the table, the minimum age recorded was 19 years while the maximum was 45years with the mean and standard deviation of 27.36±5.08. A frequency of 154 which is 72% of the participants were married leaving only *n*=60 (28%) participants to be single.

In addition, the educational level of the participants was analyzed. The options selected for the survey were illiterate, primary school, secondary school, university student and finally graduate/postgraduate. There were no illiterate participants or primary school students therefore the value after the analysis was 0 thus it was omitted from the table. There were more university students with a frequency of 133 participants making 62.1% of the sample group. The following 37.4% consisted of the graduate/postgraduate participants with a frequency of 80. Finally, only one participant attended secondary school and that made up only 0.5% of the total group.

Furthermore, according to the responses obtained, the table revealed that *n*=92 (42.3%) were working in different job sectors while *n*=122 (56.7%) were unemployed. Participants were asked if they were in Northern Cyprus during COVID-19 and *n*=200 (93%) responded ‘Yes’ while *n*=14 (7%) responded ‘No’ implying that COVID-19 had an impact on a high

percentage of the responders in one manner or another. Finally, the participants were asked who they live with in their household in Northern Cyprus and *n*=61 (28.6%) mentioned that they lived alone, *n*=61 (28.6%) stated they lived with friends while the remaining *n*=92 (42.9%) lived with their families.

Table 2.
Mean score of variables (n=214) (On a scale of 0-10 with 0=Not at all, 10=A lot)

	Minimum	Maximum	Mean	Std. Deviation (SD)
Physical Health	0	10	5.41	2.34
Mental Health	0	10	6.17	2.71
Social Health	0	10	6.11	2.32
Sexual Health	0	10	4.96	2.97
Economic	0	10	6.97	2.07

Table 2 shows the mean scores of the Quality of Life scale used in this research which measures responses on participants' health on a scale of 0-10 where 0 indicated "Not at all" and 10 indicated "A lot". The mean score of the variables such as *Physical health, Mental health, Social health, Sexual health and, Economic status* were measured. The results presented in the table shows the mean, minimum and maximum numbers. The minimum number of all variables is 0 while the maximum number is 10. Subsequently, table 2 presents the mean and standard deviation of the variables as follows: for the physical health it is 5.41±2.34; for mental health it is 6.17±2.71; while social health is 6.11±2.32; for sexual health it is 4.96±2.97 and lastly for the economic status it is 6.97±2.07. Most participants were affected economically hence the economic status possessed the highest mean while the sexual health acquired the lowest. In general, the sexual health of the participants was least affected by the pandemic.

Table 3.
Mean score of Covid-19 QoL Scale

Covid-19 QoL Scale	Min	Max	Mean	SD	t	*p*
During the Covid-19 First Lock Down	6	30	12.75	4.34	1,936	0.05
Last Past Seven Days From Now	6	30	12.47	4.19		

t; Paired Samples Test

Table 3 presents the mean score results obtained from the COVID-19 QoL scale. According to the QoL scale in both cases a minimum of 6 and a maximum of 30 were recorded during the Covid-19 First Lock Down and Last Seven Days From Now. The QoL during the COVID-19 first lockdown recorded a mean and standard deviation of 12.75±4.34 with p value 0.05 and t value 1,936 whereas the QoL in the last 7 days recorded 12.47±4.19.

Table 4.
ANOVA test for demographic variables and effects of COVID 19

Variables		During the Covid-19 First Lock Down (Covid-19 QoL Scale)	Last Past Seven Days From Now (Covid-19 QoL Scale)
Gender	**t**	-0.530	-0.921
	p	0.59	0.35
Marital	**t**	1.475	1.410
status	**p**	0.14	0.16
Job status	**t**	-1.217	-1.914
	p	0.22	**0.04**
Educational	**F**	0.035	0.187
level	**p**	0.96	0.82
Household	**F**	1.060	0.348
	p	1.69	0.18

Age	**r**	-0,017	-0,035
	p	0,80	0,60

t; Independent t test ; F: One way ANOVA ; r; Pearson Correlation Test

Table 4 shows The One way ANOVA result. The result shows that there was no statistically significant difference between the demographic of the participant during the Covid-19 First Lock Down and Last Past Seven days from now (Covid-19 QoL Scale). All the p values of the ANOVA test of was greater than 0.05. Gender: t (-0.530; -0.921) with p = [0.59, 0.35]); Marital status: t (1.475; 1.410) with p = [0.14, 0.16]); Job status: t (-1.217; -1.914) with p = 0.22, but the Last Past Seven Days From Now (Covid-19 QoL Scale for job status was proven to be statistically significant with a p: 0.04 < 0.05. Educational level: f (0.035; 0.187) with p = [0.96, 0.82]); Household: f (1.060; 0.348) with p = [1.69, 0.18]); and Age: r (-0,017; -0,035) with p = [0.80, 0.60]).

Table 5.
Correlation analysis of the effects of COVID-19

Correlation	**Age**	**Physical Health**	**Mental Health**	**Social Health**	**Sexual Health**	**Economic**	**QoL Scale-During the Covid-19 First Lock Down**	**QoL Scale-Last Past Seven Days From Now**
Age	**1**	**r:0.159**	r:0.102	**r:0.270**	**r:0.248**	r:0.104	r:-0.017	r:-0.035
		p:0.020	p:0.138	**p:0.001**	**p:0.001**	p:0.128	p:0.809	p:0.606
Physical Health		**1**	**r:0.575**	**r:0.442**	**r:0.483**	**r:0.263**	r:0.069	**r:0.141**
			p:0.001	**p:0.001**	**p:0.001**	**p:0.001**	p:0.318	**p:0.040**
Mental Health			**1**	**r:0.354**	**r:0.271**	**r:0.369**	**r:0.158**	**r:0.152**
				p:0.001	**p:0.001**	**p:0.001**	**p:0.021**	**p:0.026**

Social Health	**1**	**r:0.620**	**r:0.430**	r:0.065	r:0.050
		p:0.001	**p:0.001**	p:0.341	p:0.466
Sexual Health		**1**	**r:0.267**	r:-0.109	**r:-0.083**
			p:0.001	p:0.110	**p:0.026**
Economic			**1**	**r:0.129**	r:0.109
				p:0.050	p:0.112
QoL Scale-During the Covid-19 First Lock Down				**1**	**r:0.882**
					p:0.001
QoL Scale-Last Past Seven Days From Now					**1**

r; Pearson Correlation Test

Table 5 shows the correlation analysis of the effects of COVID-19. The Pearson correction for age was positively correlated and statistically significant for physical health with a coefficient r (0.159); p (0.020); Social Health r (0.270), p (0.001), Sexual Health r(0.248), p(0.001). The other variables are not statistically significant.

Physical Health was statistically significant with a positive correction for Mental Health with coefficients r (0.575) and p value <0.05, Social Health with coefficients r (0.442) and p value <0.05, Sexual Health with coefficients r (0.483) and p value <0.05, Economic with coefficients r (0.263) and p value <0.05 and Last Past Seven Days from Now with coefficients r (0.141) and p value: 0.040.

Mental Health was statistically significant with a positive correction for Social Health with coefficients r (0.354) and p value <0.05, Sexual Health with coefficients r (0.271) and p value <0.05, Economic with coefficients r (0.369) and p value <0.05, During the Covid-19 First Lock

Down with coefficients r (0.158) and p value (0.021), Last Past Seven Days From Now with coefficients r (0.152) and p value (0.026).

Social Health was statistically significant with a positive correction for Sexual Health with coefficients r (0.620) and p value (0.001), Economic with coefficients r (0.430) and p value (0.001).

Sexual Health was statistically significant with a positive correction for Economics with coefficients r (0.267) and p value (0.001), and the Last Past Seven Days from Now with coefficients r (0.083) and p value (0.026).

Economic was statistically significant with a positive correlation for During the Covid-19 First Lock Down with coefficients r (0.129) and p value (0.050).

During the Covid-19 First Lock Down was statistically significant with a positive correlation for the Last Past Seven Days from Now with coefficients r (0.882) and p value (0.001).

CHAPTER V

Discussion

This chapter presents the discussion of these findings in comparison to the studies in the literature.

Covid-19 and demographic variables of the whole study

The pandemic was met by pandemic preparedness by proactive measures in a bid to limit the speed of transmission of the virus. The social, economic, and health interactions was affected by covid-19 and has affected the people, especially on mental health and quality of life (Tran et al., 2021). The demographic variables are information recorded such as age, gender, marital status, educational level, etc. Also, mental health, social health, sexual health, and economic status were measured.

People reported anxiety symptoms and mental anguish throughout the COVID-19 Pandemic, and such mental illnesses were reported in many of the affected regions around the world. As a result, the coronavirus pandemic's recorded cases and death rate had a negative effect on mental well-being (Horosh, Kapel levari, & Hassan Chayon, 2020).

Based on the most recent preliminary findings from the study by Atalan (2020), lockdown is linked to human psychology. Similarly, in a survey conducted by Gluster and colleagues, the researchers suggested that study participants were moderately mentally healthy during the period of lockdown (Gloster et al., 2020).

A previous study found a high rate of family income loss as well as degradation in some quality of life dimensions among the general population in Vietnam due to the impact of the COVID-19 pandemic. The study also discovered some potential factors linked to changes in Vietnamese citizens' family earnings and quality of life, implying the need for future interventions and programs to improve the socioeconomic status and well-being of those affected by the epidemic in resource-constrained settings. According to the findings of this study, more than two-thirds (66.9%) of Vietnamese participants reported a decrease in their family's income as a result of COVID-19.

In terms of quality of life, the average EQ-5D index (0.9) and EQ-VAS (88.2) calculated from the study were consistent with previous research among the general population of Vietnam in the context of the pandemic (0.91 and 87.4, respectively), but the rate of anxiety and depression in this study (38.7%) was much higher than that in the compared research (15.2%) Nguyen et al.,(2017). Bans on outdoor activities, fear of contracting SARS-CoV-2, and concerns about the disease's impact could all be factors contributing to a greater rate of anxiety and depression.

Algahtani et al. (2020) conducted a study in Saudi Arabia to look at some of the predictors of QoL during the first wave of the COVID-19 pandemic. The participants' socio-demographic backgrounds, physical health status, psychological reactions, and QoL were all gathered via a cross-sectional online survey questionnaire. To assess QoL, the researchers used 12 questions from the World Health Organization Quality of Life Instruments (WHOQOL-BREF). Depression, anxiety, and stress were measured using the Depression, Anxiety, and Stress Scale—21 (DASS-21). The QoL scores were described using the median and interquartile range. The statistical significance was defined at $p< 0.05$ for a multinomial regression analysis between QoL score quartiles and associated covariates. Males (OR = 1.96; 95 % CI = 1.31–2.94), participants aged 26 to 35 years (OR = 5.1; 95 % CI = 1.33–19.37), non-Saudi participants (OR = 1.69; 95 % CI = 1.06–2.57), people with chronic diseases (OR = 2.15; 95 % CI = 1.33–3.48), people who lost their job (OR = 2.18; 95 % CI = 1.04–4.57), and people with depression (or = 5.70; 95% CI=3.59-9.05), Anxiety (OR = 5.47; 95% CI = 3.38–8.84) and stress (OR = 6.55; 95% CI = 4.01–10.70) were both associated with a higher likelihood of being in the first quartile of QoL scores. While the overall model (R2 = 0.962, F (750, 753) = 16,705.4, p 0.001) was statistically significant, the three QoL components explained 0.643, 0.283, and 0.036 of the variability in environmental, social, and religious/spiritual dimensions, respectively. The COVID-19 epidemic has had a substantial impact on people's quality of life, as well as their physical and mental health.

During the first eight weeks of the coronavirus lockdown in Belgium and the Netherlands, Hanne van et al (2021) looked at people's anxieties, quality of life, access to care, and productivity. An online cross-sectional

poll was conducted in a representative population. The study includes a set of three validated questionnaires about the quality of life, medical treatment delays or cancellations, and productivity loss. The study had a total of 2099 Belgian and 2058 Dutch respondents, with an average age of 46.4 and 42.0 years, respectively. In both nations, half of the responders were female. COVID-19 was found in a modest percentage of the population, 1.4 percent vs. 4.7%, respectively. The majority of respondents with a medical condition were concerned about their present health status as a result of the pandemic (53% vs. 63%), respectively. In both countries, respondents encountered postponed or cancelled care (26%), and were concerned about medicine availability (32%). Absenteeism (36%) and presenteeism (30%) were computed as productivity losses due to COVID-19 limits in Belgium and 19% and 35%, respectively, in the Netherlands. Respondents with children under the age of 12, respondents aged 18-35, and respondents with a (anticipated) COVID-19 infection indicated the most concerns and productivity losses. After 8 weeks of coronavirus lockdown, stress, quality of life, medical resource loss, and productivity losses were all reported in Belgium and the Netherlands. The findings highlight the societal burden.

The result of COVID-19 and health quality in northern Cyprus, i.e., physical health, mental health, social health, sexual health, and economic status, were measured. Findings revealed that for the mean and standard deviation of a minimum of 0 and a maximum of 10, the mean and standard deviation of variables are as follows: 5.41 for physical health, 2.34 for mental health, 6.17 for mental health, 6.11 for social health, 4.96 for sexual health, and 6.97 for economic status. Participants in the northern Cyprus region of Africa were economically impacted, and thus their economic status had the highest mean. While sexual health was the lowest in general, the sexual health of the participants was least affected by the coronavirus pandemic. The demographic variables have a population of 214 respondents; all variables have a sub unit to get a clearer view of the topic of study.

According to evidence from a prior study (Karshling et al., 2020), individual level COVID-19 anxiety and personal identity characteristics significantly predicted QoL. The former had a negative impact on QoL, while the latter had a positive impact. Essentially, this means that the sample

respondents' QoL would be lower as a result of their increased anxiety about the viral disease. Perhaps the belief that the virus announces the "end of the world experience," causing fear and distress (Fardin 2020), will have a negative impact on one's relationships as well as creative and learning pursuits. Anxiety about the COVID-19 threat might lead to doubt and confusion (Limcaoco et al. 2020; Wang et al. 2020a, b), which can make it difficult to live a high-quality life. Personal identity, on the other hand, provides a distinct sense of life direction, certainty of their goals, and a sense of belonging, aims and expectations for the future (Baray et al. 2009) may encourage participants in this study to make positive changes in their lives in areas such as friendships, learning, and creative pursuits, as well as their perceptions of themselves and others.

Isabella et al. (2020) investigated the Brazilian population's quality of life (QoL) during this era of isolation caused by the COVID-19 epidemic by examining physical, psychological, social, and economic factors. An online survey was distributed from May 27 to August 14, 2020. There were a total of 1859 surveys completed. The findings show that economic and social factors have a greater impact on Brazilians than psychological and physical factors. Participants who were unemployed or who tested positive for COVID-19 had the lowest QoL. Females had lower QoL scores than males, but having children had no effect on the result. A higher educational level was linked to a more positive impression of QoL. The participants who did not follow social distancing criteria scored higher in the psychological domain than those who followed only partial or no social distancing requirements. This is the first nationwide study to assess adults' quality of life in relation to the Sars-Cov-2 pandemic in Brazil. Findings could aid health officials in identifying the primary elements affecting the Brazilian population's quality of life, allowing them to better prepare for recovery following the pandemic.

Bukari et al. (2020) did a study in Ghana to look at the impact of COVID-19 on poverty and living standards in Ghanaian households. It also looked into which groups of people within the income distributions were the hardest hit by the pandemic. A concurrent online survey and telephone interviews yielded information on 3,905 households. Ordinary least squares,

probit models, and simultaneous quantile regressions were all used in the analysis.

The findings revealed that COVID-19 has dramatically increased household poverty while drastically lowering standards of living. The study also indicated that there are gender and location heterogeneities in the impact of COVID-19, with females and rural people being disproportionately affected.

Chei Bukhari et al. (2021) investigated a micro-perspective in Ghana. According to the findings, the study went on to look at which groups of people within the income distributions were the hardest hit by the pandemic. A simultaneous online survey and telephone interviews yielded data on 3,905 households. Ordinary least squares, probit models, and simultaneous quartile regressions were all used in the analysis. The findings show that COVID-19 considerably increased household poverty levels while degrading living conditions, according to the findings. The research also found that when it comes to the influence of COVID-19 on women, there are genders and geographic differences, females and those who live in rural areas are disproportionately disadvantaged.

According to the analysis presented in this study, the socio-variables were age, gender, marital status, educational level, and job status. According to the statistics, 61.2% of the sample groups were males and 38.8% were females, indicating that males are more affected by COVID-19 than women. The mean and standard deviation of the average age are 27.36 and 5.08. For the education level, university students have the highest frequency of 62.1% of the sample group. Also, according to the responses obtained, (42.3%) were working in different job sectors, and (56.7%) were unemployed. Also, 93% of participants were in northern Cyprus during COVID-19, which stipulates that COVID-19 has a high impact on respondents. Also, 28.6% of respondents mentioned they lived alone, and 28.6% stated they lived with a friend. Etc.

Covid-19 and quality of life

Quality of life (QoL) has enjoyed wide exploration in the past decade, primarily in research and literature on non-communicable and chronic diseases (Algahtani et al., 2021). According to (Heraldstad et al., 2019), QoL refers to a patient's subjective view and perception of the effect of an illness, disease or medical condition on different domains which can include physical, psychological, social and occupational lenses (Heraldstad et al., 2019). In essence, QoL describes how a patient and people around them relate to an illness.

The pandemic is the genesis of negative effects on the quality of life of people (Tran et al., 2020). Research from Morocco demonstrated a negative relationship between the coronavirus pandemic and HRQ02. These effects were just as expected as the pandemic itself. The findings revealed that the general health of people in quarantine has a negative impact on their quality of life, especially if they have chronic health issues.

The quality of life and depressive symptoms of Peruvian university students were examined by Figueroa et al. (2022). During the COVID-19 Pandemic Multicentre trial, convenience sampling was used to recruit 1,634 pupils. The European Quality of Life-5 Dimensions at three levels (EQ-5D-3L) was used to assess quality of life (QoL), and the Patient Health Questionnaire-9 was used to assess depressive symptoms (PHQ-9). Linear regressions and fitted regressions with robust coefficients of variance were used to analyze characteristics associated with QoL and depressive symptoms. 345 (21.1%) said they had difficulty completing everyday activities, 544 (33.3%) said they had pain and discomfort, and 772 (47.2%) said they felt anxious or sad. In addition, 207 (12.7 percent) of the participants exhibited moderate-severe, or severe depression symptoms. p = 0.004) and displayed fewer signs of depression (0.7; 95% CI: 1.3; 0.2; p = 0.011). Residents of Ayacucho reported more depressive symptoms than residents of Ancash (β: 0.8; 95% CI: 0.1, 1.5; p = 0.022), whereas Piura residents reported fewer depressive symptoms than Ancash residents (β: -1.195 percent CI: 1.8, 0.3, p = 0.005). Students who left their homes during quarantine had more depressive symptoms (β 0.7, 95% CI: 0.2, 1.2, p = 0.006). In more than three-quarters of the sample, problems completing daily

activities, pain and discomfort, as well as mild to severe depressive symptoms were reported. Authorities may explore depression treatment to improve quality of life in areas where infection rates were high during the pandemic.

Ali et al. (2021) looked at the impact of COVID-19-induced daily activities on health parameters in Malaysian universities, using random sample procedures, 150 students from the Universiti Teknologi PETRONAS in Perak, Malaysia, were surveyed via an online web survey. Multilevel linear regression analysis and hierarchical structural equation modeling were used to examine the data in RStudio and SPSS. The estimated results show that preventing people from participating in out-of-home activities has a negative impact on their physical and social wellbeing. During the COVID-19 pandemic, a unit increase in in-home maintenance activities resulted in a daily rise of 0.5 percent in physical health. Furthermore, a one-percentage-point increase in in-home leisure activities results in a one-percentage-point improvement in social health. As a result, physical activity has been shown to help people with severe COVID-19 improve their physical and social health. For all endogenous factors, however, the coefficient of determination (R2) varies from 0.148 to 0.227, which is extremely acceptable in psychological research. This study used multidisciplinary techniques that are needed to develop a healthy society with a higher quality of life.

In this study, according to the quality of life scale in both cases, a minimum of 6 and a maximum of 30 were recorded during the COVID-19 first lockdown and the last seven days of being recorded. The mean and standard deviation were 12.75 ± 4.34 with a p value of 0.05, whereas the QOL in the last 7 days of being recorded was 12.47 ± 4.19.

Pais-Ribeiro et al. (2022) assessed the magnitude of depression, anxiety, and stress among individuals in Portugal during the first obligatory lockdown in 2020, as well as the psychosocial and health-related factors that were linked to these symptoms. An online survey was completed by 484 people (73% of whom were women) with an average age of 40 years (SD = 14.03). Depression, anxiety, stress, social support, COVID-19 interference in daily life, attitudes about COVID-19, and health perception were all measured in the survey. The lockdown had a significant influence on

psychological well-being, with up to 36% of subjects displaying indicators of at least mild psychological distress (i.e., depression, anxiety, and stress). All of the dependent variables were explained by social support, COVID-19 interference in daily life, health perception, and age. Some of the dependent variables were explained by education level, income, opinions regarding COVID-19, and gender. These findings imply that the COVID-19 pandemic has a significant influence on mental health in adults in Portugal. The lockdown had a significant influence on psychological well-being, with up to 36% of subjects displaying indicators of at least mild psychological distress (i.e., depression, anxiety, and stress). All of the dependent variables were explained by social support, COVID-19 interference in daily life, health perception, and age. Some of the dependent variables were explained by education level, income, opinions regarding COVID-19, and gender. These findings indicate that the COVID-19 epidemic has had a significant influence on the mental health of Portuguese individuals.

The influence of COVID-19 on the quality of life (QoL) of survivors, their partners, and family members was measured in a previous study by Shah et al (2020). A potential worldwide online cross-sectional survey using social media was used in this study, COVID-19 patients and their partners or family members (under the age of 18). The survey was completed by 735 covid-19 survivors (mean age=48years; females=563) at a mean of 12.8 weeks after diagnosis and by 571 partners and family members diagnosis, there were 164 family members from Europe (50.6%), North America (38.5%), and the rest of the world (n=735; mean age=47 years; females=246) (10.9%), covid-19 survivors had an EQ-5D mean score of 8.65 (SD=1.9). Also, from the findings of Shah et al 2020, it was revealed that the median = 9 and the range is 6–14. 81.1% (596/735) reported they had pain and discomfort, 79.5 % (584/735) reported they had trouble with daily tasks, 68.7% (505/735) said they had anxiety and sadness, and 56.2% (413/735) reported that they had mobility issues, hospitalized survivors (20.1%, n=148) and pre-existing health disorder survivors (30.9%, n=227) reported significantly more mobility and routine activity problems ($p< 0.05$), with hospitalized survivors also reporting significantly more impact on self-care ($p\leq 0.001$). The mean FROM-16 score (maximum score=highest impact =32)

among 735 partners and family members was 15 (median=15, range=0-32). 93.6 % (688/735) were worried, 81.7% (601/735) were frustrated, 78.4 %t (676/735) were sad, 83.3% (612/735) said it affected their family activities, 68.9% (507/735) said it affected their sleep, and 68.1 % (500/735) said it affected their sex life. The study by Shah et al (2020) concluded that covid-19 survivors reported a major persisting impact on their physical and psychological health. The lives of their partners and other family members were also severely affected.

Bahar et al. (2021) investigated psychological distress, fear, and coping among Malaysians during the COVID-19 epidemic. The study was conducted from August to September 2020; participants were invited to take part in an online cross-sectional survey. The Kessler Psychological Distress Scale, the Fear of COVID-19 Scale, and the Brief Resilient Coping Scale were used to assess psychological distress, fear, and coping techniques. To account for relevant confounders, univariate and multivariate logistic regression analyses were used.

The participants' mean (±SD) age (N = 720) was 31.7 (±11.5) years, with the majority of them being females (67.1%). Half of the participants had a source of income, and 216 (30%) of the participants identified as frontline health or key service employees. People who had their financial situation impacted by COVID-19 (AOR 2.16, 95 % CIs 1.54–3.03), people who drank alcohol in the previous four weeks (3.43, 1.45–8.10), people who were patients (2.02, 1.39–2.93), and people who had higher levels of fear of COVID-19 (2.55, 1.70–3.80) were all more likely to have psychological distress. Participants with higher levels of fear were those who self-isolated as a result of COVID-19 exposure (3.12, 1.04–9.32) and had moderate to very high levels of psychological distress (2.56, 1.71–3.83). When compared to those who did not, people who gave care to a family member or patient with a suspected case of COVID-19 were more likely to be moderately to extremely resilient.

Also, according to one-way ANOVA results, the results show that there was no statistically significant difference between the demographics of participants during the COVID-19 first lockdown and the last seven days upon being recorded. All the p-values of the ANOVA test were greater than

0.05. Gender: t (-0.530; -0.921) with p (0.59, 0.35) and others, but only the last days were statistically significant with a p=0.140.05. Pulvirenti and colleagues conducted their study of the HRQL of respondents in Italy; the findings revealed that female gender was linked to higher levels of anxiety, depression, and stress. Also, a study in Italy utilizing a questionnaire to measure health-related quality of life (HRQOL) of adults with common variable immune deficiency showed that the COVID-19 pandemic had a negative effect on the coronavirus pandemic on QOL and mental health.

The impact of the COVID-19 pandemic on quality of life and well-being in Morocco was studied by Salmani et al. (2020). The Short Form Health Survey (SF-12), which is based on eight dimensions of health, was used as a determinant of quality of life. The information was gathered via an online computerized questionnaire. The participants also provided socio-demographic information as well as information about their awareness and habits of the COVID-19 epidemic and whether or not they had chronic health problems. All participants' quality of life was moderately impacted during the COVID-19 pandemic, according to the findings, with a mental health score (MCS) of 34.49 (6.44) and a physical health score (PCS) of 36.10 (5.62). Participants with chronic conditions had lower mental health (MCS) scores of 29.28 (1.23) and 32.51 (7.14) in terms of physical fitness and health (PCS). COVID-19's seriousness has an impact on people's quality of life and health well-being, and this impact is particularly pronounced in those who have chronic health problems.

During the COVID-19 pandemic, Anne Yee et al. (2020) evaluated the level of depression and coping reactions to the movement control order, as well as their influence on quality of life in the Malaysian community: From April to May 2020, a Cross sectional investigation was conducted from April to May 2020. The Depression, Anxiety, and Stress Scale–21, Coping Orientation to Problems Experienced Inventory, and World Health Organization Quality of Life–BREF Scale (WHOQOL-BREF) in both English and validated Malay versions were used to assess the outcomes.

Findings revealed that mild-to-severe depression was observed in 28.2% (n=149) of the 528 respondents, according to the findings. Respondents with mild-to-severe depression were significantly younger

(33.09 ±10.08 versus 36.79 ± 12.47 years), did not have a partner (71.8 percent versus 45.6 percent), lived in the red zone (85.9% versus 71.0 percent), and had lower household income (51.7% versus 39.3%) than those without depression (all p >0.01).

When comparing individuals with mild-to-moderate depression to those without depression, the avoidant coping score was significantly higher (25.43 ± 5.69 versus 20.78 + 5.65), while the religious coping score was significantly lower (5.10 ± 2.07 versus 5.94 ± 2.11) (both p<0.001). After controlling for age, marital status, zone, household income, and coping scores, respondents with mild-to-severe depression had significantly lower mean scores in each domain of the WHOQOL-BREF than those without depression [(physical health, 13.63 + 2.66 versus 16.20 + 2.11); (psychological, 12.5 ± 2.79 versus 16.10 ± 2.14); (social relationships, 12.173.49 versus 15.282.93); and environment (14.50 ± 2.39 versus 16.21 ± 2.14).

COVID-19 lockdown had adverse mental health effects. The study highlighted that approximately one in three individuals experienced mild-to-severe depression during the nationwide survey.

During the COVID-19 epidemic, Fernandes et al. (2021) looked at how the Portuguese population's intake of alcohol, stimulants, illegal substances, and pharmaceuticals changed. From the 26th of January to the 31st of March 2021, an online questionnaire with seven sets of questions was made available to the general adult population of mainland Portugal, with one group pertaining to alcohol, stimulant drinks, illegal substances, and medication use patterns. 1666 questionnaires were chosen after following the inclusion criteria, and descriptive and inferential statistics were used to analyze them. The statistics suggest that 48.9% of the individuals drank alcohol and that their alcohol intake increased by 16 percent after the COVID-19 pandemic lockdown began. Furthermore, 8.7% of respondents felt compelled to increase their consumption of stimulant beverages, with coffee being the most commonly consumed stimulant beverage (77.9%). It was also shown that among the 3.1 percent of respondents who are regular consumers of illegal substances, 26.9% increased their intake during the COVID-19 epidemic. In terms of medications, 23.2 percent of respondents

said they needed to take a therapeutic drug once the COVID-19 epidemic started. In the COVID-19 epidemic, the profile of common consumers of alcohol, stimulant drinks, illegal substances, and medications is diverse and varies by gender, age, and employment level. The pandemic of COVID-19 resulted in an increase in the consumption of alcohol, stimulant drinks, illegal substances, and prescriptions prescribed to alleviate anxiety, depression, and sleep disturbances among the Portuguese populace. Domestic violence, mental illnesses, and a decrease in family quality of life are likely to increase as a result of these new consumption habits in the Portuguese community.

CHAPTER VI

Conclusion and Recommendations

Conclusion

- The purpose of this research was to discover how COVID-19 impacted the health and wellbeing of Africans residing in Northern Cyprus.
- According to the quantitative analysis of the survey response gathered from google forms, COVI-19 had a negative impact on the QoL of African residents in North Cyprus regardless of the socio demographic features.
- As governments imposed no contact policies and social distancing to regulate the spread of coronavirus, it left many people stranded and helpless since many individuals were met unprepared. The pandemic had a negative impact on the QoL of people around the world on different dimensions of wellness.
- Conforming to the study results, COVID-19 had the most negative impact on the economic domain of wellness, with the second most affected being mental health and social status of life, then finally physical and sexual health respectively.
- As reported by the one-way ANOVA results, there was no statistically significant difference in the demographics of participants during the COVID-19 first lockdown and the last seven days after being recorded.
- The findings discovered evidence that COVID-19 had a variable effect based on demographic factors such as gender, job status and educational level.
- Males occupied a larger proportion of the sample group, with 61.2 % denoting that COVID-19 had a greater impact on their QoL than women. University students had a percentage of 62.1 % on the educational level, implying that this group was also impacted more, while 56.7 % of the participants reported to be unemployed and this could also be seen as a great influence on mental distress and other dimensions of wellness as everyone required money to meet their needs during the lockdown.
- The findings leave us with a conclusion that during the lockdown more participants were negatively impacted on their QoL with great impact on economic status and less sexually.

Recommendations

Based on these conclusions, understanding the ramifications for the health and wellbeing, particularly of the vulnerable population, can help policymakers manage the COVID-19 pandemic impacts among the African community. The results emphasize the significance of social bonds in reducing the detrimental effects of the COVID-19 pandemic on mental and physical health.

The question raised is ‘What should mental health professionals expect in the near future?’ and the response is that, intense responses to the pandemic are inevitably wearing off but in the long run it seems fair to assume a public health crisis of depression and anxiety syndromes, posttraumatic stress disorders and sooner or later suicides due to the convergence of several factors, such as being quarantined and admitted to hospital, or maybe the death of a family member.

It is recommended that the PHN implements ideal mental health programs for all Africans relatively soon. More mental health trained staff should be hired in hospitals and healthcare facilities to cater for the needs of foreigners and deal with situations like post pandemic distress, as well as deliver specialized and suitable effective interventions and models of care.

Furthermore, due to lack of communication and language barriers mental health implications were exacerbated by fear of the unknown and might continue to rise in the future.

It is recommended that initiatives should strive to identify Africans, meet their needs through direct involvement, and also provide advice about COVID-19 using a familiar language such as English and notify them on the adjustments in healthcare services during the pandemic via multimedia.

Because of the economic distress caused by the pandemic many participants were greatly affected. The COVID-19 pandemic exposed flaws in healthcare systems and showcased the complex relationship among health and the economy. Worsening economic consequences are likely to have a detrimental effect upon the susceptible population's wellbeing.

It is recommended that the government should aid Africans in Northern Cyprus by including them in social welfare programs in response to

COVID-19, initiating food stamps during the pandemic as well as start to provide free or low-cost diagnosis and treatment for this group.

This research is limited to Africans living in Northern Cyprus and the respondent must be at least 18 years old to partake in the survey. One more limitation of this research was the lack of baseline pre-pandemic data on Africans residing in Northern Cyprus, so it was uncertain if the QoL implications had been caused by COVID-19. According to the study's purpose and nature, the convenience sampling methodology was adopted under the non-probability sampling method. Because it is difficult to reproduce the convenience sample results, the study results cannot be applied to the entire population of Africans in North Cyprus.

It is recommended that future studies should look into the significance of these findings as the baseline of the impact of COVID-19 on the Africans in Northern Cyprus. Future research should conduct complex analyses, such as categorizations of age, gender, nationality, educational level, marital status and job status, with the goal of trying to distinguish the extend and category of the most impacted and establishing more appropriate interventions.

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APPENDICES

Appendix A: Ethics Committee Permission

YAKIN DOĞU ÜNİVERSİTESİ
BİLİMSEL ARAŞTIRMALAR ETİK KURULU

ARAŞTIRMA PROJESİ DEĞERLENDİRME RAPORU

Toplantı Tarihi :25.11.2021
Toplantı No : 2021/97
Proje No :1441

Yakın Doğu Üniversitesi Hemşirelik Fakültesi öğretim üyelerinden Yrd. Doç. Dr. Dilay Necipoğlu'nun sorumlu araştırmacısı olduğu, YDU/2021/97-1441 proje numaralı ve **"Determining the impact of COVID-19 on the quality of life of Africans living in the Northern Cyprus"** başlıklı proje önerisi kurulumuzca değerlendirilmiş olup, etik olarak uygun bulunmuştur.

Prof. Dr. Şanda Çalı
Yakın Doğu Üniversitesi
Bilimsel Araştırmalar Etik Kurulu Başkanı

Kurul Üyesi	Toplantıya Katılım	Karar
	Katıldı(✓)/ Katılmadı(X)	*Onay(✓)/ Ret(X)*
Prof. Dr. Tamer Yılmaz	✓	✓
Prof. Dr. Şahan Saygı	✓	✓
Prof. Dr. Nurhan Bayraktar	✓	✓
Prof. Dr. Mehmet Özmenoğlu	✓	✓
Prof. Dr. İlker Etikan	✓	✓
Doç. Dr. Mehtap Tınazlı	✓	✓
Doç. Dr. Nilüfer Galip Çelik	✓	✓
Doç. Dr. Emil Mammadov	✓	✓
Doç. Dr. Ali Cenk Özay	✓	✓

https://etikkurul.neu.edu.tr/

Appendix B: Institutions Permission

16.11.2021

Subject: About Institutional Permit of Oripah Nyasha Kalumo

I kindly request you to conduct the survey for the thesis titled ' Determining the impact of COVID-19 on the quality of life of Africans living in the Northern Cyprus ' of Oripah Nyasha Kalumo, a student of the Near East University Public Health Nursing Graduate Program, at the Seventh Day Adventist Church.

Kind Regards.

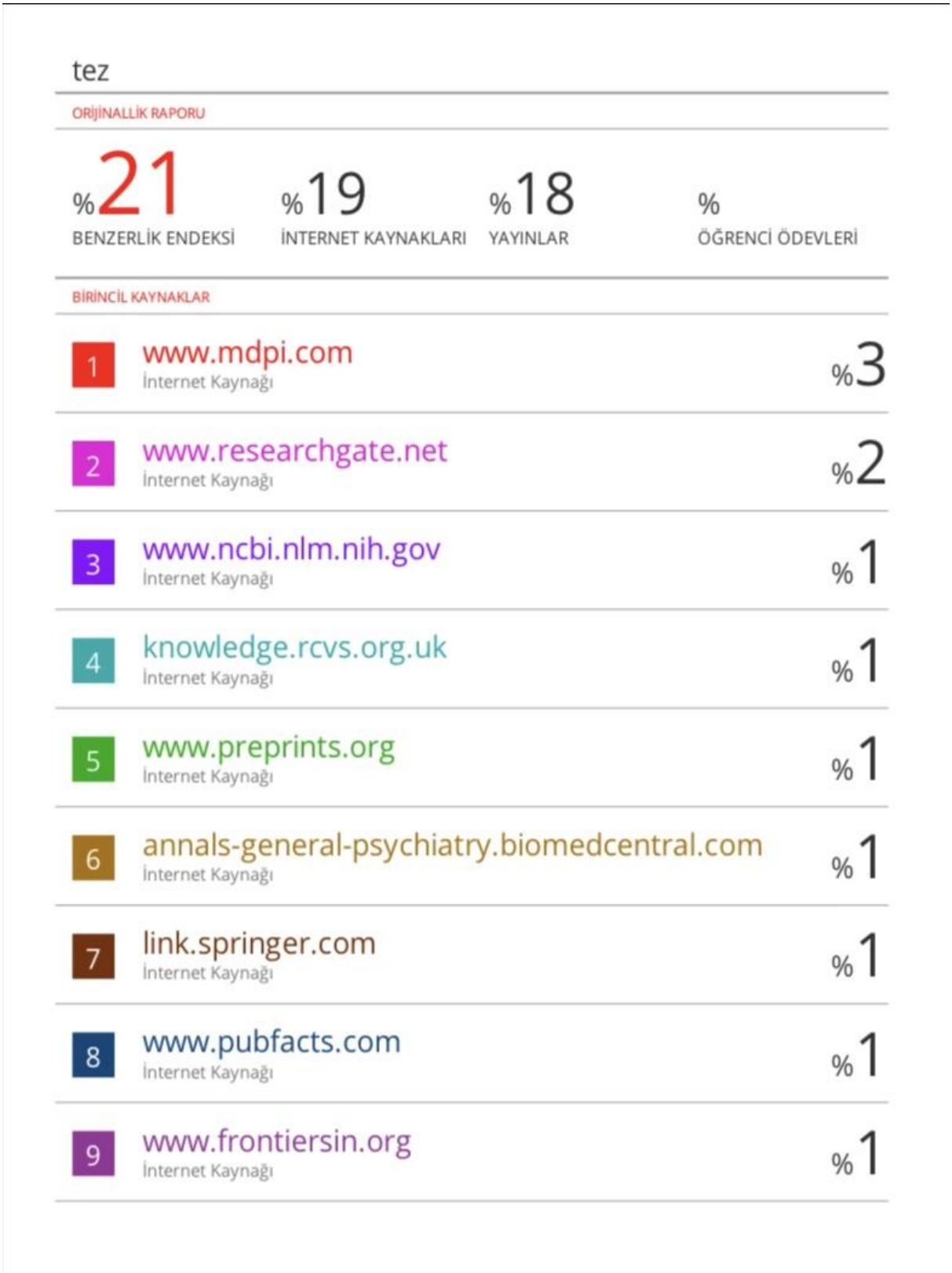
Assist. Prof. Dr. Dilay NECİPOĞLU
Near East University
Head of Public Health Nursing Department

Institutional Permit; As the head elder of the SDA Church Nicosia region, Permission of research has been granted to the above mentioned student

Name-Surname:

Signature:

Appendix C: Turnitin Similarity Report



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ORİJİNALLİK RAPORU

%21	%19	%18	%
BENZERLİK ENDEKSİ	İNTERNET KAYNAKLARI	YAYINLAR	ÖĞRENCİ ÖDEVLERİ

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Appendix D: Curriculum Vitae

1. PERSONAL INFORMATION

NAME, SURNAME: **GENDER:** **DATE of BIRTH and PLACE:** **MARITAL STATUS:**	Oripah Nyasha Kalumo Female 03/01/97, Masvingo, Zimbabwe Single
CURRENT OCCUPATION: Student **ADDRESS of CORRESPONDENCE:** Sehit Ahmet Hasan Sokak, Harise Hanim Apartment, Flat number 12,Yenisehir, Lefkosa, Mersin 10 **TELEPHONE:** +905338833799 **E-MAIL:** missyonkoris@gmail.com	

2. ACADEMIC EXPERIENCE

PERIOD	TITLE	DEPARTMENT	UNIVERSITY
2016-2020	Bachelor of Science	Nursing	Near East University
2020-2022	Master of Science	Public Health Nursing	Near East University