

Chapter One

Introduction

1.1 Background to the Study

The Coronavirus disease (COVID-19) outbreak began in the latter part of 2019 and has caused an unprecedented worldwide health disaster¹. This extremely infectious viral disease, introduced by the SARS-CoV-2 coronavirus has caused widespread sickness that has overburdened healthcare systems, and caused significant socioeconomic disruptions all over the world to the extent that the medical communities, governments, and society at large have been challenged by the fast transmission of the disease and high rates of illness and mortality it brings.

COVID-19 emerged from the Chinese city of Wuhan around December 31, 2019. The emergence of the disease from the "Huanan Seafood Market" was followed with numerous cases in a short duration². With the nature of the virus been unclear, the incidence kept increasing but it was only documented to present pneumonia-like symptoms; an ailment which once ravaged China between 2002 and 2003 claiming the lives of 700 individuals within a year. Unfortunately, the spread of COVID was prevalent and over forty cases was reported within thirty days, thus calling for concern and drastic response. The spread of the disease is fast as it only requires an incubation period of two to fourteen days leaving its host with symptoms such as dry cough, fever, shortness of breath, runny nose, sore throat, soreness in the muscles and joints pain among others.

Clearly, a disease of such prevalence posed a huge threat not only to the republic of China but the entire world and this was affirmed as the virus will later spread throughout the entire globe.

As of January 19, 2021; exactly twelve months and nineteen days after the first case was reported in Wuhan, China; the globe had recorded 2,029,084 deaths with 93,956,883 laboratory-confirmed cases of COVID-19, followed with a huge rise to 4.95 million deaths and clinically-confirmed cases of over 244 million in October 26, 2021³.

Clearly, a disease of such prevalent nature sent shocking waves leaving nations clueless on the best and alternative measures in containing the spread of the virus. Given the situation, numerous nations were necessitated to provide contextual solutions while they hoped for a pronouncement of a cure. Beyond health and medical impact of the pandemic, COVID-19 has had a significant negative effect on global economy as many businesses were forced to shut down due to lockdowns, restrictions and containment measures adopted by nations⁴.

The lockdown and other containment measures adopted across the globe had a huge negative impact on trades and services. Regarding trade, exchange of goods and services assumed an unusual pattern and these was the norm across various industries. With restrictions, trade was affected in all sectors and first to take the hit was the travel and tourism sector of many nations. This was evident as trade and services declined in the industry by more than 50 percent and remained substantially low for a longer duration thus leading to increased demand in information and communications technology and ecommerce services⁵. Truly, lock downs heightened fears of many nations but it remained the feasible option introduced by governments to break transmission of the disease within their borders despite slowing down economic activities, declining government revenues and expenditure among others. Besides the immediate effect of job losses, reduced income and increased poverty levels; economic and social implications of the pandemic was devastating as millions were at risk of falling into extreme poverty. This was more worrisome as the global population of undernourished people which was 690 million in October

2020, and was estimated to increase by up to 132 million before the end of 2020⁶. In addition, the disruption continued as millions of jobs were further slashed and individuals were deprived of decent chances of making and sustaining livelihood. In fact, the pandemic affected the less protected individuals in the labour market and this majorly comprised of migrants and women; thus, posing a threat to the hard-won gains for gender equality and women empowerment⁷.

The spread of Covid-19 across the globe was at a tremendous rate due to the interconnectedness of today's economy and societies; and this led to disruption that affected not just trade and investment only but other spheres of life.

For instance, educational systems across the globe were largely affected with educational institutions forced to shut down to prevent the spread of the virus. The situation became far worrisome as there was a huge learning crisis globally even before the emergence of the pandemic. Before Covid-19 hit the world, the entire globe was experiencing a learning deficit as over 258 million children that have attained primary and secondary school age were out of school. Statically, this crisis remains obvious as over half of all 10-year-olds; meaning over 53 percent could not read, write or understand a simple text. Unfortunately, the emergence of Covid-19 aggravated the situation as over 1.6 billion children were out of school globally, further leaving over 700 million students to study from home. However, this presents another issue as remote learning seemed unattainable in developing nations and this is the case in sub-Saharan Africa where an estimated 90 percent of students have no access to household computers and 82 percent have no internet access⁸. In Africa, the closure of schools affected over 330 million students, 8.5 million teachers; hence, leaving them unable to learn or teach from their respective homes. With tertiary education, it was the same case, as 220 million students in tertiary institutions were negatively impacted with the shutdown of tertiary institutions. By implication,

students became more disadvantaged with widened achievement gap and likely chance of never attaining full education potential⁹.

In Africa, the effect of COVID-19 is significant as the losses were witnessed in many spheres of lives of people on the continent. Unlike other continent, Africa even had its fair experience of the pandemic before there was a reported case. This was evident as the continent witnessed a decline in demand of commodities from international corridors, collapse of tourism industry and air transport due to lockdowns among others¹⁰. This further indicates that the pandemic transcended notional borders or regions as the challenges, vulnerabilities remain common.

Also, the continent was reported to be badly hit with food insecurity due to the potential disruption of food chain systems and supply. In fact, it is indicated that despite the continent's agricultural resources; Africa remains a net importer of agricultural produce that makes up 66 percent of total African food imports, estimated to be about US\$46 billion¹¹. This was further described to have negative implications for peace and stability in the continent as it led to sharp rise in food prices thus informing fast rise in hunger and malnutrition.

In Nigeria, the effect of COVID-19 seems far reaching just like many other nations in the world (United Nation, 2020). The first reported case of Covid-19 was confirmed at the Infectious Disease Centre (IDC), Yaba, Lagos State on the 27th of February, 2020¹². This called for the Nigeria Centre for Disease Control (NCDC); the national apex body for disease control and containment to begin contact tracing of 'Persons of Interest', which will include every person the infected 'carrier' had per adventure come in contact with. With this, strict containment measures were approved by the Presidential Task Force (PTF) to reduce the spread of the virus. In Nigeria, like other nations of the world, the implications of Covid-19 took similar dimensions' affecting

every sector and sphere of life including education, employment, mental health, gender dynamics, and social cohesion.

For instance, the emergence of COVID-19 resulted to declining consumption and reduced spending. This made it even worse with the restriction on movement, thus making individuals spend money on necessities including food and shelter. In addition, the informal sector was terribly affected as it operated on temporary contractual basis; a situation that also affected future income expectations.

In addition, uncertainties lingered in the country as businesses likely failed to invest due to gloomy business atmosphere. This was further established as the Nigeria Stock Exchange posited that the Covid year produced the worst business records and financial indices since the crisis of 2008 that saw a decline in wealth and investments. Naturally, this meant that business will delay long-term plans and investment drives thus continuing the circle of uncertainty¹³.

Also, COVID-19 contributed to a severe slowdown in GDP growth as Nigeria's GDP growth rate in 2020 was rated the poorest result since the 1980s. Additionally, the epidemic has caused a substantial rise in unemployment as it reached 33.3% in 2020, which is the highest level in more than ten years¹⁴.

Invariably, this unfathomable outcomes and disruption to human lives shape the social response, relations and perspectives of individuals, families and nations at large¹⁵.

Specifically, COVID-19 has brought changes in societal structures, interpersonal relationships, economic dynamics, and various dimensions of human behavior. Moreover, it has revealed pre-existing vulnerabilities and inequalities within societies, exacerbating disparities and necessitating critical examination from a social perspective. This necessitates the need to review

COVID-19 and its social implication from Nigerian perspective where social integration remains the bedrock of human existence.

Social perspective emphasizes the larger social context of behavior by taking into account factors such as an individual's social location, employment, income, education, gender, age, and race, as well as external influences such as other people's experiences that are internalized and contribute to their thoughts and motivations¹⁶. An examination vis a vis a social context will require that we discern the connections between human behavior and other social contexts that influence it.

Also, social perspective is a method of comprehending human behavior that places it within a larger societal framework. Often referred to sociological perspective, it is also the nexus of the individual or group of persons of interest and the history or the social forces that shape them¹⁷.

With this, a social examination of the impact of COVID-19 which will involve understanding the interconnectedness and interdependencies among societies across the world remains crucial. Furthermore, this is important as the pandemic transcended national borders, impacting societies on a global scale and revealing the shared challenges and vulnerabilities faced by individuals and communities worldwide¹⁸. By analyzing the global social perspective of COVID-19, we can gain insights into the commonalities and variations in social impacts, as well as the factors that shape societal responses and outcomes.

1.2 Statement of the Problem

Covid-19 emerged as a global health crisis, affecting individuals, societies in ways unfathomed. The outbreak of Coronavirus disease has negatively affected many nations of the world leaving many businesses and lives struggling for survival¹⁹. These effects were witnessed across all strata and spheres of the society leaving no one unscathed. Indeed, the COVID-19 has taken a huge toll

on Nigerians as it has compromised the daily living and wellbeing of the people thus reversing efforts aimed at attaining development, economic growth among others²⁰.

The emergence of the virus saw the institution of diverse measures of containment by the federal government. Chief among these was the restriction of movement; a lockdown that saw businesses collapse and resulting in unprecedented disruption of commerce across all industries. This situation led to short-term and long-term challenges that affected supply chain, consumer demands, sales and marketing among others. Consequently, this silent debacle would later become an economic crisis far worse than those experienced 2009 and 2016. In fact, the shutdown of businesses majorly had effect and negative toll on the small and medium enterprises that remain the focal point of government round the globe. Unfortunately, these businesses form a huge part of the market systems that contributes to nation building and remains important to supply chain that fulfils demands of consumers.

The COVID-19 pandemic caused significant disruptions globally in 2020 and 2021, with long-lasting effects likely across many sectors, particularly health. This remained the situation in Nigeria as the country was not exempted from the global crisis, and the country's health care facilities and workers were deployed to curb the rapidly rising COVID-19 demands, which had an impact on emergency health service provision because health systems were left overburdened and unable to function efficiently. This situation further stretched an ailing health sector.

Understandably, the economic impact of Covid-19 was anticipated even if the manner and coping strategies seemed elusive but the social implication was never evaluated under any guise.

In fact,

the closing of schools to stop the pandemic's spread was the biggest social issue of the international community's response to COVID-19. Truly, this action denied kids access to all

types of learning while also robbing millions of educators of their means of support and lowering their general well-being.

As of March 25th, 2020, there had been school closings recorded in about 150 different countries; leaving Nigeria and other African nation to follow suit. School closings are crucial because they act as a social isolation tactic to restrict the spread of the disease and prevent an increase in cases that would further strain health services. The precise timing of the closures, the population's age distribution, and the length of the closure will all curb the spread of the virus.

The economic shock brought on by the COVID-19 epidemic seems to be far greater than ever thought and accordingly, the expansion of the pandemic came at a great human cost, with practically all homes finding it difficult to keep up as expenses increased. Significant trade disruptions, a decline in oil prices, and tightening financial circumstances have all been brought on by the COVID-19 pandemic in Nigeria and many other nations. This was evident as the survival of several homes, organizations, and businesses has continued to be threatened by these impacts, which have already contributed to significant rises in unemployment and underemployment.

1.3 Aim and Objectives of the Study

The aim of this thesis is to examine the global effects of the COVID-19 pandemic on the Nigerian social perspectives while the specific objectives of the study are to:

- i. examine the major social impacts of Covid-19 in Nigeria.
- ii. analyze the social behaviors and attitudes of Nigerians changed as a result of Covid-19.
- iii. investigate how COVID-19 pandemic affected social interactions and relationships among Nigerians at the individual and community levels.

- iv. examine social norms and cultural practices adapted in the wake of the new realities brought about by Covid-19.

1.4 Research Questions

1. What are the major social impacts of Covid-19 in Nigeria?
2. How have the social behaviors and attitudes of Nigerians changed as a result of Covid-19?
3. How has COVID-19 pandemic affected social interactions and relationships among Nigerians at the individual and community levels?
4. How have social norms and cultural practices adapted in the wake the new realities brought about by Covid-19?

1.5 Significance of the Study

This study holds great significance in examining the impact of the COVID-19 pandemic on Nigeria social perspectives. Understanding the social implications of COVID-19 in Nigeria is crucial for devising effective response strategies, policy interventions, and public health initiatives. By examining the local context and societal dynamics, this thesis contributed to the existing body of knowledge on the global effects of the pandemic. Through comprehensive analysis, it aimed to shed light on the various social dimensions of COVID-19 in Nigeria and provide insights into the challenges faced by communities, individuals, and institutions.

With this, the study delved into the direct and indirect impacts of the pandemic on the society by adopting a comprehensive approach, drawing on various academic disciplines such as sociology, public health, and economics, among others.

Additionally, the study shed light on the healthcare infrastructure and social support systems in Nigeria during the pandemic. Understanding the strengths and weaknesses of the existing healthcare system helped in identifying areas that require improvement to effectively respond to future health crises. Moreover, examining the social support systems enabled the identification of vulnerable groups and the assessment of their access to essential resources, such as food, shelter, and healthcare.

The thesis also explored the impact of COVID-19 on education and social cohesion and dynamics in Nigeria. The study examined the shift to remote learning and its effectiveness, as well as the challenges faced by students, teachers, and parents during this transition. Furthermore, it investigated the changes in social interactions, community dynamics, and mental health issues that may have arisen due to social distancing measures.

Moreover, this study contributed to the global understanding of the pandemic's effects by providing a unique Nigerian perspective. It added to the existing body of knowledge on COVID-19 by examining how cultural and societal factors influence the response and adaptation of Nigerian communities. This broader perspective helped in formulating strategies and policies that are more context-specific, ultimately leading to more effective responses to similar global health crises.

Summarily, the significance of this study lies in its comprehensive examination of the global effect of COVID-19 from a Nigerian social perspective. By investigating the socio-economic implications, healthcare infrastructure, social support systems, education, and social dynamics, the study provided crucial insights for policymakers, researchers, and stakeholders to develop targeted interventions and strategies. Ultimately, this research contributed to the overall

understanding of the pandemic's impact on Nigerian society and its lessons for global health crisis management.

1.6 Scope of the Study

The scope of this study is focused on examining the global effects of COVID-19 on Nigeria's social perspectives. To achieve this, the study used the South western Nigeria which comprises of six states namely Lagos, Ogun, Osun, Oyo, Ondo and Ekiti states to carefully examine the effect of the pandemic. Also, the duration of analysis to be factored into this study was be 2019, the year COVID emerged till the present date (2023). Also, the study explored the social implications of the global pandemic by taking into account the various factors such as the public health, socio-economic implications of the pandemic as well as the well-being of individuals and communities.

Specifically, the study will explore the social implications of the global pandemic in Nigeria, taking into account various factors such as education, public health, socio-economic implications, and the overall well-being of individuals and communities.

1.7 Limitation of the Study

There are two major limitations encountered in the course of this study. Firstly, most studies concentrated on the health and economic effects of Covid-19. Secondly, few people especially people above 50 interviewed were more interested in how the pandemic affected their social lives particularly religious practice and health issues.

1.8 Operational Definition of Terms

COVID-19: COVID-19, short for Coronavirus Disease 2019, is a highly contagious respiratory illness caused by the novel coronavirus SARS-CoV-2. The virus was first identified in December 2019 in Wuhan, China, and has since become a global pandemic. Common symptoms include fever, cough, and difficulty breathing, but it can range from mild to severe, leading to fatalities, especially among vulnerable populations. Preventive measures such as vaccination, wearing masks, practicing social distancing, and regular hand washing are crucial in controlling its spread.

Pandemic: A pandemic is a widespread outbreak of a contagious disease that affects a large geographic area, often crossing international borders. It occurs when a novel infectious agent, such as a virus or bacterium, spreads rapidly and causes illness on a global scale. Pandemics can have significant impacts on public health, economies, and social systems, leading to widespread illness, death, and disruption of daily life. Governments, health organizations, and communities typically respond with various measures to control the spread of the disease and mitigate its effects.

Containment Measures: Containment measures refer to a set of strategies and actions implemented by authorities to control and mitigate the spread of infectious diseases or other hazards. These measures aim to limit the transmission of the agent causing the problem within a specific area or population. Common containment measures include quarantine of affected individuals, isolation of confirmed cases, travel restrictions, social distancing protocols, and the use of personal protective equipment (PPE). The goal is to reduce the overall impact of the threat and prevent it from spreading further beyond manageable levels.

Social Perspective: The social perspective consists of viewpoints through which people examine the phenomena of human actions and organizations. It's a dimension that looks at society

through a lens devoid of personal opinions and; causes and actions are generalized into patterns and categories.

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Endnotes

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Chapter Two

Literature Review

2.1 Conceptual Review

2.1.1 History and Overview of COVID-19

The 2019 novel human coronavirus disease (COVID-19) was first reported in Wuhan, China in 2019 and then spread worldwide thus becoming the fifth documented pandemic since the 1918 flu pandemic. As of September 2021, nearly two years after COVID-19 was first identified, there were more than 200 million confirmed cases and more than 4.6 million deaths from the disease. The first official cases of COVID-19 were reported on December 31, 2019, when the World Health Organization (WHO) was informed of cases of pneumonia with no known cause in Wuhan, China. On Jan. 7, Chinese authorities identified a new coronavirus, tentatively named 2019-nCoV, as the cause of these cases. Weeks later, on January 30, 2020, the WHO declared the rapidly spreading COVID-19 outbreak a public health emergency of international concern. However, the new coronavirus did not receive its official name until the following month, on February 11¹.

This situation will eventually be felt by many nations of the world. In the US, the Centers for Disease Control and Prevention (CDC) confirmed that the first person had died from COVID-19 in the country. The individual was a man in his 50s who lived in Washington state.²

In the early months of COVID-19, global health officials, government agencies and the general public were unclear about how the disease would spread and affect daily life. On March 1, 2020, the United Nations donated US\$15 million to support the global response to COVID-19³. A week later, on March 7, the number of COVID-19 cases reached 100,000⁴. A few days later, on March 11, 2020 the WHO declared the COVID-19 pandemic. COVID-19 has rapidly evolved

from a major problem seemingly confined to China to a global health emergency almost overnight. At that time, the situation in Wuhan was widespread after unprecedented measures were taken to contain the virus. At the beginning of the outbreak, China was reporting thousands of new cases a day, down from a few dozen in March of the same year⁵.

In Europe, however, the number of cases has been rising day by day and Italy recorded an unprecedented 250 deaths in the 24 hours between March 12 and 13. As a result, the WHO announced on March 13 that Europe had become the epicenter of the pandemic. On the same day, the United States declared a state of emergency⁶. This situation had to be controlled hence the drastic need for a vaccine but measures had to be in place still a vaccine was available. With this, strict measures have been taken around the world to combat the pandemic leading to social distancing and travel restrictions coming into effect in March, along with advice on proper hand washing techniques.

However, since these measures were only intended to slow the spread of the virus, scientists realized that a vaccine must be developed to defeat the pandemic and, with numerous efforts, mRNA vaccine trail began on March 17, 2020⁷. It was clear that lockdown restrictions would not be enough to stop the spread of COVID-19. Restrictions have quickly tightened in most areas and the UK introduced a curfew on March 26⁸. At that time, many European countries introduced their own national restriction of movement. By April 2, the total number of COVID-19 cases worldwide has risen to 1 million⁹. This number showed the true severity of the pandemic and governments were doing everything they could to slowdown the spread of the virus before a vaccine could be considered safe to use. However, it was necessary to introduce guidelines and measures to curb the spreads of the virus and on April 6, WHO released mask-wearing guidelines as mounting evidence pointed to the role of aerosols in the spread of disease¹⁰.

The restriction and precautionary measures yielded great results as many countries saw a drop in reported Covid cases, hospital admissions and deaths. However, in late summer of August 2020, a new variant; the lambda variant was discovered in Peru. According to the WHO, this variant has so far spread to at least 29 countries. This will also lead to the discovery of another variant named the alpha variant after a month in September 2020 in the United Kingdom. The discovery of these variants was significant, showing that the virus was evolving.

These discoveries implied that a vaccine was highly required to combat the scourge. On November 23, clinical trials from Oxford University and Astra Zeneca proved effective and were passed for treatment of COVID-19. Shortly thereafter, in December, the delta variant was later discovered in India. This situation further fueled more concerns about the possibility of increased transmission of the variants, thus compounding the surge numbers in some countries like the UK, which had already enforced strict lockdown measures.

Finally, on December 31, 2020, the WHO released the first emergency validation of a COVID-19 vaccine, making the Pfizer/BioNTech vaccine the first vaccine available for use. The emergency validation was seen as a positive step towards global availability of COVID-19 vaccines, a necessary step to end the pandemic. Since then, the Moderna vaccine and the Oxford/AstraZeneca vaccine have also been approved for use, and national vaccine rollout initiatives were in full swing. As of April 27, 2021, 1 billion doses of the COVID-19 vaccine have been administered with continued rolling out of the vaccines to all countries to contain the pandemic and prevent future outbreaks¹¹.

Characteristics and Features of COVID-19

Covid-19 presented numerous signs which was mistaken for common flu and here are some key characteristics of COVID-19:

- Transmission: COVID-19 primarily spreads through respiratory droplets when an infected person coughs, sneezes, talks, or breathes. It can also spread by touching contaminated surfaces and then touching the face.
- Symptoms: Common symptoms include fever, cough, sore throat, fatigue, body aches, shortness of breath, loss of taste or smell, and in some cases, diarrhea. However, it's important to note that some individuals may be asymptomatic or experience mild symptoms.
- Incubation Period: The incubation period for COVID-19 is typically between 2 to 14 days, with an average of around 5-6 days. This refers to the time between exposure to the virus and the onset of symptoms.
- Severity: COVID-19 can range from mild to severe illness. Some individuals experience mild symptoms and recover without requiring hospitalization, while others may develop severe respiratory symptoms, leading to pneumonia, acute respiratory distress syndrome (ARDS), or other complications.
- High Contagiousness: COVID-19 has demonstrated high contagiousness, resulting in rapid spread within communities and across countries. The virus has caused numerous outbreaks and has the potential to lead to a pandemic.
- Variants: Several variants of the SARS-CoV-2 virus, which causes COVID-19, have emerged. These variants have different genetic mutations and some may have increased transmissibility or potential impact on vaccine efficacy.

- **Vulnerable Populations:** Certain populations, including older adults, individuals with underlying health conditions (such as heart disease, diabetes, or respiratory conditions), and immune-compromised individuals, are at higher risk of severe illness or complications from COVID-19.
- **Public Health Measures:** To control the spread of COVID-19, various public health measures have been implemented, such as wearing masks, practicing physical distancing, frequent hand washing, testing and contact tracing, quarantine and isolation protocols, and vaccination campaigns.

2.1.2 Transmission of COVID-19

When COVID-19 started spreading, the virus seemed to be contained within China and the cruise liner "Diamond Princess," which formed the infection's primary clusters. But as of April 2020, the virus has spread to over 210 nations and territories, with Europe, the United States, and Iran forming the infection's new cluster. Among these nations, the United States had the highest number of confirmed COVID-19 cases, whereas India and China, despite being among the world's most populous countries, had managed to limit the infection rate by implementing a complete lockdown with plans in place to manage confirmed cases. Similarly, the United Kingdom had managed to keep a low rise of the disease by applying comparable measures. Studies indicated that despite these measures and control plans, the new strains of virus affected the plans and containment measure of the virus ^{12,13,14}.

The disease is transmitted by droplets and as of April 2020, the total number of people infected was about 3 million, with about 200,000 deaths and more than 1 million recoveries worldwide^{15,16}. The virus therefore has a mortality rate of about 2% and an R_0 of 3 according to current data. This implies that the R_0 ; which gauges the contagious infections if more than one

means that each existing infection causes more than one new infection and the disease will be transmitted between people, and there may be an outbreak or epidemic¹⁷. However, a recent report by the CDC, Atlanta, USA, states that the R_0 could be as high as 5.7¹⁸. Based on the available data from China and India, it has also been observed that in both countries, people aged between 20 and 50 years are susceptible to viral infections^{19,20}. In these two countries, the working class is mainly in this age group, increasing the likelihood of exposure.

Germany and Singapore are prime examples of countries that had high case numbers but low death tolls compared to their immediate neighbors. Also, Singapore is one of the few countries that developed a detailed action plan for dealing with a similar situation in the future after the last SARS outbreak, which worked to its advantage for the Covid-19 outbreak. Both countries acted quickly after the outbreak: Singapore banned travelers from China and introduced screening and quarantine measures at a time when the WHO did not recommend them. They ordered the elderly and vulnerable to stay strictly at home and ensured the immediate availability of life-saving equipment and large-scale testing facilities^{21,22}. Likewise, Germany has taken similar steps, increasing testing capacity early and ensuring everyone has an equal chance to be tested. This meant that all young, old and at-risk individuals were tested, leading to positive results early in the development of the disease, and that most cases were mild, as in Singapore, where the mortality rate was lowest²³. This allowed infected people to be identified and quarantined before they developed symptoms. Testing was done in multiple labs, reducing the workload and ensuring massive scale, which countries like the US were relatively late in doing and India was limited to a few government and private labs. The German government has also banned large gatherings and recommended social distancing to further contain the spread of the virus, but unlike India and the United States, it did so quite late. South Korea was another

example of how the country had successfully contained the spread and transmission of infections. South Korea and the United States reported their first cases of COVID-19 on the same day. However, the US government downplayed the risks of the disease, unlike South Korean officials, who kept their citizens abreast of the disease's development through media and a centralized messaging system. They also used the Trace, Test and Treat protocol to quickly identify and isolate patients, while the United States limited it to severely infected patients and only later expanded this criterion, as did many European countries and India. Unlike the United States, South Korea also has universal healthcare that offers free diagnostic tests. The primary route of transmission for 2019-nCoV is human-to-human. Transmission from animals to humans had not yet been confirmed. Asymptomatic carriers of the virus are at high risk of super infection with this disease, as not all infected individuals may develop the disease²⁴. This is a concern voiced by nations around the world, and the Indian government had raised concerns about how to identify and contain asymptomatic carriers, who could account for 80% of those infected²⁵. More importantly, because current resources focused on understanding symptomatic hospitalized patients, there was still a large amount of information about asymptomatic people that has not yet been studied. For example, some questions that needed to be answered include: Do asymptomatic people ever develop disease? Do they eventually develop antibodies? How long are they spreading the virus? Could these people's tissues store the virus in a dormant state? Asymptomatic transmission is a gray area with great unknowns when it comes to COVID-19. The main transmission route from person to person is via droplets that are produced when coughing, speaking or sneezing and are then inhaled by a healthy person. They can also be indirectly transmitted to a person when they land on surfaces that are touched by a healthy individual who may then touch their nose, mouth, or eyes, allowing the virus entry into the body.

Fomites are also a common issue in such diseases. Aerosol-based transmission of the virus has not yet been confirmed²⁶. Stool-based transmission via the fecal-oral route may also be possible since the SARS-CoV-2 has been found in patient feces^{27,28}. Some patients with COVID-19 tend to develop diarrhea, which can become a major route of transmission if proper sanitation and personal hygiene needs are not met. There is no evidence currently available to suggest intrauterine vertical transmission of the disease in pregnant women²⁹.

More investigation is necessary of whether climate has played any role in the containment of the infection in countries such as India, Singapore, China, and Israel, as these are significantly warmer countries as compared with the UK, the USA, and Canada. Ideally, a warm climate should prevent the virus from surviving for longer periods of time on surfaces, reducing transmissibility.

2.1.2.1 Effects of COVID-19 on the Global Economy

The emergence of the COVID-19 pandemic has brought unprecedented challenges and has significantly impacted various aspects of society around the world. The global spread of this novel coronavirus poses a threat to public systems and ways of life around the world.

The economy of each country depends on its agriculture, industry, economy, public investment, imports and exports. The COVID-19 pandemic has directly affected all industries. Economists around the world are analyzing the impact of this pandemic on the global economy³⁰; 4% compared to the previous estimate (i.e., 5.7%)³¹. The International Monetary Fund also estimates that the global economy will collapse by 3% and that global gross domestic product (GDP) will fall by 3%³². Its influence is easily felt in various sectors of different countries that depend on China for trade or production³³. It is estimated that the service sector and industry will also suffer huge losses. The travel and tourism industry will be badly affected. The international

entertainment and sports brand industry will suffer significant sales and marketing losses³⁴. Therefore, unless credible and adequate strategic plans to deal with this scandal are developed, the impact of the COVID-19 pandemic on the economy will be very drastic.

- Agriculture

Borders have been introduced in most countries to contain the COVID-19 epidemic. This has implications for food supply chains, crop availability and logistics services³⁵. These restrictions may have exacerbated the traumatic condition of people in developing countries. Agriculture is the most important service that cannot be stopped. However, several countries have made concerted efforts to produce surplus food and store it in cold storage. This will help countries that depend on food supplies from others. There is no doubt that the pandemic has had a very strong impact on the economy and has led to a drop in incomes. Governments of different countries try their best to balance life and livelihood. They invest in economic stimulus measures and secure food supplies for the unemployed and the poor. Governments are taking bold steps to tackle the chronic crisis in food supply chains. Labor shortages can be an obstacle for farmers. The United Nations World Food Program estimates that acute food insecurity will affect around 130 million or more (i.e., 135-265 million) of the population by the end of 2020³⁶. The World Bank Group works closely with governments to monitor national agricultural and food supply chains. They also examine the effects of unemployment and income on their ability to buy groceries. Short-term and long-term financing strategies are required for the reconstruction of existing projects. Unforeseen weather conditions and various insect infestations have recently become a new challenge for farmers and governments. Both take appropriate measures to implement control measures to prevent the depletion of agricultural land and crops.

- Business

Due to the lockdown and quarantine period, job opportunities for people have been limited. Consumers bought only essential and limited items that had a direct impact on the supply and demand chain. The decline period also presented a decline in import-export due to restrictions and shutting down of international border and trade.

- Entertainment

The COVID-19 pandemic has also affected the film industry. However, this discussion focused on digital commerce and technology³⁷. This is one of the most exposed sectors. Subscriptions to online gaming, digital radio and media, and OTT media service platforms have increased significantly in this pandemic situation. In the years that follow, they can provide more income. While the film, theater and live events industries are suffering huge losses as noted by the Event and Entertainment Management Association (EEMA)³⁸. The drop in these revenues can be explained by the closure of cinemas and multiplexes. These setbacks are not just limited to the end of the pandemic. In post-COVID-19 conditions, people will show different behaviors regarding their acceptance of external media. Many people may prefer home media³⁹. The employment of a large number of people depends on this sector. After this pandemic situation, they may face unemployment. New and innovative ideas are required for the provision of digital content and events such as virtual live events. Implementing innovative ideas requires advanced clouds and remote desktops.

- Travel and Tourism

Travel and tourism play an important role in the social and economic development of every country⁴⁰. The tourism industry indirectly impacts multiple sectors such as labour, agricultural

products (food and beverages), transport and housing. According to the Global Trade Analysis Project (GTAP), skilled and unskilled workers account for 30% of tourism spending in both developed and developing countries. Figure 4 shows the different inputs required in the tourism industry⁴¹. However, this sector has been hardest hit by the pandemic. COVID-19 has had a tremendous impact on the travel and tourism industry. Immediate measures have been taken in tourist destinations that have a significant impact on people's mobility⁴². According to the United Nations World Tourism Organization (UNWTO), international tourist arrivals fell by 72% between January and October 2020. As a result, export earnings suffered a loss of US\$935 billion. This loss is about ten times greater than the loss suffered in 2009 during the economic crisis⁴³. In most restaurants, there are high operating costs due to the distance and hygiene measures. Restaurants have been closed due to declining tourist numbers and high operating costs. Some restaurants have also been turned into quarantine centers. The sustainable development of the travel and tourism industry is a difficult task in the current pandemic situation. The tourism industry in both developing and developed countries is suffering from this crisis. The UNWTO reports that tourist arrivals in developing countries have fallen by 60-90%. Domestic travel has increased dramatically during this pandemic, this will have a slight impact on the economies of developing countries. Developing countries largely rely on international travel. It is estimated that Indian tourism could suffer a major revenue loss of INR 1.25 trillion in 2020 due to hotel and airline industry closures. Also, Indian tourism industry is expected to lose INR 69,400 billion in revenue due to the suspension of international flights⁴⁴. It has been said that in 2021 there will be a loss of 50% of foreign exchange earnings. Indian Airlines reported a loss of \$600 million for the January-March quarter. The Indian government planned a rescue package of up to INR 100-120 billion. A decision was made to defer taxes on the Indian aviation

sector until it gets back on its feet. Companies could have the option to pay interest-free taxes in the next tax cycle. In South Africa, tourist arrivals have fallen by 71% during this pandemic. Sales fell from 15.8 million to 5 million in 2020. South Africa did not receive any visitors from April to September 2020. During this crisis, Australia saw an 81.4% drop in tourist numbers. However, the United Kingdom (UK) and Zimbabwe have received large numbers of foreign tourists compared to other countries.

- Tertiary and Manufacturing Sector

China is a major supplier of raw materials, small parts and tools to various manufacturing industries around the world⁴⁵. Due to the occupation of borders between countries, global manufacturing entities, especially those that rely on sourcing raw materials from China, are facing significant blockages in production. During this pandemic, many manufacturing facilities have transitioned to a smarter model or turned to producing medical products. The United Nations Conference on Trade and Development (UNCTAD) estimates that global foreign direct investment has fallen by 5-15% due to the closure of the manufacturing sector⁴⁶. Electrical and electronics companies have been particularly hard hit by this pandemic as most of their critical parts are shipped from China. According to the International Labor Organization (ILO), an estimated 25 million people worldwide will be affected by unemployment during the pandemic⁴⁷. In service companies, very few people come into their offices as most employees work from home.

2.1.2.2 Effects of COVID-19 on the Environment

Nowadays the human lifestyle has drastic effects on the environment. The population has dropped from 1 billion (1800) to 7.7 billion in 2020⁴⁸. Humans make extensive use of natural resources for the re-development of industries, infrastructure and habitats. As the human

population has increased, so has the demand for dairy and meat products such as eggs, meat and milk. This has promoted poultry farming and animal husbandry, which are actually believed to be the main alleged gateway for transmission of various viruses from the wild to the human world⁴⁹. Decreasing the amount of green space on earth will have a serious impact on our lives in the long run. The evergreen forests of the Amazon are considered carbon sinks in the ecosystem. According to the World Wildlife Fund, forests cover more than 30% of the earth's surface⁵⁰. Humanity is expected to face a complete loss of rainforest cover in the basin by the year 2100 due to decreasing rainfall and increasing temperatures⁵¹. The exploitation of forest vegetation, the burning of fossil fuels, and the release of toxic fumes from industry and transport are responsible for ecosystem disruption. Research on zoonoses by the United Nations Environment Program (UNEP) and the International Farm Animal Research Institute (ILRI) indicates that the outbreaks will recur in the future due to drastic changes in climate and the food chain⁵². Unforeseen changes in the environment and wildlife have upset the balance of the food chain.

Due to large-scale deforestation, wild animals have left their habitats and are moving to towns or villages. It has also led to the transmission of new microbes and pathogens from these animals to humans. This severely affects the food chain and is responsible for the increase in zoonotic diseases in the near future⁵³. There are millions of unknown and undefined virus species in animals. They can seriously infect people. According to a report by the Intergovernmental Platform for Science and Policy on Biodiversity and Ecosystem Services (IPBES), the existence of genetic diversity will help strengthen the resilience of animal populations⁵⁴. It also reduces the occurrence of infectious diseases. Recently, farmers use pesticides and fertilizers on their crops to prevent insects, weeds and various diseases. However, intensive use of pesticides and fertilizers can help pathogens develop greater resistance to zoonotic treatments.

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- Effect on Air

The COVID-19 pandemic has impacted the environment in more deadly ways. During this pandemic, air quality has improved significantly due to the reduction in human activities and production processes⁵⁵. This pandemic has helped nature regenerate. The rivers are clear and the skies are cleaner. A study of the SARS epidemic found that the mortality rate in the most polluted areas of China was twice as high as in the least polluted⁵⁶. Pathogens and pollutants can form a strong bond that helps them survive unscathed in the atmosphere for long periods of time and provides them with an easy route to enter the human body. According to the annual report on the state of the world air⁵⁷, 95% of the world's population breathes unhealthy air. In India there are 1.61 million deaths from air pollution every year. Likewise, China records 1.58 million deaths annually. During the detention period, air quality has improved significantly thanks to the reduction in PM_{2.5}, SO₂ and NO₂. This can lead to a reduction in mortality. TH researchers at Harvard University. The Chan School of Public Health has found a link between deaths from COVID-19 and PM_{2.5} levels. They found that a small increase of one microgram per cubic meter of PM_{2.5} in the air led to an 8% higher mortality rate (95% confidence interval) during SARS-CoV-2⁵⁸. The concentration of various harmful gases has been significantly reduced in various countries since the blockade. In the United States, a 49% reduction in NO₂ concentration and a 37% reduction in CO air quality was observed⁵⁹. In Delhi, a 70% reduction in harmful nitrogen dioxide was analyzed after the lockdown⁶⁰. During this pandemic, levels of pollutants in the air are falling dramatically. This can lead to a reduction in the number of patients with

asthma, lung problems or heart attacks^{61,62}. These changes are not sustainable after the COVID-19 situation. The government should take preventive measures to maintain better air quality. Renewable energy systems are expected to be widely used in manufacturing⁶³. The government should encourage people to install solar panels. Accessibility of public transport should be improved to reduce congestion and pollution. Tax breaks, subsidies and financial incentives are to be granted when purchasing electric vehicles.

- Effects on water

During this pandemic, acid rain formation has greatly decreased due to reduced air pollution. Due to the lock-up period, the amount of industrial wastewater was very limited⁶⁴. Reducing religious activities, fishing, and social gatherings can result in less solid waste. Along with better water quality, the river's self-cleaning properties improve. River dissolved oxygen is about 5 mg/L in Yamuna River in Delhi⁶⁵. In Italy, the water in the Venice canals was cleaner than in the previous year⁶⁶. Fish can be seen in the canals of Venice. The marine ecosystem is also recovering from the decline in fishing activities and blue carbon reduction⁶⁷. There is no evidence that the coronavirus survives in drinking water. However, this is possible in untreated drinking water. Since the structure of SARS-CoV-2 is the same as previously discovered coronaviruses, the same precautions mentioned for previously discovered coronaviruses should be taken.⁶⁷ Regular hand hygiene and water disinfection can help reduce the risk of contracting SARS-CoV-2. Governments need to develop appropriate rules and regulations for the efficient treatment of solid and aqueous waste from industry. International and national laws must be developed to combat overfishing.

- Effects on Wildlife

Wildlife management plays a key role in achieving many sustainable development goals and supporting local communities whose economic dependence depends largely on wildlife. Nature tourism provides 21.8 million jobs worldwide, or 6.8% of all travel and tourism jobs⁶⁸. The exit restrictions in different countries, the closure of international borders and the closure of the transport system have severely affected this sector. Most people have left this industry. Due to the falling cash flow, this sector is almost closed. Conservation of wildlife and endangered species is facing a significant lockdown due to this pandemic⁶⁹. This has also resulted in reduced funding for anti-poaching units. Poaching has increased due to less strict laws and regulations. In addition, the unemployed depended on wildlife. Another big problem is illegal activities. This accelerates the transmission of the SARS-CoV-2 virus from animals to humans, as these animals are usually kept without proper hygiene. These animals can harbor various undetected pathogens and viruses. It has been observed that 75% of new infectious diseases come from animals that eat them⁷⁰.

2.1.2.3 Impact of COVID-19 on Education

The COVID-19 pandemic is having a significant impact on the education system. The nationwide lockdown has ordered the closure of schools, colleges, classes, exams and universities. According to UNICEF, 98.5% of the global student population is affected by the closure of educational centers in approximately 186 countries⁷¹. Overall, 60% of learning losses among children are observed in families with the lowest level of education. There is speculation that closing educational institutions could help prevent the spread of the coronavirus. A recent

study on COVID-19 predicted that school closures would reduce the mortality rate by 2% to 4%⁷². This scenario may change if appropriate COVID-19 behaviors are not implemented. Another study shows that while children can contract the coronavirus, they rarely show severe symptoms and can act as transmitters of the coronavirus. Therefore, educational institutions have been closed to contain the COVID-19 epidemic. However, closing educational institutions is not the best solution. Its effectiveness may vary depending on the timing of the COVID-19 outbreak⁷³. If implemented in the early stages of COVID-19, it will have a major impact in reducing the mortality rate. However, if this measure is taken at a later date, it may not have a significant impact on mortality. After the reopening of educational institutions, a slight increase in mortality was observed⁷⁴. School closures have a direct impact on students, teachers, staff and their families. Key impacts are presented in several long-term areas, including:

- Global stock market formation has had a tremendous impact on the global stock market. Highly skilled traders have used new technologies and tactics to analyze the stock market and make more profits. Because of this pandemic, less experienced traders will come out of institutions.
- Food insecurity Students and their families who are directly dependent on meals during the day. In India, more than 100 million children eat during the day. During this pandemic, they faced food insecurity.
- Internet services E-learning requires Internet services and digital technologies such as tablets, mobile phones and laptops. The high demand for these items can lead to an increase in their cost. Students living in rural areas struggle with a lack of internet access infrastructure.

- Health problems Families who currently have no means of earning a living face many health problems. UNESCO has proposed adapting distance learning methods and online programs. In India, the central government has taken various preventive measures. The Indian government has declared the complete closure of educational institutions during the first phase of the COVID-19 pandemic. However, this closure will affect various competitions, internships, internships, student support activities, etc.

Impact on Students

Due to school closures, students have switched to distance learning methods. However, many schools are still trying to introduce online teaching. Some children are unable to carry electronic devices and an adequate internet connection⁷⁵. It was a big challenge to use distance learning. It is very difficult for working parents to take care of their community and maintain balance in the home environment. A strong infrastructure system is required to overcome these problems⁷⁶. This speeds up learning for students with learning gaps during summer vacations or weekends. It will also help unlock some additional global opportunities for interaction and learning outside of school, connecting them to the rest of the world.

- Implications for Research

E-learning has made the enormous internet traffic a heavy burden for service providers. Teleconferencing or video conferencing is often used to communicate with experts instead of conference rooms^{77,78}. Only 2% of scientists were working in virology before this pandemic. A large number of researchers and laboratories are currently dealing with COVID-19. This has led to an increase in biomedical research of about 10-15%⁷⁹. On the other hand, researchers in the field of artificial intelligence and machine learning have conducted extensive scientific

investigations and published several articles in various prestigious journals⁸⁰. In addition, a large number of scientific articles related to COVID-19 have been uploaded to preprint servers such as bioRxiv, medRxiv and arXiv. Potential deficiencies were identified during the peer review process, which significantly affected the reputation of leading peer-reviewed journals⁸¹. During this pandemic, a collaborative platform was set up to pool knowledge and share expertise between researchers and scientists. Various renowned laboratories around the world have closed their doors to visitors, employees and non-essential personnel. Scientists have started working from home. Many researchers and scientists from renowned laboratories have collaborated in cloud computing. They pooled their resources to access IBM supercomputers for research⁸².

2.1.2.4 Effects of COVID-19 on the Society

The COVID-19 pandemic has affected both the economic and health status of people of all ages. It shows drastic impact on various people living below poverty line, disabled, belonging to elderly groups, belonging to indigenous communities etc. Due to lack of prior knowledge about this type of coronavirus, positive cases are increasing rapidly worldwide. It can pose a serious threat to humans and other living things. Some groups are striving for basic amenities and medical care, with young people being prioritized over the elderly. International human rights bodies ensure that everyone receives the highest possible standard of health, on the contrary, during the period of service shortages during the pandemic, the treatment of the elderly was considered less important than that of the young and healthy. An older population with diabetes, asthma and cardiovascular attacks is more likely to be infected with the coronavirus⁸³.

To address the lack of basic needs during the pandemic, self-isolation is a necessary measure that has led to a further increase in emotional imbalance in society. Due to the weak health systems in most countries, the elderly are given less importance than the young. Therefore, governments

should develop adequate plans to strengthen their health systems to deal with the pandemic situation. Older people also suffer from depression and mental health problems. Modern technologies are not able to alleviate the problems of older people⁸⁴. In the future, webinars or digital workshops should be organized for seniors.

The Youth

The young population makes up a quarter of the world's population. Young people enthusiastically participated in various economic and social activities. They work to help the economically weakest parties. They provided innovative ideas for solving social and economic problems⁸⁵. However, young people have felt the social and economic impact of the COVID-19 pandemic. The report shows that 267 million young people out of 1.8 billion (i.e., aged 15 to 24 years) had neither studied nor worked before the pandemic⁸⁶. After the COVID-19 pandemic, this crisis becomes more serious than the previous situation. According to the Global Study on Young People and COVID-19, employee earnings fell by 42%. In developing countries, young workers suffered greater losses in income and working hours. This had a huge psychological impact on the young population. It has been found that 17% of the young population suffer from depression and anxiety⁸⁷. The young population suffers from fears and insecurity about the future due to economic and educational disruptions, social isolation and personal stress. The young population has less severe health effects than the older population⁸⁸. Employment policies must be implemented to alleviate the employment crisis caused by the COVID-19 pandemic. Sports activities and mental health services should be integrated into employment policies to alleviate mental health problems.

People with Disabilities

People with disabilities face various challenges such as healthcare, personal hygiene and implementing social distancing. These people may need outside help to carry out daily activities and to solve other problems⁸⁹. People with disabilities are more vulnerable to the COVID-19 pandemic. During this pandemic, the disabled population faces the following challenges⁹⁰.

- Inability to wear a mask. Some people with disabilities cannot wear a mask because of their disability or health problems. Some people may experience difficulty breathing and panic. Some people wearing masks are unable to communicate with others through lip reading⁹¹. It is therefore not necessary to oblige every person with a disability to wear a mask.
- Unavailability of telemedicine services. Visually impaired people do not have access to cognitive delays. Sign language interpreters are required for deaf people to access telehealth services.
- Unavailability of COVID-19 screening centers. People with disabilities cannot visit the centers alone. They needed a safe ambulance, which is impossible in the current pandemic situation
- The Impact of Social Distancing Social distancing plays a key role in preventing the outbreak of the coronavirus. Without the help of others, people with disabilities face complications in carrying out everyday activities and also suffer from mental health problems⁹².
- Incompetent health policies in the early stages of the COVID-19 pandemic, health policies did not take into account the needs of people with disabilities in relation to support staff. Because of this, without the help of a caregiver, many people have suffered adverse health effects.

2.1.2.5 Impact of COVID-19 on Globalization

The main motivation for globalization is to increase life expectancy and reduce infant mortality through various aspects of globalization⁹³. Various aspects of globalization can be involved, such as social, economic and political. Developing countries focus on the economic aspect of globalization that promotes wealth creation to improve the health of their populations, while developed countries focus on social inclusion. In the COVID-19 situation, social globalization plays an important role to stop the spread of the coronavirus. Countries with a high degree of social globalization have reacted quickly and introduced travel restrictions and other control measures⁹⁴. Countries with more political globalization are less interested in introducing travel restrictions⁹⁵. It has taken a long time to enforce strict travel restrictions. However, there is no close link between economic globalization and travel restrictions. A country with more political, cultural and interpersonal globalization expects fewer travel restrictions to be imposed in this pandemic situation. Most countries with policies that support globalization are less keen on imposing travel restrictions. Thailand and Malaysia have been hit hard by the COVID-19 pandemic. The number of jobs related to the travel and tourism industry has decreased by 14%. The economic impact in the United States was also found to exceed \$220 billion. After this pandemic, governments are focusing on expanding the national supply chain for some essential products. For example, South Korea uses robots in the manufacturing industry. It has also been noted that vaccines and medical equipment are being shipped from developed countries to developing countries.

2.1.3 Social Perspective

The social perspective, also called the sociological perspective, consists in seeing the phenomena of human actions and organizations⁹⁶. A sociological perspective is one that looks at society

through a lens devoid of personal opinions. Generalize individuals' causes and actions into patterns and categories. However, he not only observes these social patterns, but also tries to explain these patterns or behaviors. Sociologists are not interested in personal characteristics instead, they try to find common attitudes and traits in millions of people, as well as hidden patterns of those traits and behaviors. A major goal of the sociological perspective is to find and understand the patterns behind the recurring features of social interactions and to explore their social implications. With this goal in mind, many sociological perspectives have developed, but there are three main perspectives that have gained popularity.

2.1.3.1 Types of Sociological Perspectives

- Perspective of structural functionalism:

In sociology and other social sciences, structural functionalism serves as a school of thought in which every institution, relationship, position, and convention that together make up a society has a purpose and is necessary for the continued functioning of other members and society to the big one. Social change was seen in structural functionalism as an adaptive response to specific social difficulties. When one element of the interwoven social structure changes, frictions arise that are resolved by changes in other areas between that element and other aspects of the system. According to the sociologist Durkheim, social cohesion arises from the interdependence of the various components of society, which is a complex system with its own dynamic properties, external to humans but influencing their actions. From this perspective, various institutions, structures, and processes serve a specific purpose that benefits members of society. These include education that helps society develop, legal systems that control deviations in society, governments that govern people and protect citizens, families that help procreation, and much more. Even processes that others may view negatively have a purpose from a functionalist

perspective. A criminal is someone who is generally considered harmful to society. However, structural functionalists believe that criminals motivate people to behave morally and make the justice system work. Among the critics of this perspective is that it fails to explain the social and non-functional aspects of society that serve no purpose for society's needs. Some object to the notion that all social activities are beneficial to society¹⁰⁷.

- Symbolic Interactionism

The perspective of symbolic interactionism, also called symbolic interactionism, encourages scholars to study symbols and nuances, their meaning, and their impact on the interactive relationships of everyday life. From this perspective, symbols are related to their meaning and these symbols are perceived subjectively. Communicating and exchanging meanings through words and symbols is considered the method by which people understand their social environment. This subjective perception is particularly evident in verbal interactions, where the spoken words are the primary symbols. Conversations are symbolic exchanges between people who are constantly evaluating their surroundings. The symbolic-interactionist perspective derives from Max Weber's idea that people have an interpretation of their world and its meanings, and that their actions are influenced by those meanings. Symbolic interactionism as a perspective helps people understand the viewpoints of others and also contributes to the smooth functioning of society. It promotes community and motivates the development of society. Symbols such as flags are used in international conflicts by politicians and broadcasters to promote the idea of unity and social cohesion among citizens and to enlist their support for the armed forces. The association promotes the cultivation of symbols for various occasions. In western countries, Halloween is associated with the symbols of carved pumpkins and horror stories. A dove with an

olive branch means peace for the whole world. Movements create symbols to spread their causes and meanings¹⁰⁸.

❖ Conflict Theory

Conflict theory holds that conflict arises and is a source of social change when wealth, power, and social status are unequally distributed among different social groups. Power in this sense can be understood as control over productive capacity and acquired wealth, influence over political and social institutions, and over the social position of everyone else. Conflict theory goes back to the writings of Karl Marx, who focused on the determinants and consequences of bourgeois-proletarian class conflict in a capitalist society. This system enforced an unequal social order by creating unanimity in values, goals, and standards through the intellectual coercion of the bourgeoisie. As the proletariat's social and economic situation deteriorated, Marx predicted that it would become aware of the class system, which would mean that the wealthy capitalist class would exploit it and unleash a revolution that required social changes. This perspective evolved from Marx and covers a wide range of conflicts and controversies that contribute to social change in society. It is also believed that wars between nations are caused by material or ideological differences and their resolution leads to structural changes. Sociological perspectives such as Marxism and feminism derive from conflict theory and both focus on specific conflicts, differences and their impact on society¹⁰⁹.

2.1.3.2 Nigerian Social Perspective

The Nigerian social perspective necessarily refers to the unique cultural, historical, and sociopolitical perspectives that are specific to Nigeria. These perspectives encompass the values, beliefs, customs, traditions, and social dynamics that shape the Nigerian society and influence the behaviors, interactions, and perceptions of its people.

These aspects are worth examining due to the diversity and uniqueness of the country. Nigeria is a diverse nation with over 250 ethnic groups; each having its unique and distinct cultural practices; and this social perspective can encompass various aspects, including family structure, kinship ties, religious beliefs, gender roles, social norms, political dynamics, economic challenges, and societal values.

Understanding Nigerian social perspective involves exploring the complex interplay between traditional practices, and contemporary influences. It recognizes the rich diversity within Nigeria and acknowledges the multiple perspectives and experiences that exist within the society.

With a theoretical basis, a societal problem such as the outbreak of the COVID-19 pandemic is considered from three theoretical angles, namely from the perspective of symbolic interactionism; functionalist perspective; and that of conflict. The level of analysis of the symbolic interactionist perspective is at the micro level and focuses on how individuals interpret the meaning of the situations in which they find themselves. Therefore, the action taken by communities and states during the COVID-19 pandemic is to shut down the system to contain the pandemic. For the functionalist perspective, the level of analysis is at the macro level and this perspective posits that society is held together by social consensus, a cohesiveness about which members of society agree and work together to achieve the best for society as a whole. To this end, the public and states should jointly agree on a consensus on measures to mitigate the long-term impact of the COVID-19 outbreak on Nigerian society. The conflict perspective focuses on how social institutions such as education and the political system can help overcome the inequalities in the competition for scarce resources that the outbreak of the COVID-19 pandemic in terms of cultures, ethnicities, classes and other diverse groups in the world can create country.

2.2 Theoretical Framework

2.2.1 Social Determinants of Health Theory

Social determinants of health (SDH) are the conditions in which people are born, grow up, work, live and age, and the broader range of forces and systems that shape the conditions of everyday life. These forces and systems include economic policies and systems, development programs, social norms, social policies, and political systems. Social determinants of health (SDH) are social and economic conditions broken down into five key determinants namely health and healthcare, social and community context, neighborhood and built environment, education, and economic stability^{110,111}. Health and healthcare include access to health care, access to primary health care, health insurance and health literacy. Low health literacy can make it difficult for patients to navigate the complex healthcare system and understand medical advice or prescriptions. People without health insurance are less likely to use or even have access to primary health care, making it more difficult to identify and treat chronic diseases such as cardiovascular disease, asthma, diabetes and cancer. Social and social context are the circumstances in which a person lives, learns and works. This area of SDOH includes social engagement and discrimination. Lower mortality rates are associated with social and community support and cohesion. Neighborhood and the built environment include housing, neighborhoods, transportation, access to healthy food, air quality, water quality and access to green space¹¹². Air pollution has been shown to be linked to asthma. The CDC has confirmed that people with asthma are at higher risk of developing severe COVID-19¹¹³. Safety plays an important role in health. People are more likely to go out or run outside when they feel safe in their neighborhood. Without fear of crime and danger, a safe neighborhood also allows people to maintain good mental health. Immune function is compromised by psychological stress. Also, it was discovered that people living in deprived neighborhoods were more stressed than those living in healthy

neighborhoods. Stressors for people living in deprived neighborhoods include "overcrowding, high crime rates, perceived threat, poor transport links, poor housing, poverty, limited services, poor infrastructure and lack of social support"¹¹⁴. Education includes completion of secondary school, admission to higher education, and language and reading skills. The higher the level of education, the higher the life expectancy. It is important to communicate health information appropriately to the patient, taking into account their level of education. Economic stability includes employment, poverty, food security and housing stability. In addition, poverty rises, so does the proportion of adults age twenty-five and older with an activity-limiting chronic disease. Unemployment affects an individual's health in a number of ways as it is linked to depression, domestic violence, substance abuse and physical illness. SDHs have a significant impact on health inequalities – the unfair and avoidable health inequalities within and between countries. In countries of all income levels, health and illness follow a social gradient: the lower the socioeconomic position, the worse the health status. The following list provides examples of social determinants of health that can impact both positively and negatively on health equity: income and social protection, education, unemployment and precariousness, working conditions, food insecurity, accommodation, basic services and environment, early childhood development, social inclusion and non-discrimination, structural conflict and access to affordable health services of adequate quality.

Research shows that social determinants can have a greater impact on health than health care or lifestyle. For example, numerous studies suggest that SDH is responsible for 30-55% of health effects. In addition, estimates show that the contribution of the non-health sectors to population health outcomes exceeds that of the health sector. Adequate consideration of SDH is crucial for

improving health and reducing health inequalities in the long term, which requires action by all sectors and civil society.

In practice, some challenges in implementing policies to address health inequalities stemming from the social determinants of health need to be overcome. The social determinants of health equity are a complex and multifaceted area. It involves a wide range of stakeholders within and outside the health sector and at all levels of government.

Additionally, collecting and sharing data on the social determinants of health can be challenging. As the evidence base on the social determinants of health has grown over the past decade, the evidence bases on what works needs to be strengthened and good practice disseminated effectively. The three critical areas for action identified in the Global Commission's report on the social determinants of health reflect their importance in tackling health inequalities. You understand:

- Improving the conditions of everyday life: the circumstances in which people are born, grow up, live, work and age;
- Dealing with the unequal distribution of power, money and resources: structural determinants of these everyday living conditions (e.g., macroeconomic and urbanization policies and governance);
- Measure and understand the problem and assess the impact of action: broaden the knowledge base, develop an informed workforce about the social determinants of health, and raise public awareness of the social determinants of health.

More comprehensive and systematic responses are needed that are universal but proportionate to disadvantage along the social gradient. This is necessary to effectively address health inequalities and promote healthier populations.

During the Covid-19 pandemic, SDOH has had widespread health impacts on individuals and communities. Differences in any of these conditions result in a measure of social hierarchy called socioeconomic status (SES). The lower people are on the SES spectrum, the worse their health outcomes are. People at the bottom end of the scale are losing life expectancy because of poor performance¹¹⁵.

Socioeconomic inequalities lead to health complications on top of the financial hardships that already burden the disadvantaged in society.

The five SDOHs are interconnected and have played important roles during the COVID-19 pandemic. For example, a person's level of education can affect their occupation, which determines economic stability and income levels, which can affect the type of health care a person is entitled to and where they live sometimes affects the social context in which individuals find themselves, and these factors have played an important role in the current COVID-19 pandemic. This suggests that socioeconomic factors play a key role in infection and mortality rates.

Health and Healthcare

Health Awareness and Literacy

In the United States, Department of Health and Human Services (HHS) defines health literacy as “the extent to which individuals are able to obtain, process, and understand basic health

information necessary to make appropriate health care decisions”¹¹⁶. This includes the ability to read and understand health advice, prescriptions, written instructions from a doctor,

Low levels of health literacy are associated with poorer health outcomes. Some population groups are said to have low health literacy compared to other groups. People who live in poverty, are uneducated, belong to a particular racial/ethnic group, or have disabilities are more likely to have low health literacy. Patients with low HL scores may have high overall literacy skills and high verbal fluency, which can result in the patient having a high HL score. It is important to acknowledge those who may have low health awareness, especially during a pandemic, as health literacy is an important way to prevent infectious diseases like COVID-19.

Some understanding of infectious diseases, including the transmission of pathogens and their viability, will help people more easily accept the circumstances in such situations, rather than questioning the recommendations. Health literacy can help people understand their responsibilities for adhering to social distancing and other recommended measures during the COVID-19 pandemic, as well as the rationale for taking action to prevent the spread of the virus. Access to health care and essential health care. The National Academies of Sciences, Engineering, and Medicine describes access to health care as “the timely use of personal health services to achieve the best possible health outcomes”. Many people face health barriers that can limit their ability to take responsible actions for their well-being. Barriers include limited or no access to transportation for medical appointments, lack of health insurance, limited health education, limited health care resources, and health care hours limited to working hours, etc. The lack of health insurance is typical for low-income groups and minorities.

A study found that 14 percent of American adults said they would not seek treatment if they developed a fever and dry cough¹¹⁷. Fever and dry cough are the most common symptoms of

COVID-19. When adults were specifically asked if they would seek help if they thought they had COVID-19, 9% still answered “no”. Those who reported not seeking medical care were non-white adults under the age of 30, with a high school diploma or less and earning less than \$40,000 per year. Reluctance to seek treatment is related to socioeconomic status. Hispanic and African Americans were less likely to have health insurance than non-Hispanic whites¹¹⁸. Without health insurance, primary care visits may not be possible or people may be reluctant to seek healthcare resources. This puts people without health insurance at risk of not being screened for chronic conditions such as cardiovascular disease, high blood pressure, asthma and diabetes. Access to health care also depends on the availability of resources. Minority and/or low-income people are already struggling to access healthcare. Many rely primarily on student-run clinics for health care. The University Of Nebraska Medical Center College of Medicine has a student-run clinic called SHARING (Student Health Alliance Reaching Indigent Needy Groups) that provides affordable primary health care and services to underserved populations in the Nebraska community. This clinic has been closed due to the COVID-19 pandemic. As a result, disadvantaged populations who already face barriers in accessing health care now also face barriers in accessing primary care at these student-run clinics, which are their primary means of maintaining their well-being.

Social and Community Context

- Discrimination

Socially unjustified organized action against a particular group or population contributes to discrimination. These policies favor the rich and powerful at the expense of the poor. Discrimination in the healthcare system occurs both individually and structurally. Individual discrimination includes negative interactions between a patient and a healthcare professional

based on race, gender, etc. Negative interactions can limit healthcare resources and patient well-being. Structural discrimination manifests itself in housing segregation by racial or ethnic group, inequality in employment opportunities by gender, inequality in access to quality education, inequality in prisons, etc. Forms of structural discrimination can affect the health of individuals and communities. Residential segregation plays a large role in observed inequalities between African American and Caucasian populations. African Americans are more likely to live in very poor neighborhoods than other Americans. Very poor neighborhoods include mediocre and substandard schools, limited access to health care and employment, weak social networks, high crime rates, pollution and congestion¹¹⁹. Congestion in poor neighborhoods can make it difficult to comply with social distancing recommendations. For some families, maintaining physical distance from others may not be an option. Many people living in poverty also find themselves in a difficult position at times like these when they are required to work from home, as minorities and African Americans are more likely to have jobs where work from home is not an option¹²⁰. Many Hispanics and African Americans face the dilemma of having to pay rent and put food on the table instead of having to eat. Stay home and make sure your family stay healthy during COVID-19 outbreak as they are the ones working in warehouses, food processing, construction, cleaning services etc., and these are jobs that cannot be done at home. Although data on race and ethnicity are only available for 35% of people affected by the virus, there is clear discrimination in the available data. Social commitment and social cohesion. Social support is an important part of individual well-being. Social cohesion, one of the terms used to describe social relationships, describes the strength of relationships and whether there is a sense of togetherness among members of a community. Social capital, an indicator of social cohesion, measures the extent of shared group resources within a community, perceived fairness, perceived utility, group

membership, and trust. Researchers have found that the above measures of social capital are inversely related to mortality. Social capital decreases as income inequality increases. Social capital is seen as a link between income inequality and mortality. Social cohesion is associated with less neighborhood violence, better health and less stress/anxiety. Stress has many effects on the body, including the immune, cardiovascular, and neuroendocrine systems. The study found that greater social support was associated with lower levels of atherosclerosis in women at higher risk of cardiovascular disease.

Neighborhood and Built Environment

- Access to Healthy Food

Food is a basic human need. It plays an important role in a person's health and quality of life. Eating healthy foods is associated with a lower risk of chronic disease. A healthy diet consists of countless fruits, vegetables, grains, high-protein foods (seafood, lean meats, poultry, legumes, soy products, eggs, etc.), and fat-free or low-fat dairy products. Poor diet and nutrition have been linked to chronic diseases like cardiovascular disease, high blood pressure, diabetes, and even cancer. The various components of the SDOH neighborhood and the built environment domain are interdependent and influence each other. There are many barriers to accessing healthy food. Transportation, another element of the neighborhood and built environment, plays an important role in accessing healthy food. Income also plays a role in access to healthy food. Studies have shown that low-income families rely on inexpensive, low-nutrient-dense foods.

Healthy foods like fresh fruits and vegetables tend to be more expensive than processed foods. Those who cannot afford fresh groceries turn to processed foods, which are unhealthy.

It's important to recognize food deserts and communities that lack access to healthy food, especially during a pandemic when supplies can be scarce at first. When supplies

are scarce, those with limited access to healthy food, or food in general, will struggle to fully maintain their diet and nutrition. Individuals also need to visit grocery stores more frequently to buy groceries, which could put them at risk of contracting the virus. Minority and low-income populations living in food deserts may have more difficult access to healthy food during the COVID-19 pandemic due to overbuying and food hoarding by customers. This can be more of a problem in areas with food deserts than in affluent areas.

SCT can provide valuable information for understanding the connections between the cognitive processes, social factors and behavior of individuals in the context of the Covid-19 pandemic. An examination of this theory in the context of the Covid-19 pandemic shows that people's responses to the pandemic are influenced by their cognitive processes, social influences and observational learning. People's beliefs, knowledge and opinions about the virus, its transmission and prevention measures drive their behavioral choices; and these cognitive processes are also influenced by social factors such as media, social networks and social norms. According to the SCT, people observe and learn from others, particularly those they find credible or similar to themselves.

In the case of Covid-19, people can observe and model the behavior of health officials, government officials, family, friends and celebrities. When people watch others take preventive measures like wearing masks, social distancing or vaccinations, they are more likely to exhibit similar behaviors.

Furthermore, social-cognitive theory suggests that self-efficacy plays a key role in determining individual behavior. Self-efficacy is a person's belief in their ability to achieve a certain behavior. In the context of Covid-19, those who have higher self-

efficacy in taking preventive measures are more likely to engage in these behaviors consistently. Factors that can influence self-efficacy include prior experience, access to resources, and social support.

In addition, this underscores the importance of expected outcomes, which concern individuals' beliefs about the consequences of their behavior.

When people realize that following preventive measures will yield positive results, such as reducing the risk of infection or protecting their loved ones, they are more likely to adopt and maintain those behaviors. In general, social-cognitive theory suggests that individuals' behavior during the Covid-19 pandemic will be influenced by their cognition processes, social influences, observational learning, self-efficacy and expected outcomes. Understanding these factors can help policymakers, health professionals, and public health campaigns design effective strategies to promote and sustain behavior change, such as: promoting accurate information, increasing self-efficacy, and using positive role models or social norms to encourage preventive behavior.

2.2.2 Social Cognitive Theory

The Social Cognitive Theory (SCT) is one of the leading theories on behavior change. The Social Cognitive Theory (SCT) emerged in the 1960s as the Social Learning Theory (SLT) by Albert Bandura. It postulates that learning takes place in a social context with the dynamic and reciprocal interaction of person, environment and behavior. A unique feature of SCT is its focus on social impact and its focus on external and internal social empowerment. SCT takes into account the unique manner in which individuals acquire and maintain a behavior, while also considering the social environment in which individuals engage in that behavior. The theory

takes into account a person's past experiences that influence whether behavioral actions take place¹²². These past experiences influence the reinforcers, expectations, and expectations that determine whether a person will engage in a particular behavior and the reasons for engaging in that behavior. Many behavioral theories of health promotion do not consider behavior maintenance, but rather focus on behavior induction. This is unfortunate because the real goal of public health is to perpetuate behavior, not just initiate behavior.

The goal is to explain how people regulate their behavior through control and reinforcement to achieve goal-directed behavior that can be sustained over time. The first five models were developed within SLT; The concept of self-efficacy was added as the theory evolved into Reciprocal Determinism - This is the central concept of TBS. It refers to the dynamic and mutual interactions between person (an individual with a set of learned experiences), environment (external social context), and behavior (response to stimuli to achieve goals).

- Behavioral Ability – refers to a person's actual ability to perform a behavior based on basic knowledge and skills. In order to successfully perform a behavior, a person must know what to do and how to do it. People learn from the consequences of their behavior, which also has an impact on their environment.
- Observational Learning – states that people can observe and observe the behavior of others and then repeat those actions. This often manifests itself as “pattern behavior”. When individuals see a successful demonstration of the behavior, they may also successfully demonstrate the behavior.
- Reinforcement - This refers to internal or external responses to a person's behavior that affect the likelihood that the behavior will continue or stop. Reinforcers can be self or

environmental, and reinforcers can be positive or negative. It is the construct of SCT that is most closely related to the interaction between behavior and the environment¹²².

- Expectations - These are the expected consequences of a person's behavior. Performance expectations may or may not be related to health. People anticipate the consequences of their actions before engaging in the behavior, and these anticipated consequences can affect the success of the behavior. Expectations are largely based on past experience. While expectations are also based on past experience, expectations focus on the value placed on the outcome and are subjective to the individual.
- Self-Efficacy – Refers to a person's level of confidence in their ability to successfully perform a behavior. Self-efficacy is unique, although other theories added the construct at later dates, such as the theory of planned behavior. Self-efficacy is influenced by specific human abilities and other individual factors, as well as environmental factors (barriers and facilities)¹²².

2.2.3 Theory of Planned Behaviour

The theory of planned behavior suggests that behavior depends on the intention to perform the behavior. Intention depends on the individual's attitudes (beliefs and values about the outcome of the behavior) and subjective norms (beliefs about what others think the person should do or general social pressures). Behavior is also determined by a person's perceived behavioral control, defined as a person's perception of their ability or self-efficacy to perform the behavior. This relationship usually depends on the nature of the relationship and the nature of the situation.

How can this theory influence your practice?

- Intent has been shown to be the most important variable in predicting behavior change, suggesting that behavior is often related to personal motivation⁸. This suggests that presenting information can be important in promoting positive attitudes toward the behavior and highlighting subjective norms or beliefs that support the behavior¹²³.
- For perceived behavioral control, as in self-efficacy, to result in behavior change, a person must recognize that they have the ability to perform the behavior. Therefore, as Grizzle⁷ suggests, perceived control over needed skills, resources and competencies is an important part of the change process.

The theory of planned behavior (TPB) is a widely used psychological theory that can be applied to understand the relationship between individuals' beliefs, attitudes, intentions, and behaviors about a wide range of issues, including health behaviors analyze. By examining the link between the theory of planned behavior and Covid-19, we can explore how the theory can shed light on individuals' reactions and behaviors during the pandemic. As mentioned above, TPB mainly depends on three factors: attitudes, subjective norms and perceived behavioral control; and affect people's responses even during a pandemic¹²³. In the context of Covid-19, attitudes can influence the behavior of individuals regarding preventive measures such as wearing a mask, observing social distancing and practicing good hygiene. For example, people with a positive attitude toward these preventive measures are more likely to engage in these behaviors consistently.

Subjective norms play a key role in shaping individuals' behavior during a pandemic. Perceptions of what others expect or approve of in terms of preventative behavior towards COVID-19 can affect individual compliance. When people see that those close to them (e.g.,

family, friends, community leaders) endorse and adopt COVID-19 prevention behaviors, they are more likely to do the same¹²⁴.

Perceived behavioral control is also relevant in the context of COVID-19. It refers to individuals' beliefs about their ability to adopt and maintain certain behaviors. Factors such as access to resources, knowledge, skills, and self-efficacy can influence perceived behavioral control. For example, people who feel confident about following preventive measures are more likely to follow them consistently.

Applying the theory of planned behavior to COVID-19, we can understand that individuals' intentions to engage in preventive behaviors are influenced by their attitudes towards those behaviors, the subjective norms of their social environment, and perceived behavioral control. In addition, the theory suggests that intentions are an important predictor of actual behavior. Therefore, people who have a strong intention to take preventive action are more likely to practice these behaviors consistently. Research studies applying the theory of planned behavior to COVID-19 have shown positive correlations between attitudes, subjective norms, perceived behavioral control, intentions, and actual behaviors related to COVID-19 prevention. For example, people are more likely to have positive attitudes towards mask wearing, feel social support for this behavior, and believe in their ability to wear a mask consistently. In conclusion, the theory of planned behavior provides a valuable framework for understanding and predicting individual behavior in the context of Covid-19 prevention interventions. By considering attitudes, subjective norms, and perceived behavioral control, this theory helps shed light on the factors influencing actual intentions and behaviors of individuals during a pandemic. Understanding these connections can help design effective interventions and communication strategies to promote widespread adherence to COVID-19 prevention measures¹²⁵.

Trans-Theoretical Model (Phases of Change)

The trans-Theoretical model (also called “stages of change”) developed in the late 1970s, arose from research into the experiences of smokers who quit smoking on their own and those who needed further explanation to understand why some people are able to quit on their own¹²⁶. It has been proven that people quit smoking when they are ready. Thus, the trans-theoretical model (TTM) focuses on individual decision-making and is a model of intentional change. TTM is based on the assumption that people do not change their behavior quickly and decisively. In contrast, behavior change, particularly habitual behavior, occurs continuously in a cyclical process. TTM is not a theory but a model; Different theories and behavioral constructs can be applied at different stages of the model where they are most effective. The TTM posits that individuals go through six phases of change: precontemplation, contemplation, preparation, action, maintenance, and completion. Abortion was not part of the original model and is used less frequently in implementing steps to change health-related behaviors. For each level of change, different intervention strategies are most effective in taking the person to the next level of change and then maintaining the ideal level of behavior through the model ¹²⁶.

1. Pre-Contemplation – In this phase, people will not take any action for the foreseeable future (defined as the next 6 months). People are often unaware that their behavior is problematic or has negative consequences. People in this phase often underestimate the benefits of behavior change and overemphasize the downsides of behavior change.
2. Contemplation - At this point people intend to begin practicing healthy behaviors for the foreseeable future (defined as the next 6 months). People recognize that their behavior may be problematic, leading to a more thoughtful and practical consideration of the pros

and cons of behavior change, with equal consideration for both aspects. Despite this realization, people may still be ambivalent about behavior change.

3. Preparation (Determination) - In this phase, people are ready to take action within the next 30 days. People are starting to take small steps to change their behavior, believing that changing behavior can lead to healthier lives.
4. Action - In this stage, people have recently changed their behavior (defined as within the last 6 months) and intend to continue that behavior change. People can manifest it by changing problematic behaviors or learning new healthy behaviors.
5. Maintenance – In this stage, people maintain the behavior change for a period of time (defined as more than 6 months) and intend to maintain the behavior change in the future. People at this stage work to prevent relapses in earlier stages¹²⁶.
6. Conclusion - At this point, people do not want to return to their unhealthy behaviors and are sure they will not. Because this is rarely achieved and people tend to remain in the maintenance phase, this phase is often overlooked in health promotion programs.

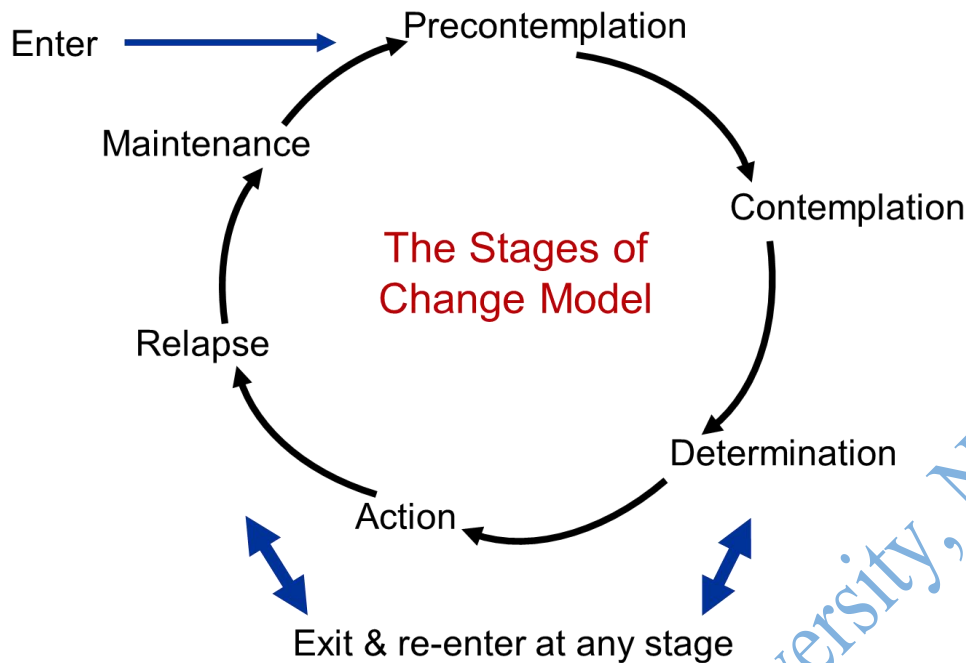


Fig. 2.1 The Stages of Change Model

Humans use cognitive, affective, and evaluative processes to go through phases of change. Ten change processes were identified, with some processes being better suited than others in a particular phase of change. The outcome of these processes are strategies that help people create and sustain change.

1. Awareness - Awareness of healthy behavior.
2. Dramatic Relief - Emotional arousal related to health behaviors, positive or negative.
3. Self-Evaluation – Rethink yourself to realize that healthy behavior is part of who you want to be.
4. Environmental Reassessment – Social reassessment to see how their unhealthy behaviors are affecting others.

5. Social Liberation - There are ecological ways to show that society supports healthy behavior.
6. Self-Empowerment – Commitment to behavior change based on the belief that healthy behavior is possible.
7. Supportive Relationships - Find supportive relationships that promote the desired change.
8. Counterconditioning - replacing unhealthy thoughts and behaviors with healthy thoughts and behaviors.
9. Reinforcement Management: Reward positive behavior and reduce rewards for negative behavior.
10. Stimulus Control - Redesign the environment to include memories and cues that support and promote healthy behaviors and suppress those that promote unhealthy behaviors.

The transtheoretical model, also known as the staged model of change, can be useful in understanding individuals' responses and behavioral changes in the context of the COVID-19 pandemic. This model suggests that individuals go through different stages as they change their behavior and may provide insight into how people are adapting to new health policies and practices during the pandemic.

During the pre-contemplation phase, people may not see the need to change their behavior in response to COVID-19. They may not be aware of the risks or understand the importance of preventive measures. This phase has been seen in people who initially downplayed the severity of the virus or ignored public health guidelines. The contemplative phase concerns those who recognize the need for change but have not yet acted. At this point, individuals can begin to think about the potential risks and benefits of adopting preventive behaviors. You can weigh the pros and cons of measures like wearing masks, social distancing or vaccinations. When people enter

the preparedness phase, they are actively planning behavior changes in response to COVID-19. You can gather information, look for clues and make decisions about preventive measures to take. At this stage, people start buying masks, practicing hand hygiene, or scheduling vaccination appointments. The action phase is characterized by the implementation of behavioral changes. At this point, people have taken preventive measures and are actively practicing practices such as wearing masks, maintaining physical distancing, and adhering to public health guidelines. During this phase, people begin to take concrete steps to protect themselves and others from Covid-19. The maintenance phase consists in maintaining the behavior adopted over time. They have successfully integrated preventive measures into their everyday lives and strive to adhere to them in the long term. This phase can include people who consistently follow guidelines, participate in immunization campaigns, and support public health initiatives. It is important to recognize that not all people progress through these stages in a linear fashion, and that some may regress or transition between stages depending on various factors such as motivation, external influences, or personal circumstances. Additionally, individuals at different stages may need tailored interventions and support to facilitate behavior changes and maintain adherence to preventive measures.

2.2.4 Theory of Social Norms

Social norm theory was first applied in 1986 to study student consumption habits. Consequently, the theory and later the social norms approach are best known for their effectiveness in reducing alcohol consumption and alcohol-related injuries among college students¹²⁶. This approach has also been applied to a variety of public health issues, including smoking, prevention of drunk driving, use of seat belts and, more recently, prevention of sexual assault. The target group of social norm approaches are usually students, but recently they have also been used for younger

groups of students (e.g., Secondary school). This theory attempts to understand the environment and interpersonal influences (e.g., peers) to change behavior, which can be more effective than focusing on changing individual behavior. The influence of peers and the role they play in individual behavioral decisions is central to social norm theory. Peer influences and normative beliefs are particularly important when it comes to adolescent behavior. Peer influence is influenced more by perceived norms (what we consider typical or standard within the group) than by actual norms (actual beliefs and actions of the group). The gap between the perceived and the real is a misconception and the basis of the social norms approach.

Social norm theory posits that our behavior is influenced by misconceptions about how those around us think and act. When we overestimate the problematic behavior of others, we exacerbate our own problematic behavior. If we underestimate the problematic behavior of our colleagues, we will be discouraged from exhibiting problematic behavior. The theory thus states that correcting misperceptions of perceived norms will most likely lead to a reduction in problematic behaviors or an increase in desirable behaviors. Social norm interventions aim to provide correct information about peer group norms in order to correct misperceptions of norms. Specifically, many social norms interventions are social norms media campaigns that address misconceptions through mainstream electronic and print social media to promote specific and healthy norms of health behaviors¹²⁶. The stages of a media campaign on social norms include:

- Evaluate or collect data to convey a message
- Selection of the normative message to be disseminated
- Test the message with the target audience to make sure it resonates
- Selection of the method of sending the message
- Quantity or dose of messages to be delivered• Rate the effectiveness of the message

Media campaigns for societal norms are currently funded by numerous federal agencies, state agencies, foundation grants, and nonprofit organizations. Sometimes media campaigns on social standards are funded by industry. There have been many evaluations of social norms campaigns.

During Covid-19, social norms played a key role in shaping individual adherence to preventive measures and in the overall response to the pandemic studies have shown that social norms have a significant association with compliance with Covid-19 policies and protocols. When people see that the majority of members of their social network or community adhere to recommended behaviors, such as wearing masks, observing social distancing and washing hands regularly, they are more likely to adhere to those standards as well. This phenomenon is called descriptive norms. On the other hand, perceived norms related to others' approval or disapproval of certain behaviors can also influence individuals' compliance with Covid-19 guidelines. When people believe that their social network or community expects them to follow preventative measures, they are more likely to adhere to those norms.

During the COVID-19 pandemic, an understanding of the social norms in a given community or society is critical to effective public health interventions. By identifying and promoting positive social norms related to COVID-19 prevention, health officials and policymakers can encourage widespread compliance. However, it should be noted that social norms can also be influenced by a variety of factors, including misinformation, cultural beliefs and existing social inequalities. In some cases, non-compliance with Covid-19 guidelines may be due to alternative societal norms or resistance to change.

2.2.5 Diffusion of Innovation Theory

Diffusion of Innovation Theory (DOI) developed in 1962 is one of the oldest theories in the social sciences. It emerges from communication to explain how an idea or product gains momentum over time and spreads (or spreads) within a given population or social system. The end result of this diffusion is that people within the social system adopt a new idea, behavior, or product. Adoption means that a person does something differently than before (e.g., buying or using a new product, adopting and performing a new behavior, etc.). The key to acceptance is that the person must perceive the idea, behavior, or product as new or innovative. This enables transmission.

The adoption of a new idea, behavior, or product (i.e., an “innovation”) does not happen simultaneously in a social system; rather, it is a process in which some people are more inclined to embrace innovation than others. Researchers have found that people who adopt an innovation early have different characteristics than those who adopt it later. When promoting innovation among a target group, it is important to understand the characteristics of the target group that help or hinder the uptake of the innovation. There are five established adoption categories, and while most of the general population tends to fall into the intermediate categories, it is still necessary to understand the characteristics of the target population. Different strategies are used in promoting innovation to address different target groups.

1. **Innovators** - These are people who want to be the first to try an innovation. You are imaginative and interested in new ideas. These people are very willing to take risks and are often the first to come up with new ideas. Very little, if anything, needs to be done to attract this population.

2. Early Adopters - These are the people who represent opinion leaders. You enjoy leadership roles and take opportunities for change. They are already aware of the need for change and are therefore very open to new ideas. Strategies targeting this population include implementation guides and information sheets. You don't need information to change.
3. Initial Majority - These people are rarely leaders, but embrace new ideas earlier than average¹²⁶. However, they usually have to show proof that an innovation works before they want to adopt it. Strategies that appeal to this demographic include success stories and evidence of innovation effectiveness.
4. Late Majority - These people are skeptical about change and do not accept an innovation until the majority has tried it. Strategies that appeal to this demographic include insights into how many others have tried and successfully adopted the innovation.
5. Laggards - These people are traditional and very conservative. They are very skeptical about change and are the most difficult group to implement. Strategies for attracting this demographic include statistics, fear appeals, and lobbying by people from other adoption groups.¹²⁶

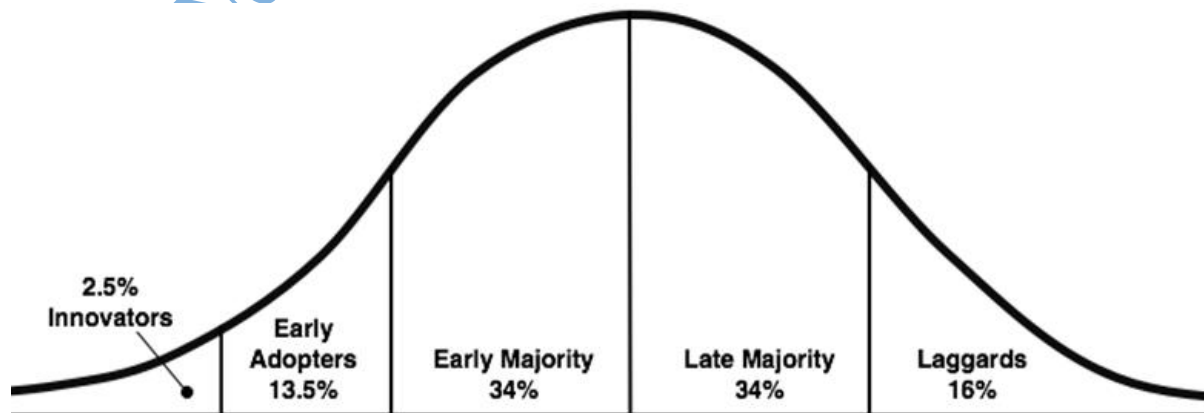


Fig. 2.2 Diffusion of Innovation Theory

The stages in which a person adopts and disseminates an innovation include recognizing the need for the innovation, deciding to accept (or rejecting) the innovation, initially using the innovation for testing, and continuing to use the innovation. There are five main factors that influence the adoption of innovation, and each of these factors has a different impact on the five user categories.¹²⁶

1. Relative Advantage - The extent to which an innovation is perceived as superior to the idea, program, or product it replaces.
2. Compatibility - the correspondence of the innovation with the values, experiences and needs of potential users.
3. Complexity - Degree of difficulty in understanding and/or applying the innovation.
4. Tripleness - The extent to which an innovation can be tested or tried before it is committed to implementation.
5. Observability - The extent to which an innovation produces tangible results.

Understanding the innovation theory of diffusion helps shape public perceptions of Covid-19. Using five well-established adoption categories, namely Innovators,

Early Adopters, Early Majority, Late Majority and Laggards, helps us to understand the different rates of adoption and acceptance of preventive measures by the population. For example, innovators will be the first group to quickly take preventive action before it is widely recommended or mandated. For example, people who proactively started wearing masks and practicing social distancing at the beginning of the pandemic could be considered innovators. Although pioneers may be those who took preventive measures when they were generally

recommended or required, but before they were generally accepted; and their behavior may prompt others to follow suit.¹²⁷

Alternatively, the first majority is more cautious, demanding social proof or proof of efficacy before engaging in a particular behavior. It is people who have started to take preventive measures after seeing a large part of the population doing so or after experiencing firsthand the effects of the pandemic. The late majority are often skeptical and reluctant to change, but eventually adopt this behavior under external pressure or perceived norm. In the context of COVID-19, these are people who, under the influence of heightened societal pressure, government mandates, or realizing the seriousness of the pandemic, have begun to take preventive measures. The laggards, on the other hand, are those who continue to resist or reject preventive measures against Covid-19, even if they are widely accepted and recommended.

2.2.6 Social Exchange Theory

The Social Exchange Theory (SET) began in the late 1950s and has since expanded into a significant field of social behavior research. This theory is frequently employed to explain utilitarian and sociological perspectives on social network ties. Literatures on social exchange theories are mainly attributed to some authors. These authors were interested in small group psychology, which sought to explain interpersonal connections in communities as well as dyadic relationships¹²⁸. A scholar adopted a reductionist approach to explain human connections in terms of reinforcement processes, in which the conduct of social actors is reinforced by reward and prohibited by punishment. The concept that the reinforcement mechanism underpins social connections stems from operant conditioning research. According to this line of research, behavior is the product of a learning process based on the good and bad consequences of such action. Another theory was developed by taking a techno-economic approach to analyzing the

features of social systems. Despite holding comparable ideas on incentives and punishments, another research technique was utilitarian in nature, it was felt that conduct is driven by expectations rather than real advantages. Scholars devised matrices to predict relationship outcomes by applying theoretical notions to human decision-making in social groupings. The matrices show various trade outcomes that are influenced by the quantities of costs and benefits that people receive/carry in interpersonal interactions. An individual's choice to pursue or engage in an exchange is influenced by whether it provides more advantages (e.g., social power, gain) or lowers costs than other competing partnerships¹²⁹. Although the four scholars use diverse methods to theory development and analysis, they all agree that social group activity is a type of exchange. The growth of research on social exchange and the major role it has played in the literature on the subject has been dictated by diverse points of view on the examination of social connections. The introduction of SET merged social, economic, and psychological viewpoints, spurring research into human behavior.

This method sought to overcome literature controversies concerning the use of economic techniques in anthropological study¹³⁰. The relevance of economic theories to normatively controlled conduct has been questioned due to their substantial reliance on a rational interpretation of human actions in a market context. The advancement of social exchange research has therefore permitted the application of quasi-economic analysis to social systems. Furthermore, the interconnectedness notion presented by SET should contribute to social theories. Previous anthropological studies considered persons as autonomous from the activities of other actors and concentrated on the cognitive processes involved in understanding the meaning of objects that motivate conduct¹³¹. This method gave only a limited understanding of interaction patterns and results.

The utilitarian purpose of social ties and their contingency in regard to other actors were outlined by social exchange theory. It cleared the path for understanding the logical principles underpinning decision-making and perception of social exchange results.

Components of Social Exchange Theory

The idea describes four major aspects of people's social conduct. To begin, the framework defines empowering mechanisms, such as Rewards/Benefits and Sharing Resources, to assist in motivating individuals to engage in social interactions. Reward is seen as the product of beneficial interactions, whereas resource is a trait that provides a person the potential to enable rewards and inspires individuals to develop trade relationships¹³².

Love, prestige, money, knowledge, services, and products may all be represented by resources. The incentives for exchanged resources can be distributed in a two-dimensional array. The first dimension is particularism, which means that the value of the resources transferred is determined by the source. The quantity of money, for example, rates low on the particularism scale since the value of money remains constant regardless of its source. Love, on the other hand, has a high specificity value since its value is firmly linked to the supply.

The second resource aspect is practicality, or the resource's degree of tangibility. However, resources with little monetary value may be seen as symbolic and hence have more value for recipients. In general, resources permit two types of rewards: socio-emotional and monetary. Economic benefits fulfill money demands, but socio-emotional benefits emerge from acquired resources that promote self-esteem and answer social needs. Previous studies, however, differ on whether these types of benefits are equally useful to the partners in the relationship. The second section discusses the mechanics of trade.

According to the idea, resource exchange is based on a subjective cost-return analysis such an approach is predicated on two key variables that influence a person's decision to participate into an exchange relationship. These requirements are: a) the degree to which a comparable activity has previously been rewarded for the individual or others, and b) the degree to which the outcome of the transaction provides value for the person. This is often credited to theorist that the more frequently individuals receive a reward for an action, the more likely they are to participate in a similar behavior in the future.

Because the circumstances and duties in social trade are not clearly defined, the cost-benefit considerations differ from those in commercial transaction¹³³. As a result, determining the appropriateness of the expenditures invested in the connection and the rewards obtained is subjective. Perception is influenced by individual norms of fairness and must thus be evaluated from the user's perspective. To comprehend user perceptions, it is necessary to comprehend changes in people's attitudes about sharing, disparities in assessing costs and advantages over time, and differences in context¹³⁴. Third, social structures and social capital variables promote social exchange interactions. Reliance on social systems illustrates the contingency of interaction resulting from the parties' original connection. Social capital represents numerous types of social actors, such as norms, regulations, information routes, expectations, and duties. These units are included into the systems of social organizations. Social capital may both enhance and hinder the formation and impact of social interactions¹³⁵. The allocation of power and capital in social networks may be one of the outcomes. The structural relationship between the players of the sharing economy platform therefore reflects the number of valuable resources that the actors control as well as the balance of resource allocation relative to other actors¹³⁶.

Organizational social capital, for example, which shows leadership's collective commitment and devotion, has been proven to contribute to cooperative conduct while undermining opportunistic behavior. Social capital is viewed not just as a characteristic that fosters interpersonal collaboration, but also as a reward for partnerships.

The projected maximizing of social advantages, such as expanded social connections and networks, has been demonstrated to promote interpersonal interactions. Reciprocity, the fourth mechanism underpinning social transaction, produces duties between the parties¹³⁷. The role of reciprocity in social exchange and the interdependence of social actors is explained by research in experimental economics and evolutionary psychology, which assumes that humans are evolutionarily predisposed to behave in ways that allow for reciprocity.

Humans have created cognitive matrices that represent the balance of rewards and costs in connections that underpin decision-making. On the one hand, reciprocity is the norm that establishes views about the exchange's result and motivates conduct. People join partnerships expecting a favor (i.e., a contribution to the relationship) to be returned, but without expecting instant performance. Because there is no specific time constraint for the return, the social transaction is long-term. The belief may be based on social standards or an individual moral orientation centered on the assumption that the parties will achieve a fair settlement in which the unjust treatment of one party will be condemned and fair treatment will be rewarded. The concept of reciprocity, on the other hand, functions as a regulatory mechanism that ensures mutually satisfying connections based on the interdependence of actors. Interdependence appears as mutual and complementary agreements that urge the other party to repay the resources offered¹³⁸. Reciprocal social exchanges foster trust, loyalty, and mutual commitment while rules-based exchanges (such as in commercial transactions) are more straightforward. The object of

social trade is first seen favorably or unfavorably. Also, affirmative action might entail offering high-quality assistance, services, or products in order to achieve a goal. The negative action may be a representation of losses experienced by the target, such as harassment, egotism, or intimidation. In order to exact justice in reaction to such activities, the targeted actor engages in good or bad conduct, with good behavior eliciting a positive response and bad behavior evoking a negative one. Long-term engagement and cooperation are typically the result of a succession of beneficial interactions between the parties¹³⁹.

2.2.7 Theory of Affective Social Interaction

The players in the transaction are seen by SET as being emotionless, and the motivations, perceptions and outcomes of social behavior are seen as being reasonable due to the economic foundation of cost-benefit analysis in social exchange. Although this theory argues that systems of reward and rational decision-making support social interactions, it fails to consider the mediation role of emotions intertwined in these mechanisms. Positive and negative experiences known as emotions include neurobiological and cognitive characteristics.

Emotional theory of social interaction attempts to close a gap in the literature. The idea is supported by a survey of the literature on emotions and their influence on the circumstances, procedures, and results of exchanges, also, there are attempts to differentiate between general and focused emotions and sentiments thanks to the inquiry. Emotions are a term used to describe an internal state that might have a vague origin (global emotions) or a clear cause, such as an item or event (specific emotions). A prolonged emotional state linked to a social setting or to one or more things is referred to as a feeling. Potentially, general emotions might change into more focused feelings and moods¹⁴⁰.

The theory's objective was to comprehend the circumstances in which social exchange causes social actors to attribute global positive and negative emotions (i.e., well-being and negative feelings) to social objects and to develop persistent positive and negative feelings towards them. Based on earlier studies on social involvement, five theoretical assumptions have been proposed¹⁴¹. These ideas are based on the idea that when people share pleasant feelings, solidarity effects are created. These effects include enhanced collaboration, noncommittal benefit exchange, loyalty, and forgiving conduct. According to the theory, social interactions may cause both positive and bad feelings in the world, depending on how they turn out.

These feelings function as a particular kind of rewards and penalties. In order to produce positive feelings (e.g., self-blame, wrath at the other), the trade might encourage actors to make or refrain from making an exchange. Actors are motivated by their emotional states to use their cognitive abilities to comprehend the causes of their feelings. The attribution process can be started by universal emotions. Attribution is the act of connecting feelings to more specialized object-centered feelings¹⁴². Activities, unity, people, connections, and social groupings are examples of objects. Tasks are enmeshed in productive, negotiable, reciprocal, and generalizable trade mechanisms.

Task structures relate to task features, which are characterized by the degree to which actors' contributions to a task may be distinguished from those of others and the degree to which players share responsibility for a task. The common good should be created through productive commerce. The agreed-upon conditions of the trade are negotiated. Mutual trade entails reciprocity without any rigid time constraints or requirements. This implies that generalized sharing, the reciprocity happens secondarily to a group member other than the one who first gave

the resource. The intensity of happy and negative sentiments depends on the degree of shared responsibility and the division of tasks in various exchange models¹⁴³.

Feelings cause people to emotionally attribute their own and/or others' success or failure on a task, which causes object-related emotions (such as self-pride and thankfulness for others) to surface. According to the fifth theory, agents relate social objects like persons, social connections, events, or social networks to explain the causes of universal emotions. In other words, affective attribution causes either emotional identification with or emotional disassociation from items. When social items are managed and consistently elicit favorable emotions, affective attachment develops. Effective distance is brought about by negative feelings brought on by stable and unpredictable social objects.

A stable and controlled cause in the context of education may be personal aptitudes and competencies, but a stable and uncontrollable cause could be the complexity of the teacher's job. The factors that lead to the emergence of certain emotions and their function in controlling the process of appraising the impacts of social exchange are both covered in great depth by the theoretical presumptions of affective social exchange theory. The theory supplements the theory of social trade with the idea of the irrational part of human behavior rather than challenging the logical premises of social exchange. The theory has implications for the growth of sustaining and supporting relationships by outlining how logical decisions impact emotional moods. A lot of micro- and macro-sociological theories may be included within the extremely broad framework of social exchange theory. The theory may be used to describe practically any logical pattern of behavior due to a reasonably generic conception of interactions within communities. This theory is a cornerstone of social behavior due to its emphasis on the universal concept of reciprocity in social connections¹⁴⁴.

It has evolved into a comprehensive paradigm for describing a variety of phenomena, including networks, justice, psychological contracts and social power. The principles of this theory have inspired a lot of study that aims to explain many facets of human behavior and how they arise in various disciplinary contexts. There are three ways to do research on human behavior. First, the cost-benefit analysis that influences people's decisions to engage in social activities has been studied using the theory. The circumstances in which interactions occur have benefited from the emphasis on costs and benefits¹⁴⁵.

For instance, a study examining how communities reacted to infrastructure development looked at perceived advantages and drawbacks of initiatives in terms of support and happiness with such efforts. According to the study's findings, behavioral outcomes may be anticipated based on a negative association with perceived adverse effects and a positive correlation with perceived favorable effects. The role of real and projected expenses in connection to the internal and external advantages of business sharing inside firms was the subject of another research.

Sharing exercises is a balance between the effort needed to perform the exercise, the responsibility to reciprocate, and organizational benefits (such as a successful exercise outcome). In order to analyze the expected reciprocity of the connection, it was necessary to balance the advantages and disadvantages of various approaches a belief in fair exchange known as the reciprocity standard was also put to the test. The hypothesis that people participate in relationships because they anticipate reciprocity is well supported by empirical data¹⁴⁶. Belief in reciprocal connections is linked to happiness and drives behavior. Notably, it is the most potent social factor predicting user intent to engage in the sharing economy and it is a prelude that is helpful behaviors in companies.

The consequences of reciprocal and non-reciprocal exchanges were the focus of the second section of the study. Engagement, contentment, and other good behaviors are influenced by interactions. Researchers came to the conclusion that reciprocity has a direct influence on engagement via emotional connection and a direct impact on engagement through trust. Researchers have asserted that in non-reciprocal relationships, the perceived disparity between the negative (the perception that a person received fewer rewards than the costs) and the positive (the perception that the rewards are greater than the costs) increases stress and elicits emotions like guilt and rage¹⁴⁷.

Relationships that result in outputs that are incompatible with inputs start off a chain of behaviors intended to make up for or exact revenge for the lack of reciprocity. Self-deprivation (decreasing one's reward to equal the reward for the other party) and retaliation through the relationship at the root of the inequality are examples of proactive behavioral measures to restore inequality. Emotion-focused inequality restoration therapies are connected with cognitive processes including assertiveness, denial of responsibility, and undervaluing the other party's involvement¹⁴⁸.

Being assertive entails having faith that your connections are valid. By psychologically skewing the advantages and contributions of the other party and lowering or raising them as appropriate, the devaluing of the other party's contribution and denial of accountability refers to an unwillingness to accept responsibility for the other party's unjust treatment.

The SET framework was employed in a third line of research to examine the role of social capital in the development of dyadic and group interactions. The judgment of relationship

performance is influenced by variables including trust, social norms, altruism, and selfish incentives.

There is proof, for instance, that connectivity and trust are predictors of continuous knowledge sharing. The quality of trading relationships is positively impacted by the social capital created by complacency toward superior group members. In addition, the beneficial effects of selfish attitudes, a reciprocity norm, and social worth influence people's engagement in sharing platforms in the sharing economy¹⁴⁹. The overall tenet of social exchange theory concerning the enabling and constraining functions of social capital has received substantial scientific support, despite contradictory findings addressing the significance of specific social capital elements.

Regarding the setting, social exchange theory is clearly utilized to examine how people behave in organizations. The hypothesis explains why staff members are eager to participate in CSR initiatives and are motivated to take on new responsibilities to make up for the pleasant work environment that has been established. Also, the social exchange framework is a useful tool for understanding relational models based on information systems¹⁵⁰.

In the field of information systems management, the theory has been applied to research the effects of various profitability ideas on technological advancements and trade patterns in online communities. In addition, more discussions on the use and acceptance were evident. For instance, it was useful in determining the advantages and disadvantages of utilizing online knowledge management systems, which influenced the usage of the system for knowledge sharing among system members. Maslow's hierarchy of needs and the theory have been utilized as a general theoretical framework to describe the factors that influence information sharing on websites¹⁵¹.

The theory was applied to the study of motivations for engagement in online social networking sites, and empirical testing of the model revealed that perceived benefits trigger general and specific knowledge-sharing behaviors, while associated costs suggest that the capacity to strengthen social connections and privacy control is considered in the context of privacy risks related to the use of social media tools¹⁵². The notion has sparked medical study into the use of mobile health treatments meant to ensure patient compliance. These research' findings showed that costs and rewards, or negative and positive reinforcers, both encourage or deter system usage.

Cost-benefit analysis has been proven to be the process on which company choices are founded by entrepreneurship study. The idea that project expenses shouldn't exceed the benefits provided particularly informs investment choices¹⁵³.

Social exchange theory's guiding ideas have come under fire. It has been asserted that the theory's fundamental concepts are not clearly stated and coherently linked, which causes issues when employed as a broad research framework. The biggest drawback is the non-exhaustive and overlapping list of constructs, which reduces the theory's capacity for explanation and impairs its capacity for prediction.

A propensity to explain people's behavior in part results from the use of an imperfect collection of notions. Due to the ambiguity of theoretical concepts, their conceptual constraints are interpreted differently, which causes disagreements in the interpretation of study findings.

Although the theory is generally applicable across fields due to the lack of clearly defined ideas, this raises doubts about the conclusion and makes it challenging to replicate the results. The lack of clarity and terminological uniformity is the second issue. In contrast to previous literature

certain authors handled social and economic interaction as a transaction rather than a relationship¹⁷⁸.

There is still a need to evaluate whether an exchange is a type of relationship, a transaction leading to a connection, or vice versa despite efforts to define the distinction between a relationship and an exchange. For instance, the parties' prior connections may have an impact on the exchanges, and the exchanges themselves may contribute to the formation of new relationships. According to scholars who use the words (transaction, relationship) interchangeably, this controversy is still open. The third issue is the absence of clarity and coherence in the guidelines for study exchanges¹⁷⁹.

Although the reciprocity principle is the fundamental premise of this theory, researchers also employ additional principles to explain behavior (e.g., negotiated dominance, rationality, altruism, group acquisition, status cohesion, and competitiveness). Different trade laws provide uneven results and heterogeneous views on individual behavior. To lessen the uncertainty surrounding the theory's guiding principles, each trade rule has to be defined in a clear and consistent manner. The operationalization and taxonomy of concepts are the fourth constraint¹⁸⁰.

The literature oversimplify conduct or social behavior by actors, despite the fact that various empirical research has examined the origins and results of human connections¹⁸¹. Researchers, in particular, have distinguished between the concepts of positive and negative acts without considering how an action's valence is determined. As a result, it has been questioned if there is a need for generic criteria for evaluating behavioral aberrations, which may be helpful in figuring out the viability of social exchange notions¹⁸². The reciprocity structure's straightforward representation presents another issue. The concepts of reciprocity fall into two opposing categories: negative and positive.

This classification is justified by the absence of a positive occurrence (such as abusive behavior). But this illustration just has one dimension. The activity dimension, which may be utilized to separate actively expressed positive/negative behaviors from repressed positive/negative behaviors, is not taken into consideration in this. Despite the conceptual distinctions between the various behavior categories, this classification has not yet undergone empirical testing.

- Performances Costs (independent): Extracurricular pursuits or chances that the key players have overlooked.
- Employee Social Exchange: exchange between two or more persons of material or intangible assets, which may be more or less lucrative or expensive.
- Reciprocity (independent/dependent): One of the traits of social exchange and social life in general is the giving of benefits to others in exchange for benefits received.
- Reciprocity Standard (Independent): The reciprocity standard defines certain actions and obligations.
- Equity (conditional): the balance between a person's contribution and their performance at work.
- Reward (Independent): Sources of positive reinforcement.

Summarily, social exchange theory is a sociological and psychological perspective that seeks to explain social interactions and relationships in terms of the costs and rewards involved. According to this theory, individuals engage in relationships and interactions based on a subjective assessment of the potential benefits they can gain and the potential costs they may incur.

In the context of COVID-19, the social exchange theory can provide insights into how individuals evaluate the costs and rewards associated with various behaviors and decisions related to the pandemic. Here are a few ways social exchange theory can be linked to COVID-19:

➤ Compliance with Preventive Measures:

Social exchange theory suggests that individuals weigh the costs and benefits of complying with preventive measures, such as wearing masks, practicing social distancing, and getting vaccinated. The perceived costs may include discomfort, inconvenience, or limitations on personal freedoms, while the perceived benefits may include reducing the risk of infection, protecting loved ones, or contributing to the collective well-being.

➤ Risk Perception and Behavior:

Social exchange theory also considers how individuals assess the risks associated with certain behaviors. For example, some people may engage in risky behaviors, such as attending large gatherings or not following recommended guidelines, if they perceive the benefits of socializing or maintaining their usual routines to outweigh the potential costs of contracting or spreading the virus.

➤ Trust and Cooperation:

Social exchange theory emphasizes the role of trust and cooperation in social interactions. In the context of COVID-19, trust is crucial in following public health guidelines, cooperating with contact tracing efforts, and complying with quarantine or isolation requirements. Individuals may evaluate the trustworthiness of authorities, institutions, and others in their social networks when deciding whether to engage in cooperative behaviors.

➤ Economic Considerations:

Social exchange theory recognizes that economic factors can influence social behavior. During the pandemic, individuals may weigh the economic costs and benefits of various decisions, such as whether to continue working in a high-risk occupation, how to allocate limited resources, or whether to support businesses through purchasing goods and services.

In addition, it's important to note that social exchange theory is just one framework for understanding human behavior, and it may not capture the full complexity of individuals' decisions and motivations during the COVID-19 pandemic. Other factors, such as social norms, cultural values, and individual differences, also play significant roles in shaping behavior during this unprecedented time.

2.2.8 Social Support Theory

Social support theory is a social-psychological theory that explains the benefits of social relationships for individuals' physical and mental health. The theory was first proposed in the 1970s by a group of researchers¹⁸⁰, focuses on the idea that individuals benefit from the support and assistance they receive from their social networks, such as friends, family, and community. Furthermore, the theory states that social relationships can buffer people from the negative effects of stress. When people have strong social support networks, they are better able to cope with stressful events. This is because they have people to turn to for emotional support, advice, and practical help.

In actual terms, the theory encompasses both the structural aspects of an individual's social network and the specific functions served by interpersonal relationships¹⁸¹. Also, social support can be emotional, informational, or tangible in nature, and it plays a crucial role in individuals' ability to cope with stress and maintain psychological health¹⁸². The social support theory emphasizes the significance of social connections and relationships in promoting well-being and

coping with stressors and challenging life situations; and the key Components of Social Support Theory includes:

➤ **Social Support:**

Social support refers to the emotional, instrumental, informational, and appraisal assistance individuals receive from their social network. It can come in various forms, including companionship, encouragement, advice, financial assistance, and more.

➤ **Types of Social Support:**

Social support can be classified into different types based on its functions:

- Emotional support: Providing empathy, understanding, and comfort to help individuals cope with emotional distress.
- Instrumental support: Offering tangible or practical assistance, such as financial aid or help with daily tasks.
- Informational support: Sharing advice, suggestions, or information to help individuals understand and address specific problems.
- Appraisal support: Giving feedback, constructive criticism, or affirmation to help individuals evaluate their thoughts and actions¹⁸³.

➤ **Sources of Social Support:**

Social support can come from various sources, including family members, close friends, colleagues, support groups, religious or spiritual communities, and professional counselors or therapists.

➤ **Benefits of Social Support:**

The theory suggests that having a strong social support network can have numerous positive effects on an individual's mental and physical well-being. These benefits may include increased resilience to stress, improved coping mechanisms, reduced risk of developing mental health issues like depression and anxiety, and enhanced overall quality of life.

➤ **Stress Buffering Effect:**

One of the central concepts in Social Support Theory is the stress-buffering effect. This effect posits that social support can mitigate the negative impact of stress on individuals. When facing challenging situations, individuals with adequate social support tend to experience less severe psychological and physiological consequences compared to those lacking support.

➤ **Perceived Support:**

Another important aspect of Social Support Theory is the perception of support. It is not just the actual support received, but also the individual's belief and perception that support is available if needed, which can have positive effects on well-being and coping.

Social Support theory has been widely studied and has implications for various fields, including psychology, sociology, medicine, and public health. Understanding the importance of social support can lead to interventions and strategies to strengthen social networks and improve individuals' overall mental and physical health.

In summary, social support theory provides a framework for understanding the importance of supportive relationships in promoting psychological well-being and buffering against the negative effects of stress. It highlights the role of emotional, informational, and tangible support in helping individuals cope with challenges and maintain their mental health. By recognizing the

significance of social support, interventions and policies can be developed to enhance social connections and promote resilience in times of crisis, such as the COVID-19 pandemic.

Resilience Theory

Resilience theory is a framework that brings many disciplines together with the desire to explore how individuals and communities adapt and thrive in the face of adversity, challenges, and crises¹⁸⁴. The theory emphasizes the dynamic and interactive nature of resilience, highlighting the processes and factors that contribute to individuals' ability to bounce back and even grow stronger from difficult experiences¹⁸⁵.

Defined as the ability to bounce back from adversity, resilience is not about being immune to stress or trauma, but rather about being able to cope with it in a healthy way. The theory posits that there a number of factors that contributes to resilience and it includes, genetics, early experiences, coping skills and social support.

Furthermore, the theory emphasizes on the concepts of resilience by highlighting important concepts.

➤ Adversity and Risk Factors:

Resilience theory recognizes that individuals and communities face various forms of adversity, such as economic downturns, natural disasters, or, in this case, the COVID-19 pandemic⁶. It acknowledges the presence of risk factors that can increase vulnerability to adverse outcomes.

➤ Protective Factors:

Resilience theory emphasizes the importance of protective factors that can mitigate the negative impact of adversity and promote positive adaptation⁶. These factors can be individual, relational,

or contextual and include personal strengths, social support, coping strategies, and access to resources.

➤ Dynamic Processes:

Resilience is not a fixed trait but a dynamic process that unfolds over time⁵. It involves the interaction between individuals and their environment, as well as the interplay of various personal and contextual factors. Resilience theory recognizes that individuals can adapt and change in response to adversity.

➤ Positive Growth and Transformation:

Resilience theory goes beyond mere recovery and highlights the potential for positive growth and transformation following adversity¹⁸⁵. It suggests that individuals can develop new skills, perspectives, and strengths as a result of their experiences, leading to personal development and enhanced well-being.

The resilience theory is applicable on many fronts. For instance, this theory can be applied to the COVID-19 pandemic that has presented significant challenges and disruptions to individuals, communities^{186,187}. In fact, applying resilience theory can provide valuable insights into understanding how individuals can navigate and adapt to the crisis.

First, the theory helps in identifying protective factors that helps people withstand and recover from the impacts of the pandemic¹⁸⁵. This may include factors such as financial resources, social support networks, adaptive coping strategies, and access to information and resources.

Also, it provides means for people to become adaptive and innovative. This theory can help people adapt models and tactics that can make them survive in the face of the changing

circumstances introduced by the pandemic¹⁸⁶. It can also help people to find new opportunities amidst health and other challenges

The theory also adds that social support and collaboration is important in promoting resilience. In fact, it can inform strategies to foster collaborations among people, stakeholders in order to share resources, knowledge and best practices. In another dimension, the resilience theory recognizes the potential for personal and professional growth following adversity¹⁸⁴. It can guide efforts to support the learning and development of people, helping them acquire new skills, adapt to changing times, and seize opportunities for growth. Clearly, the resilience theory seems widely used in business and management field but the same can be used in the management of lives and social issue like the covid-19 pandemic and it can serve as a framework for managing and understanding the situation and introduce long-term stability.

2.3 Review of Empirical Studies

On December 31, 2019, the World Health Organization (WHO) was officially informed of a cluster of cases of pneumonia in the city of Wuhan, a city of 11 million people and the cultural and economic center of central China Movie Theater. On January 5, 2020, death was reported 59 days after death¹²⁸. Ten days later, the WHO was aware of 282 confirmed cases, including four in Japan, South Korea and Thailand. In Wuhan, six people died, 51 were seriously ill and 12 were in critical condition. The virus responsible was isolated on January 7 and its genome was made available on January 12¹²⁹. The cause of the severe acute respiratory syndrome known as COVID-19 was the new coronavirus SARS-CoV-2. The rest is history, even if history is constantly being rewritten: As of May 12, 82,591 new cases of COVID-19 were confirmed worldwide every day, resulting in a death toll of more than 4,200 per day. Phylogenetic analysis

suggests that SARS-CoV-2 originated in animals, possibly bats, and was transmitted to other animals before being transmitted to humans at the Huanan Wet Market in the city of Wuhan. There is evidence to support this that an intermediate vector could contain pangolins, a species of nocturnal anteater illegally imported for its meat. This animal carries a coronavirus that is very similar to SARS-CoV-2, but differs in a key region that determines the virus' infectivity and host range. It is therefore possible that the virus passed to humans and then, by adaptation as it infected more people, mutated and acquired the properties that led to its rapid spread.

Like SARS-CoV, the SARS-CoV-2 virus that causes COVID-19 can survive for hours in aerosols and on surfaces such as stainless steel, plastic and cardboard, although washing with soap or detergent destroys the virus¹³¹. Transmission can occur during the asymptomatic incubation period (estimated at 50–60% of cases) and up to two weeks after symptom onset. Each infected person transmits the virus to three other people on average. The incubation period is approximately 5–6 days (range 1–14 days). The clinical picture ranges from an asymptomatic subclinical infection and a mild course to a severe or fatal course; Worsening can occur quickly, often as early as the second week of illness. Viral loads are up to 60 times higher in people with severe symptoms than in mild cases. Death is due to pneumonia and possibly hyperinflammation associated with cytokine storm syndrome.¹³² Crude hospitalization rates and death rates in Europe up to April 22, showing the effects of aging, As reported on April 21, the most commonly reported symptoms of COVID-19 in Europe are fever/chills (49%), dry or wet cough (24%), sore throat (12%), general weakness (8%). Pain (7%), runny nose (4%) and diarrhea (2%). These data are mainly from Germany and may not be representative of all COVID-19 cases. Complications include cardiomyopathy, thrombosis, acute kidney injury and encephalitis. Likely risk factors for serious illness and death include older age, membership of a minority ethnic

group, immunosuppression, hypertension, diabetes, cardiovascular disease, chronic respiratory disease, obesity, smoking and cancer. Men in these groups appear to be at higher risk. Chronic obstructive pulmonary disease (COPD), cardiovascular disease and hypertension are strong predictors of ICU admission.¹³

The Covid-19 pandemic is both a social, economic and health crisis: its serious and profound effects are being felt around the world. From school closures to destroyed industries to millions of lost jobs, the social and economic costs of the pandemic are many. Covid-19 is under threat, exacerbating inequalities everywhere, undermining progress on tackling global poverty, clean energy and more. The effects of Covid-19 have had profound and varied consequences in different sectors of society, leaving an indelible mark on health, economy, education and social dynamics. The pandemic has resulted in a massive death toll around the world, straining healthcare systems and causing immeasurable pain and suffering to families and communities.

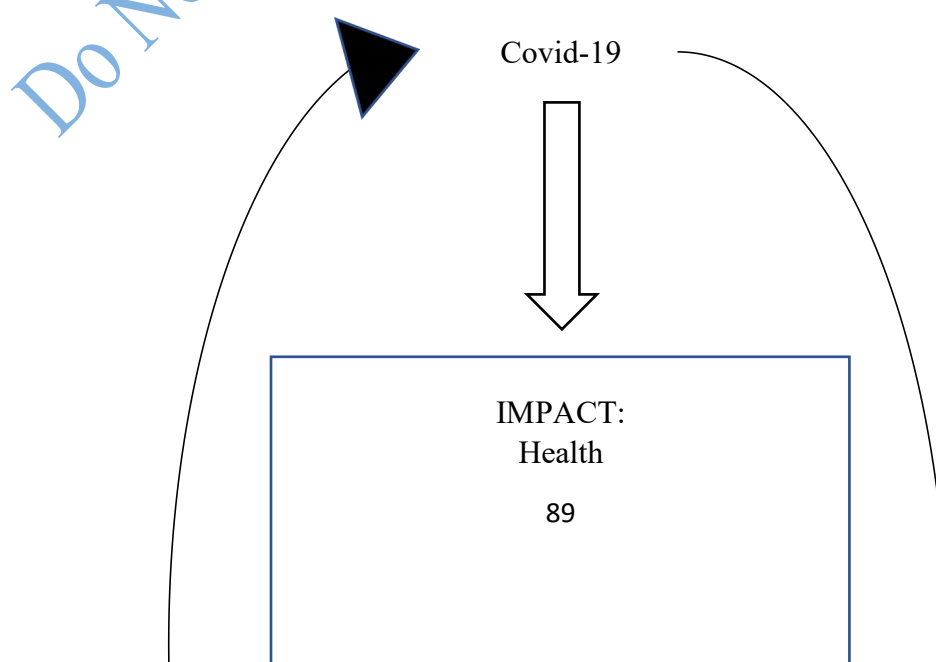
From a health perspective, the immediate impact of Covid-19 was devastating. The virus spread quickly, infecting millions of people around the world. The severity of the disease ranges from mild symptoms to severe respiratory failure and requires hospitalization and intensive care. The high rate of transmission and the pressure on healthcare systems have led to severe shortages of medical supplies, personal protective equipment and health workers. Frontline workers are under tremendous pressure and fatigue while providing aid and trying to contain the spread of the virus.

The economic impact of the pandemic was large and devastating. Tough measures such as lockdowns, travel restrictions and business closures have resulted in significant job losses, corporate bankruptcies and economic downturns. Industries that rely heavily on face-to-face interactions, such as hospitality, tourism, retail and entertainment, have been hit by the economic crisis. Small businesses, which form the backbone of many economies, struggle to stay afloat,

causing financial difficulties for entrepreneurs and workers. Government measures such as stimulus packages and financial aid have been implemented to ease the economic strain, but the recovery process remains arduous and uncertain.¹³⁴

Education systems have faced unprecedented challenges due to the pandemic. School closures and the shift to distance or hybrid learning models have impacted the education journeys of millions of students around the world. The digital divide has exacerbated inequalities in education as marginalized communities have limited access to technology and online learning resources. Students struggle with disrupted routines, limited social interactions, and increasing reliance on virtual platforms. The educational landscape has changed, requiring innovative approaches to teaching, learning and assessment. Long-term implications for academic progress, mental health, and social development are areas of concern that require continued attention and support.

2.4 Conceptual Framework



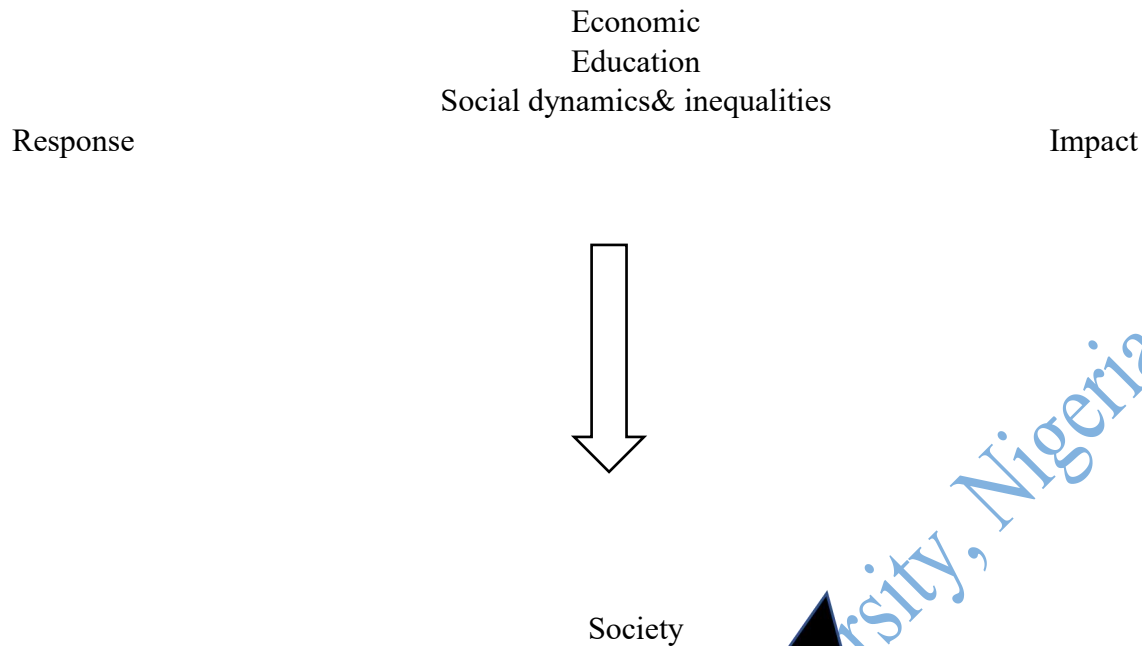


Fig 2. 3 Conceptual Framework on the effect of COVID-19 Pandemic on Nigerian Social Perspectives

Source: Author's Fieldwork

2.5 Summary of Gap in Literature Reviewed

Literatures reviewed highlight the **global effects of Covid-19 on Nigeria's Social Perspectives** including issues related to curbing the pandemic, treatment measures, training and retraining of medical personnel, preventive mechanisms and the politics underlining the spread and control of the pandemic in the international system but little has been said on its impact on the social lives of people during the lock-down and after all restriction has been removed. This study takes a

critical look at how COVID-19 halted the social gatherings, relationships and physical contacts among people which were drastically reduced. These and more are the major focus of this study.

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Chapter Three

Methodology

3.1 Research Design

This study adopts a qualitative research method and makes use of a systematic review approach to examine the social implication of Covid-19 pandemic on Nigeria. Qualitative research is an inductive study approach that can be used to learn more about a problem's logic, idea, and motivation and it works best when examining human experience. This research technique is the most practical approach for gathering non-numerical data in the social and natural sciences¹. In terms of operation, the creation of broad research questions, the selection of pertinent targets, the gathering of data, its interpretation in light of theoretical work, and the formulation of findings are all parts of qualitative research. It is unique and appropriate when objectivity, diversity of research contributors and reflexivity are considered². This research technique is carried out by analytical taking notes, photographs or recording information from people about a situation or happening. This research includes different methodologies like interviews, life history, events that explains the problematic situation according to people. Therefore, it can be concluded that qualitative methods can be used to conduct a thorough analysis³.

3.2 Population of the Study

South West is one of the geopolitical zones of Nigeria and it has six states namely Ekiti, Lagos, Ogun, Ondo, Osun and Oyo. The region is the major Yoruba speaking area in the country. The area lies between longitude 2° 3' and 6° 00' East and latitude 6° 2' and 8° 37' N with a total land area of 77,818 km². According to the National Population Commission, the geopolitical zone is inhabited by about 47million people⁴. However, this study focuses and explores the social

implications of COVID on just three states in the region because they served as the receiving point and one with the highest number of COVID cases in the country.

3.3 Sample and Sampling Techniques

A total of 30 respondents, who had recovered from COVID-19 in the Southwest of Nigeria (namely Lagos, Oyo and Ogun States), were recruited and interviewed individually for the study. Each of the respondents met the obvious inclusion criteria, which were people who were aware of their COVID-19 status; people who had recovered from COVID-19; people who recovered from the disease; and people who either live or work in any of the Southwest states. Also, only those who consented to take part in the study were recruited. Given the nature of the study, a snowball sampling technique, a nonprobability technique where research participants are asked to assist researchers in identifying other potential was adopted to reach the participants of the study⁵. The author, having shared close contact with colleagues who were exposed to people that exhibited symptoms of the virus and in dire cases had the virus made contacting individuals of such individuals who fit the inclusion criteria beneficial to this study.

3.4 Description of the Research Instruments

While the study relies on both primary and secondary data, the primary data for the study was collected using unstructured interview guide (see details in appendix) to gather response based the objectives of the study from the participants. The questions asked revealed patterns in responses of the participants and questions asked basically includes impacts of the virus and lifestyle choices or modifications (including social and cultural) due to COVID. Questions asked allowed a follow-up by the research with the intent to gather detailed response and allow the

participants express themselves. Also, the study uses secondary data to corroborate its findings and shape understanding of the subject in the South western perspective of Nigeria.

3.5 Validity of the Research Instruments

The research instrument was tested on three different attempts with three recovered COVID-19 patients who were not part of the selected participants for the study. Notably, it is important to mention that required adjustments were made by the author before the test was administered to the recruited respondents.

3.6 Reliability of the Research Instruments

The research showed reliability of the research instrument adopted for this study has shown consistency in themes and pattern of responses from participant of the study, thus allowing confirming the reliability of the instrument adopted for the study.

3.7 Administration of Instruments and Method of Data Collection

The focus of this study is to examine the effect of COVID-19 from a social perspective in the Nigerian context. To achieve this and the research questions posed in this study, the research having adopted a qualitative research method suitable for examination of a social concept uses a systematic review and an interview guide approach to collect information for secondary and primary sources respectively. The systematic review process takes a step further than the literature review as it combines systematic and transparent data collection process with rigorous analysis⁶. It is an important activity that ensures a good piece of research and it attempts to make sense of body of literature with aggregation, interpretation, explanation or integration into existing research⁷. The process of systematic reviews includes defining research questions, conducting search for relevant papers, screening papers, developing classification scheme,

retrieving data and analyzing the result. Also, the study will consider studies published in qualitative research available on scholarly databases and the studies will be further confined to impacts of the pandemic, socio-cultural perspectives, coping mechanisms, meanings and experience of the pandemic among others. To implement the aforementioned, inclusion and exclusion criteria, published studies will be searched and selected using search terms and keywords “COVID” or “Social implications” or “Impact” “qualitative” and “Nigeria”. In addition, the data collection for the primary sources involved notification of prospective participants that had indicated that they were clinically confirmed to COVID, scheduling of in-person meetings for administration of the interview sessions.

3.8 Method of Data Analysis

The study gathers relevant answers to the research questions of the study. Furthermore, the study developed responses generated into themes namely adaptive and reactionary using thematic analysis. Specifically, the “adaptive” themes answer research questions relating to the social and cultural practices adopted with the emergence of COVID-19 while the “reactionary” themes answer research questions relating to the rational changes in Southwest Nigeria.

Endnotes

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Chapter Four

Results and Discussion of Findings

Based on findings from literatures, there exist different categories of response as elicited either from respondents, secondary sources or general perception on reviewed studies. These findings are grouped into themes/ categories in response to the research questions posed in this study. To further clearly itemize findings, the study groups findings into general overview of Covid in Nigeria, **social impacts**, with sub-categories of the findings explaining, impact on education, healthcare, economy and mental well-being as indicated in previous and related studies. Also, the study will group other response using adaptive and reactionary strategies in combating Covid in Southwest Nigeria. Basically, this portion of the study will classify response that relates to research question that indicates how social behaviours change in the wake of Covid, how Covid affects social interaction and the social norms and practices that Nigerians adapted in coping with the pandemic.

4.1 Presentation of Data

COVID-19 in Nigeria

The outbreak of the COVID-19 pandemic has had a significant social impact on South West Nigeria. This devastating infectious disease has caused significant disruptions to social and economic activities, and has brought about numerous challenges to the region. Nigeria was among the top 5 countries in sub-Saharan Africa (SSA) with the highest numbers of confirmed cases of COVID-19. The first case of COVID-19 in Nigeria, was an imported case from Italy was confirmed on the 27th of February 2020 in Lagos, southwest Nigeria. Lagos, being a major economic center and the most populous state in Nigeria became the epicenter of

COVID-19 in Nigeria with established community transmission accounting for 15,414 (34.7%) of the 44,433 confirmed cases and 192 (21.1%) of the 910 reported deaths in Nigeria as at August 5, 2020. In addition, as at May 27, 2022; Nigerian had recorded a total of 256,028 confirmed cases of COVID19 across all states and 3,143 deaths; and the incidents continued with a drastic increase.

The pandemic disproportionately affected males with a male/ female ratio of 60:40 cases and 74:26 deaths. Individuals over the age of 50 accounted for 70% of the mortality burden. All thirty-six states were affected, but Lagos, a state in the south west and Abuja, the Federal Capital Territory reported the most cases. Also, there are high chances that, the numbers may not be a true reflection of the severity of the pandemic as only 5,160,280 people were tested from a population of over 200 million. This is also assumed to be true as some deaths occurred during the pandemic but the cause of such deaths were not verified.

4.2 Presentation of Research Questions

Research Question One: What are the major Social Impacts of Covid-19 in Nigeria?

The social impact of the COVID-19 pandemic in Nigeria, especially southwest Nigeria has been reiterated to be profound and far-reaching as it was the receiving point of the pandemic. Interestingly, as one of the most populous countries in Africa, Nigeria has had to face many challenges that has affect the nation social especially health, education, economy and perhaps mental health of the citizens.

Health Sector

The health sector in South West Nigeria faced an unprecedented level of pressure and strain as a result of the overwhelming cases of COVID-19. The region's healthcare infrastructure, already operating at its maximum capacity, was stretched to its limits, and struggled to meet the surging

demand for crucial medical resources. Hospital beds, personal protective equipment (PPE), and ventilators became scarce, creating a dire situation for both COVID-19 patients and individuals requiring medical attention for other health conditions.

The scarcity of these vital resources had a significant impact on the overall quality of healthcare services in the south west region of the country. In addition, medical professionals and healthcare workers, who are already working tirelessly, grappled with the immense challenge of providing adequate care to a growing number of patients. Also, the limited availability of hospital beds forced healthcare facilities to make difficult decisions about admitting patients, resulting in delays and potential overcrowding. Among others issues, these circumstances compromised the ability to deliver timely and effective care to those in need.

Moreover, the shortage of personal protective equipment (PPE), also exposed healthcare workers to increased risks of contracting the virus themselves. This not only affected the health and well-being of these frontline heroes but also posed threat to the overall healthcare system in the region. In fact, when healthcare workers become infected and are unable to continue their work, it further strains an already burdened system and this was the case in the south west, Nigeria. For instance, ventilators, a critical resource for severe COVID-19 cases, were also in short supply and this shortage had implications not only for COVID-19 patients but also for individuals with other respiratory conditions who require ventilator support during the pandemic. The scarcity of these life-saving devices can result in the difficult decision of choosing who receives treatment, potentially leading to adverse outcomes for those who cannot access ventilators in a timely manner.

Alternatively, the impact of strained healthcare resources extends beyond COVID-19 patients. For example, individuals with other health conditions, such as chronic diseases or acute illnesses,

faced challenges in accessing appropriate healthcare services. The diversion of resources and healthcare personnel to address the urgent needs of COVID-19 patients reduced the capacity to provide comprehensive care for non-COVID conditions. This situation without doubt resulted in delayed diagnoses, postponed treatments, and increased mortality rates for other diseases that require urgent attention.

In addition to the scarcity of resources, the overall capacity of the healthcare system was tested during the pandemic. South West Nigeria, like many regions globally, has witnessed an overwhelming surge in demand for healthcare services. Hospitals and clinics, already struggling with limited resources, found it challenging to handle the increasing number of patients. This strain not only affected the physical infrastructure but also stretched the capabilities of healthcare professionals, who were heavily fatigued as they worked round the clock to put the pandemic under control¹¹. Truly, the continuous long hours, coupled with the emotional stress of dealing with the pandemic's impact on patients' lives, takes a toll on the mental and emotional well-being of healthcare workers.

Notably, the impact of the pandemic largely strained the healthcare sector with far-reaching consequences. The long-term consequences and disruptions led to worsened health outcomes in the region, and even down to all communities. Examining the health systems from a social perspective reveals that individuals, families and the other residents at the communal level were not spared from the effect of Covid-19. Studies indicated that a large percentage of families were affected physically more than as claimed by regulating agencies as the virus was termed a “family affair” because people were connected to the effect or management of the disease. Although, not all were infected with COVID-19, but enormous population of individuals and

families were indeed affected due to poor testing strategies thus making it difficult to ascertain individuals that may have come down with the virus and mistaken it common cold.

In addition, the coronavirus pandemic caused health problems, discomfort, trauma and pain among families around the world. Unfortunately, this is dire as the physical health of many individuals and families are already known to have existing cardiovascular issues further making them susceptible to the virus.

Also, studies revealed that families experienced anxiety, depression, sleep problem, and fear during the COVID-19 pandemic and it was associated to the period of lockdown as many individuals found it uneasy to confine. This was supported by the preliminary evidence that during the COVID-19 lockdown people presented signs and symptoms such as depression, anxiety, self-reported stress, and disturbed sleep, and so on; all of which are common emotional and psychological reactions to unpleasant events. In addition, a number of individual and structural variables moderated this risk. In some instance, it was also indicated as well that children experienced anxiety or worry, and fear during COVID-19 pandemic.

Examination of the impact of the pandemic presented another crucial dimension particularly in the south west region and Nigeria at large where religion holds sway and largely considered as important. Studies reveal that the pandemic had a spiritual toll as families had to seek refuge in God for succor. In fact, 52.1% families in a survey expressed fear and a change in their spiritual stance that made them closer to God. Truly, the lockdown promoted closeness to God, and this was also reiterated as 30.8% of families in another survey indicated that, Covid made get close to God as they felt alone without relief and support during the pandemic¹⁷. However, the pandemic presented one major positive impact for families as it improved family time in many cases and

improved family bonding especially for homes where every member was often busy but were now confined to the homes.

Economic Impact

The economic impact of COVID-19 in Nigeria remains a very severe one. The pandemic has disrupted various sectors, including manufacturing, transportation, tourism, and services, leading to job losses and a decline in economic growth. Many businesses have been forced to close down temporarily or permanently, causing a significant rise in unemployment rates. The informal sector, which supports a large number of people in the region, has also been greatly affected, leaving many without a source of income. Although, quantifying the impact of covid in Nigeria has been explained using many dimensions. For instance, some authors settled for GDP, remittance, recession, food systems, revenue shortfalls, demand for oil, and number of people living below the international US\$1.90-a-day poverty line among others.

With regards to the national GDP during the lock down that was necessitated by the pandemic, there was a sharp decline and Nigeria experienced recession during 2020. Specifically, the lockdown policies reduced Nigerian GDP by US\$11 billion or 23% during the 8-week period. Also, the contraction of the economy remained consistent with numerous projections. In addition, the nation witnessed a huge decline in agricultural food systems that sustained many homes in the region. Specifically, the period witnessed an 11% (US\$1.6 billion) decline in food systems, further escalating a dire situation. Also, this situation worsened the poverty situation during the lockdown as a temporary increase of 9% national poverty head count rate; thus, indicating that an additional 17 million people were further plunged below the poverty line during the 8 weeks lockdown duration.

As expected, the first major impact of the pandemic in Nigeria is the expected shortfall in federal budget revenue due primarily to the plunge in oil prices. As the pandemic continued for most of 2020, the global economic slowdown had consequences for Nigeria's oil-dependent economy. This was followed with the halt of trade, air and ground travel. In addition, the global fall of oil prices which had fallen by 45% in the first quarter further had a spillover effect on states in the southwest region. This situation implied that Nigeria had revenue shortfalls as oil contributes more than 60% of the nation's revenue. This was further reiterated that the monthly oil receipts declined from USD 2.3 billion to around US\$1 billion by September 2020. Unfortunately, this shortfall presented by the pandemic further puts the nation under intense pressure to borrow. In fact, the government was forced to raise USD\$300 million and US\$700 million for disease preparedness and stimulus payment respectively.

Also, there was a sharp increase in government spending and these expenditures were unanticipated as they were associated with health costs, stimulus for businesses, palliatives and social support for vulnerable households. In addition, a decline in remittance from abroad sets in as Nigerians residing abroad were also battling the pandemic at their various countries of residence. Remittance into Nigeria also contributes to the positive outlook of the economy as the nation is the largest recipient of foreign remittance income in Sub-Saharan Africa and it accounts for about 5% of the nation's GDP. Unfortunately, the remittance into the nation was further threatened as Nigeria relied on the United Kingdom, France, Spain, the United States and Italy for about 54% of its remittance and these countries were on full, major lockdowns. In fact, remittance from Europe to Africa reduced by 80-90%. Also, remittance back to Nigeria is not evenly distributed across families and this situation further dampens the hopes of citizens, residents that were under lockdown and threatened livelihood.

In another vein, the lock down measure in the southwest Nigeria presented more issues even than anticipated. For instance, the first restrictions on movement and economic activity imposed by the Federal government on the Federal Capital Territory (FCT) and Lagos State, and Ogun State in the south west of the country directly reduced economic output and household incomes for a large share of the residents who are unable to work and earn an income. Also, consumer demand was also curtailed directly through measures that prevented consumers from spending money on non-essential goods and services but the lockdown restrictions were not applied to sectors and industries that were considered essential. In this regard, exemption of “essential services and workers” allowed public, private hospitals and pharmacies and food retailers to operate but it goes without doubt that operations and commerce were abysmally low.

Also, other sectors that contributed immensely to economy that were not considered as essential had their operations temporarily suspended and the consequence was even more devastating than expected. For example, many manufacturing and extractive companies are cited in the south west region of the country due to proximity to the ports and Lagos State. In fact, industrial hubs in Lagos and Ogun State accounts for about 60% of manufacturing businesses and industries in the country and as such, the impact of the lockdown was negatively felt leaving many homes unable to cater for basic needs and resulted in a downturn economically for the states. By extension, value-chain of services, products were also disrupted.

Also, construction, transportation, tourism and hoteling sector and services were impacted in the region of the country. The imposed curfew and state border closure affected construction activity outside of the affected areas as well due to difficulties in obtaining important inputs such as cement or other building materials. Also, there was a modest, but nationwide, decline in the construction activity as a result of domestic policies, and realities. In addition, the interstate

restriction of movement also limited ground transportation and this impacted the value-chain in agricultural sector leading to destruction of perishable farm products that were ready for shipment to other states. In addition, the grounding of inter-state movement in a bid to curb the spread of the pandemic negatively impacted other industries including the food and tourism sectors that contributed largely to the revenue of states in the south west region of the country.

Education

This sector like others was negatively affected by the pandemic as many institutions were closed for extended period in a bid to curb the spread of the virus. In fact, the most challenging response to Covid in south western, Nigeria was the closure of schools. This single action deprived millions of education personnel their means of income and reduced their overall well-being as well as depriving students from all forms of learning. The spread of the pandemic as perceived had a high human cost with virtually many households struggling to cope as costs continued to grow. These effects in some scenarios resulted to unemployment and underemployment and has continued to threaten the survival of many households, institutions and firms.

Also, it was indicated that school closures would result in an extended period of disrupted instruction, causing students to become disconnected from their studies, which would have the potential cost of reversing gains in learning results and outcomes. Besides the disruption of academic calendars, the closure of schools in south west Nigeria generated more issues. Specifically, the closure of schools on March 23, 2020 due to the pandemic in Lagos ended in-person learning which compelled schools and educational institutions to attempt other mediums to continuous learning. With this, educational centres resorted to online learning but many students in public schools and less expensive privately established schools struggled to access these new tools. Even as the government and some NGOs worked to provide educational

programs on TV, radio, and online for learners, an irregular power supply and limited access to smart phones and other internet-connected devices among poorer households limited the effectiveness of these initiatives. Even those families with smart phones often could not afford data for online connections. This situation exacerbated these inequalities in the educational system as alternative learning methods although effective remains problematic for less fortunate children. This was further reiterated as students from different Nigerian academic institutions revealed the reasons, they could not engage in academic activities at home were due to lack of online learning apps for a synchronous mode of learning, poverty, lack of internet connectivity, lack of digital literacy, lack of ICT teaching and learning devices such as computer desktops, projectors, screens, to engage students for immersive learning at homes.

The concern of education is never overrated for numerous reasons particularly as one in every five of the world's out-of-school children lives in Nigeria. There was also the need to evaluate the rate of drop out after the emergence of the pandemic and this dimension presented more interconnectedness with other effects. For instance, food insecurity which is a major deciding factor for school attendance was affected during the pandemic as food systems and value chain were disrupted. This was also coupled with the fact that food insecurity was increased during and after Covid thus leading to fewer children returning to school upon reopening of schools.

Mental Health

Truly, isolation of individuals during COVID-19 was a strategy adopted all over the world to curb the spread of the dreaded coronavirus. This attempt was aimed at reducing the rate of infection but there was no consideration on the possible consequences of the actions. In south west Nigeria, the negative effects of these measures remained tremendous on many fronts. Many

families in the region reported to experience a severe psychological effect that affected their mental health.

This was further reiterated that social disconnections put people especially older people at risk of depression and anxiety. In fact, it was vividly recorded that deaths only occurred during the lockdown thus giving the impression that the lockdown, isolation had a role to play in death of people too. Also, there are contentions that depression and anxiety were particularly intense during coronavirus related isolation. This is also attributed to the fact that residents in the south west region of Nigeria revealed that they had the pandemic on their mind at all times and they were imprisoned by the thoughts of not contacting the virus, thus creating more anxiety. Anxiety comes as the result of the uncertainty surrounding the period of time one is expected to be in isolation. In fact, some families reveal that they experienced changes in their sleep, changes to their immune system, endocrine, neurocognitive systems and alteration to their metabolism. In addition, the outbreak of coronavirus (COVID-19) was stressful for people, as fear and anxiety about the disease was overwhelming and caused strong emotion in adults and children. In furtherance to this, proximity to death also introduced other dynamics as the death rate emanating from the pandemic was close to home and the situation was exacerbated fear and tension on families and individuals.

Domestic Tension

The lockdown measures which were implemented to curb the spread of the virus, led to increased family tension, decreased interaction between family members, an increase in domestic chores and family expenses among others. For instance, family tension due to lockdown increased for a number of reasons including;

The lockdown has created a stressful environment for many families. This is due to financial uncertainty, job losses, and the fear of contracting the virus. This stress led to conflict and tension within families and it was often exacerbated with news of deaths flying across the media. With lockdowns, family members had no choice but to remain in closed settings and indoors thus forcing members to spend more time together than they normally would. Ideally, this situation should come with great advantage of bonding and spending quality time together, but the situation was not ideal but a forced and palpable one filled with tension and uncertainty about the future. For example, some studies reiterated that couples who were already experiencing conflict before the pandemic were more likely to report increased conflict during the pandemic. This situation resulted in gender-specific and domestic violence that were at best left reported because there was a “bigger” issue- the pandemic; at hand.

The lockdown has increased the workload for many families. This was because parents were now fully responsible for homeschooling their children, and in many situations, many parents were still working from home. This led to resentment and tension between family members. In fact, there are clear evidence that many women felt overwhelmed and stressed during the pandemic than ever. This was a result of juggling their jobs, caring for the home and still battling the anxiety that comes with the pandemic.

In addition to these factors, the lockdown has also made it difficult for families to access support and social services. In this regard, families had no opportunity to relate with extended relations for emotional and spiritual support as religious centres were shut or at best had its attendance rationed to control the spread of the pandemic. Also, family ties were temporarily severed as members could not travel interstate for visit either for special occasions or emotional support.

The lockdown has also made it difficult for families to attend worship and event centres. This is important for many families, as it is a way for them to connect with their community and to practice their faith. The inability to attend these events can be isolating for families, and it can also lead to a decrease in their social support networks. In fact, many homes and members missed out on special functions and engagements as many events had to be held virtually. The period of lockdown and eased restrictions witnessed the emergence of virtual weddings, christening of new born, seminars, live events and more.

Also, family members failed to freely interact with each other for fear of contacting the virus even during the lockdown. This was largely true especially for homes with many elderly members who already are at risk of contracting the virus. This can be difficult for families, especially those who are close-knit. It can also lead to feelings of isolation and loneliness. For example, one study found that children who were unable to see other relatives and friends during the pandemic were more likely to report feeling sad and lonely.

Research Questions Two: How has the Social Behaviour and Attitude of Nigerians Changed as a result of COVID-19?

Covid-19 led to the emergent deviant behaviours and strategies employed by people to stay alive in the face of the pandemic. However, many authors have classified these social behaviours, attitudes with many observations. The emergence of Covid-19 as led to many changes in the social behaviours and attitudes of Nigerians. One notable change in lifestyle that the pandemic era introduced was the total and general restriction of movement for a number of days. Specifically, the total lockdown in the south west region. Especially Lagos and Ogun State was between 30th of March to 30th of May, 2020. Travel, once an integral part of modern life, came to a grinding halt as the country implemented travel restrictions and border closures. Adhering to these guidelines meant canceling long-anticipated vacations, postponing family reunions, and

foregoing business trips. The travel industry, a cornerstone of the global economy, faced unprecedented challenges. Yet, individuals recognized the necessity of such measures in preventing the virus's cross-border transmission. The pandemic reframed the way people approached travel, encouraging them to explore their immediate surroundings and develop a deeper appreciation for local experiences. However, compliance with these directives was resisted by majority of the populace as the survival of over 85% of the nation's population rely on their daily economic activities, even the meager palliatives given by the government could only reach about 2% of the population, the bulk of the remaining 98% would inevitably starve to death if they were to abide by the social distancing measures. Faced with the grim choice of exposure to COVID-19 virus or hunger, most Nigerians choose to ignore social distancing measures in pursuit of their livelihood.

Another notable change with regard change in social attitude and behaviour is the social distancing option that was emphasized by Federal government. After the total lockdown, social distancing as a strategy aimed at reducing physical contact between people was also implemented to reduce the risk and spread of COVID-19 at the communal level. This measure meant that, at least, two meters in physical distance must be maintained between two individuals. This healthcare guideline was perhaps one of the most challenging aspects of the pandemic that reimagined how people interacted with one another. Social distancing, demanded a fundamental shift in behavior, as people had to forgo handshakes, hugs, and close conversations that had once been second nature. Adhering to this guideline required a conscious effort to recalibrate social norms and adapt to a new way of engaging with others. From markers on the floor of grocery stores indicating safe distances to creative approaches like "elbow bumps" replacing handshakes,

individuals found innovative ways to comply with social distancing while maintaining a sense of connection.

Also, another public health guideline issued by the government was the regular washing of hands. Hand hygiene, always important for disease prevention, took on renewed significance during the pandemic. Frequent and thorough hand washing with soap and water for at least 20 seconds became a ritual that transcended age, gender, and nationality. The act of washing hands transformed from a routine action into a symbolic gesture of safeguarding oneself and others. Hand sanitizers became ubiquitous, occupying spaces from entrances of supermarkets to the corners of workplaces. The act of sanitizing hands before entering a space or after touching surfaces became ingrained in daily life, serving as a constant reminder of the need to be vigilant in the fight against the virus. In this regard, studies support that regular hand washing with soaps and alcohol-based sanitizers help flattened the curve of the pandemic. This guideline was largely adhered to by many residents in the South western Nigeria, as over 94.7 percent were indicated to subscribe to washing of hands regularly. However, these guidelines further generated another set of issue with regards to access to water in many places where alcohol-based sanitizers may not be readily accessible or affordable in some cases. For instance, some people have indicated that availability of good water is not feasible and just small proportion indicating that they had access to water and soap.

One of the most visible signs of adherence to public health guidelines during the pandemic was the widespread adoption of face masks. As scientific evidence emerged highlighting the role of respiratory droplets in the transmission of the virus, governments and health organizations recommended mask-wearing in public spaces. The sight of individuals donning masks became a testament to the collective responsibility citizens felt toward protecting themselves and their

communities. From bustling urban centres to remote rural villages, people embraced this practice as a simple yet effective way to reduce the risk of infection. In south west Nigeria, mask-wearing was immediately accepted, seeing a notable rate of compliance and a major change in social attitude and behaviour. This change facilitated smoother adherence and paved the way for other preventive measures. However, many people in the south west region were reported to have different views on the use of nose-mask usage. For instance, over 59 percent of people indicated that they were not comfortable using nose-masks in public. It was also revealed that the use of nose-mask was related with the level of education especially knowledge on the pandemic.

As businesses, schools, and universities adapted to the pandemic, remote work and online learning became the new norm during the pandemic. Adhering to guidelines meant transforming living spaces into makeshift offices and classrooms, blurring the boundaries between personal and professional spheres. Parents juggled work commitments with homeschooling, highlighting the challenges and opportunities of this unprecedented situation. The shift to remote modalities showcased the adaptability of modern society and the determination of individuals to continue functioning despite the disruptions to social and communal existence. Adherence to this guideline underscored the commitment of both employers and employees to prioritize safety while maintaining productivity. This new way of living saw a surge in the use of video-conferencing technology to hold meetings, stages for weddings, family reunions, and even religious services, allowing people to connect while minimizing health risks; thus, becoming the most preferred option even after the lifting of the restrictions. Also, the restriction of movement and work from home policy drastically reduced road usage, air and noise pollution generated by the automobiles. Notably, this change in social behaviour and attitude remains in many quarters still date as many businesses, individuals and organizations still make use of the work-from

home policy as it reduces the cost of on-site operation and helps maintain a healthy work-life balance.

Another change in social attitude and behaviour in communal existence was the quarantine and isolation efforts of people in the south west region of Nigeria. This change saw that individuals who were exposed to the virus or tested positive faced the arduous task of adhering to quarantine and isolation guidelines. These measures, though challenging, were crucial to prevent further spread. People found themselves confined to their homes, cut off from physical contact with friends and family. Adhering to quarantine meant grappling with feelings of isolation and uncertainty. However, the sacrifice was motivated by a sense of responsibility toward the community's welfare. The concept of quarantine, which dates back to medieval times, was resurrected as a powerful tool to contain a modern-day pandemic, illustrating the enduring relevance of public health practices.

During the COVID-19 pandemic, adherence to public health guidelines varied across different communities and regions, but there was community support and solidarity which played a significant role in influencing people's behaviors and actions. In this regard, communities played a crucial role in disseminating accurate information and raising awareness about COVID-19.

Local leaders, organizations, and individuals took to various platforms, including social media, community meetings, and informational campaigns, to share information about preventive measures such as wearing masks, practicing social distancing, and washing hands regularly. This collective effort helped raise awareness and educate individuals about the importance of following public health guidelines. In addition, the concept of community support fostered a sense of mutual responsibility. People realized that by following the guidelines, they were not only protecting themselves but also safeguarding vulnerable members of their community, such

as the elderly or immune-compromised individuals. This sense of responsibility created a change in social behaviour and shared commitment to adhere to guidelines for the greater good.

Also, many communities established local initiatives to support those in need during lockdowns and quarantine periods. Volunteer groups formed to provide essentials like groceries and medications to individuals who were unable to leave their homes. This sense of community care highlighted the importance of looking out for one another, fostering a spirit of solidarity in the face of adversity. In addition, a change in social dynamics influenced adherence to public health guidelines. Communities prioritized collective well-being and this led people coming together during the pandemic.

With a holistic view and complete adherence to all health guidelines presented an important change the social behaviour and attitudes which was later reactionary than adaptive. The pandemic tested the resolves of people in South West Nigeria as people grappled with the pain of adhering to the turbulence of the COVID-19 pandemic. This was era was influenced by two main forces: the strains of economics and adjusting social attitudes. In the shadow of economic strain, the decisions individuals made became intricate threads woven into a larger societal fabric. The harsh realities of the pandemic brought forth financial uncertainties, casting a somber cloud over the horizon. Many people were faced with the agonizing choice between following guidelines and securing their livelihoods. Jobs dwindled, hours were slashed, and the pressure to prioritize economic survival could outweigh the urgency of public health. A poignant tug-of-war emerged, forcing some to tread the path of essential but high-risk jobs, while risking a subtle divergence from stringent guidelines. The stage was set for a narrative where resources like masks and sanitizers turned into coveted treasures, and even the basic act of isolation became a privilege, with the cost of income loss too steep for some to bear. Economic strain and attitude change,

seemingly disparate, were intertwined causing many to adjust socially to the new realities. The strains of economics determined choices made due to dwindling income, leading individuals to sway away from guidelines in pursuit of sustenance. However, the change in attitude continued with many failing to further comply with the regulations.

Research Questions 3: How has Covid-19 Pandemic affected the social interaction and relationship among Nigerians at the individual and community level?

The COVID-19 pandemic has had a profound impact on the social interaction and relationships among Nigerians at both the individual and community levels. Prior to the outbreak, Nigerians were known for their strong sense of community and their love for social gatherings and events. However, the pandemic has forced people to change the way they interact with each other, resulting in a profound shift in the dynamics of human relationships. With the imposition of social distancing measures and the pandemic's restrictions on large gatherings, Nigerians especially people residing in the south western Nigeria have had to adapt their social interactions and relationships in various ways. At the individual level, Nigerians experienced a sense of isolation and loneliness as social distancing measures required them to limit physical contact with family, friends, and colleagues. The inability to engage in their usual social activities and gatherings, such as attending weddings, religious ceremonies, or social events, deeply affected their overall well-being. Many individuals struggled to adapt to the new reality of limited face-to-face interactions, leading to increased feelings of anxiety, depression, and a general decline in mental health. Consequently, the pandemic forced residents in the south west Nigeria to find alternative means of maintaining social connections. Understanding the value of social interactions for mental and emotional well-being, Nigerians turned to technology as a means to bridge the gap caused by physical distancing. Virtual platforms, such as video calls, social media,

and instant messaging apps, became essential tools for maintaining relationships. These mediums provided a lifeline for people to connect with their loved ones and stay updated on each other's lives. Whether it was sharing video calls with family members abroad or organizing virtual hangouts with friends, Nigerians actively sought out ways to sustain their social connections in the midst of the pandemic.

The pandemic has also had a significant impact on relationships within households. With many Nigerians forced to work from home or experience job losses, family members have had to adjust to spending more time together under the same roof. This has presented both challenges and opportunities. On one hand, people have had the chance to strengthen family bonds and engage in activities together that they may not have had the time for previously. On the other hand, the increased proximity and stress associated with the pandemic have also led to conflicts within households.

At the community level, the pandemic has led to a shift in the way Nigerians view their neighbours and communities. With the imposition of lockdowns and other restrictions, people have had to rely on their immediate communities for support. This has led to a rise in community spirit, as people come together to support each other during these challenging times. However, it has also led to a rise in social tensions, as people compete for resources and struggle to cope with the economic impact of the pandemic. Moreover, the pandemic encouraged Nigerians to recognize the importance of community support and solidarity. As the nation grappled with the health crisis, communities rallied together to provide assistance and support to vulnerable individuals, such as the elderly and those in need. Acts of compassion not only strengthened individual relationships but also fostered a sense of unity within communities, highlighting the resilient spirit of Nigerians during challenging times.

While the pandemic brought individuals closer within their immediate circles, there were also instances where it strained relationships due to various factors. The stressors of lockdowns, financial constraints, and uncertainty about the future took a toll on individuals, leading to increased conflicts and tensions within households. Domestically, families faced the challenge of balancing work from home, childcare responsibilities, and limited personal space, creating a breeding ground for disagreements and strains on relationships. Additionally, relationships among co-workers were tested as remote work became the norm, with the lack of physical proximity and face-to-face interaction often resulting in miscommunication and a sense of disconnection.

Despite these challenges, the pandemic also presented an opportunity for Nigerians to rediscover the importance of nurturing relationships and prioritizing quality time with loved ones. Families, forced to spend more time together due to lockdowns and travel restrictions, found opportunities for bonding and strengthening their emotional connections. Parents became more involved in their children's education, engaging in home-based learning activities and creating memorable experiences within the confines of their homes. These newfound moments of togetherness highlighted the resilience of families and their ability to adapt in the face of adversity. Communities also found innovative ways to maintain social ties while adhering to safety guidelines. Local initiatives emerged, such as virtual community gatherings, online support groups, and initiatives focused on addressing mental health concerns. These platforms not only allowed Nigerians to connect with others facing similar challenges but also provided opportunities for collaboration and collective problem-solving. In fostering a sense of unity and support, communities were able to weather the storm of the pandemic together, emerging stronger and more connected.

The COVID-19 pandemic has had a transformative impact on social interaction and relationships among Nigerians at the individual and community level. While physical distancing measures initially led to a sense of isolation and loneliness, Nigerians rapidly adapted by leveraging technology to maintain social connections. The pandemic also highlighted the importance of community support and solidarity, with Nigerians coming together to provide assistance and emotional support to those in need. However, it is important to acknowledge that the pandemic has also imposed strains on relationships due to the various stresses and challenges it has brought forth. Nonetheless, through resilience and a rekindled focus on nurturing relationships, Nigerians have found opportunity in adversity, demonstrating their ability to forge stronger connections even in the face of unprecedented challenges.

Research Questions 4: What are the social norms and cultural practices adapted in the wake of the new realities brought about by COVID-19?

Amidst the unparalleled challenges presented by the COVID-19 pandemic, the South Western region in Nigeria has undergone a profound shift in its societal norms and cultural dynamics. This transformative journey reflects a society embracing change while preserving its heritage. A major change in the social and cultural norm in south west Nigeria is that which is linked to the concept of death. Unlike the developed countries where burials are usually conducted as private ceremonies, funerals in Africa, especially south west Nigeria are elaborate and are usually public ceremonies involving the entire members of families, friends and well-wishers. Religion and culture are usually the deciding factors when decisions are made on how the deceased should be buried but generally cremation is not commonly practiced in Africa. In South West Nigeria, funerals are organized essentially to mourn and celebrate the life of the deceased. These events

are very elaborate events, often the central life cycle events, unparalleled in cost and importance, for which families harness vast amounts of resources to host and lavish events for multitudes of people with ramifications well beyond the event. The number of people and class of people present during a funeral may be an indication of the character, financial status, and position in the community and how sociable the deceased was before death. Characteristically, these funeral ceremonies often take place during the weekends; Fridays and Saturdays to ensure the presence of mourners, well-wishers and elaborate events. Also, many deceased indigenes of the regions are often buried in their ancestral homes and this explains why some loved relatives that died in foreign nations are often flown back to the country to observe all funeral rites and process. However, the emergence of the pandemic caused a huge shift in the social norm and cultural practices of celebrating the dead. Specifically, the Pre- COVID-19 pandemic era are usually crowded from Thursdays as deceased relatives visits the mortuaries to make all necessary preparations to pick their deceased ones for burials usually scheduled for Fridays or Saturdays but the ban on mass gathering and funeral, alongside other health regulations during the period of lockdown significantly reduced the patronage and led to a huge reduction in the number of corpses released to the beavered families in most mortuaries. In fact, there were numerous social and cultural modifications and the pandemic led to a new way of reasoning and living. This is evident as burial ceremonies are now less elaborate due to the COVID-19 experience. Although, the new change may not be solely attributed to the pandemic but the era remained an eye-opener to many who appreciate the cost-cutting measures to cultural and traditional expenses that the pandemic offered. Despite lack of evidence regarding recent COVID-19 related deaths or illness, some people intentionally still shy away from large gatherings and celebrations especially when

the cause of death of the deceased is vague; and this validates the opinions that the fear of the pandemic is still high.

In addition, the change in societal norms and culture is extended to the sudden embrace of technology even by the not-too technologically inclined residents in the south west region of the country. The palpable fear of the pandemic as led to new ways of doing things thus causing a major shift from the traditional way of life. For instance, cultural rites and celebrations including weddings, christening, among other moments continued to be shared with relatives who attend virtually as against the in-person presence that was often demanded by the close relatives before the onset of the pandemic. The post COVID-19 era still has moments of large gatherings of celebration but there are fast-rising occasions of private functions and events holding during the week days as against the traditional weekends and large gatherings that brings close and distant relatives to feast in a specific location. This sudden shift is also extended to the professional aspect of lives as individuals are fast seeking professional roles that comes with the remote-work option with only occasional on-site presence. In fact, organizations are letting go off their offices as there are little or need for the large and vacant space due the shift in work culture. The change introduced by technology further caused a paradigm shift in education with the integration of e-learning and this democratized access to education even to the rural areas.

In another dimension, the cultural aspects which encompasses the food systems took a new dimension especially in the urban and cosmopolitan centres in the south region of the country. The emergence of COVID-19 affected families and individuals as food and agricultural value chain were disrupted. This situation largely affected the urban centres as access to market and other home supplies were cut-off with only the rural areas in the region basking in abundance of supplies as the supply network to the cities were cut off thus leading to shortened shelf life of

many agricultural produces. However, this sad experience of those in the city was not a general one as many home that had gardens with small stable supplies fared better than homes waiting on ease of restriction/lockdown to restock supplies. Notably, many homes have resulted in cultivating staple supplies including vegetables and fruits to cushion the effect of such reoccurrence in the future. This is evident as homes in the urban centres of the region with no spare or vacant portion of land continues to make use of farming sacks for gardens.

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Chapter Five

Conclusion

5.1 Summary of Findings

The study examined the global effect of covid-19 from a Nigerian social perspective. The findings of the study revealed that the social impact of COVID-19 is often grouped into major aspects namely health, economic, education, mental health and family and social tension. The study revealed that the health sector in South West Nigeria was severely strained by the COVID-19 pandemic. It also discovered that the region's already stretched healthcare infrastructure faced unprecedented pressure as cases surged. Hospital resources such as beds, personal protective equipment (PPE), and ventilators became scarce, affecting the quality of care for both COVID-19 patients and those with other health conditions. Also, medical professionals worked tirelessly to meet the growing demand, but resource shortages led to compromised healthcare services. The scarcity of PPE also put healthcare workers at higher risk of contracting the virus. The strain on the healthcare system affected not only COVID-19 patients but also individuals with other health needs, leading to delayed treatments and diagnoses. Additionally, the emotional toll on healthcare workers' well-being further exacerbated the challenges faced by the sector.

In addition, the study discovered that the pandemic had far-reaching economic consequences in Nigeria's South West region. Various sectors like manufacturing, transportation, tourism, and services suffered due to lockdowns and restrictions, causing job losses and economic decline. Many businesses, particularly in the informal sector, had to shut down, contributing to a rise in unemployment rates. Notably, the nation's heavy reliance on oil revenue left it vulnerable as oil prices plummeted, resulting in revenue shortfalls and the need to seek external funding. The

decline in remittances from abroad worsened economic conditions for many households, further straining livelihoods.

Furthermore, the study examined the impact of COVID-19 on education in south west Nigeria. The study observed that the closure of schools during the pandemic disrupted education in South West Nigeria. In addition, many educators lost their sources of income, while students were cut off from formal learning. Efforts were made to facilitate online education, but challenges such as limited access to technology and intermittent power supply hindered its effectiveness. This situation exacerbated educational inequalities, disproportionately affecting those with fewer resources. The closure of schools also led to dropouts, as economic hardships and food insecurity made attending school difficult for many families. Moreover, the pandemic revealed the fragile state of Nigeria's education system and underscored the importance of equitable access to quality education.

The examination of the mental health of residents in the regions also revealed that isolation measures imposed during the pandemic had profound effects on mental health. The study further indicated that families reported experiencing significant psychological distress, leading to anxiety, depression, and fear. The occurrence of deaths during lockdowns raised questions about the potential role of social isolation in such incidents. Anxiety was particularly intense during isolation due to uncertainty about its duration. Also, the emotional strain extended to physical health, with changes in sleep patterns, immune response, and other bodily functions. The fear and uncertainty associated with the pandemic amplified the toll on mental well-being, requiring attention and support. Furthermore, the study observed a pattern of domestic tension in households during with the pandemic. In detail, the lockdown measures implemented to contain the virus contributed to increased tension within families. Stress levels surged due to financial

uncertainty, job losses, and the constant fear of contracting the virus. Families were confined in close quarters, leading to both increased bonding and heightened conflict. Couples faced increased challenges, with pre-existing conflicts often exacerbated during the pandemic. The increased workload, including homeschooling and remote work, placed additional strains on families. The closure of religious and community events severed support networks and created feelings of isolation. These factors combined to intensify domestic tensions during the pandemic.

Also, the study revealed that the emergence of COVID-19 triggered a range of deviant behaviors and adaptive strategies among people in South West Nigeria, leading to shifts in social attitudes and behaviors. Notable changes included the implementation of total lockdowns and travel restrictions to curb the virus's spread. In addition, the travel industry faced unprecedented challenges as global movement came to a standstill. Despite the necessity of adhering to guidelines, a majority of Nigerians resisted due to economic pressures, choosing to prioritize their livelihoods over social distancing. Social distancing became a challenging aspect of the pandemic response, requiring individuals to recalibrate norms and find innovative ways to connect while maintaining physical distance. Hand hygiene gained renewed significance, with frequent hand washing and sanitizing becoming symbolic acts of safeguarding oneself and others. The adoption of face masks became a visual representation of collective responsibility, aiding in reducing infection risks. Also, remote work and online learning became the norm, thus blending personal and professional spaces. The study further reveals that quarantine and isolation efforts were crucial to prevent further spread but posed challenges of isolation and uncertainty. With this in view, the community support played a vital role in disseminating accurate information and fostering adherence to guidelines. Initiatives like local volunteer groups demonstrated a sense of solidarity and shared responsibility for the well-being of the community. By extension, the

pandemic forced a complex interplay between economic pressures and adjusting social attitudes, ultimately shaping individual choices and compliance with guidelines. Economic strains influenced decisions as individuals grappled with the choice between following guidelines and securing their livelihoods, leading to adaptations in social attitudes that sometimes diverged from stringent regulations.

Furthermore, the study reveals that the COVID-19 pandemic has deeply impacted social interactions and relationships among Nigerians, particularly in the southwestern region. Pre-pandemic, Nigerians were known for their strong sense of community and social engagement. However, the pandemic led to significant changes in these dynamics, as social distancing measures and restrictions on gatherings reshaped how people connect. Individuals experienced isolation, loneliness, and heightened mental health challenges due to limited physical contact with family and friends. Findings from this study revealed that, technology was largely adopted, as residents in the region used video calls, social media, and messaging apps to maintain connections. Within households, the pandemic altered family dynamics as more time was spent together. This brought both opportunities for bonding and challenges due to increased proximity and communities showed resilience by supporting one another during lockdowns, but competition for resources and economic strains also led to tensions.

Holistically, the study identifies that the pandemic brought about a profound transformation in the social norms and cultural practices of Nigeria's South Western region. For instance; traditionally, funerals in this area are often elaborate, public ceremonies involving families, friends, and communities, reflecting religious and cultural values. However, the pandemic disrupted these practices. Lockdowns and restrictions on mass gatherings led to fewer and less elaborate burial ceremonies. This change, although influenced by the pandemic, also highlighted

the cost-cutting benefits of reducing cultural and traditional expenses. In addition, the fear of the virus persists, thus influencing people to avoid large gatherings, and technology adoption has surged, with virtual participation becoming the norm even for cultural events. Also, work culture has shifted towards remote options, hence impacting the need for physical office spaces. The study also observed that disruptions in food supply chains affected urban centers, prompting some households to cultivate their own staple supplies.

5.2 Conclusion

The south western region of Nigeria, like other regions of the continent was not isolated from the effect of the pandemic. Notably, the issues the pandemic generated are multi-dimensional and has changed the way, customs and even manner of existence in the region.

First, the pandemic has led to substantial challenges in multiple domains, including health, economy, education, mental health, and family dynamics. The healthcare sector in South West Nigeria faced intense strain, with limited resources affecting the quality-of-care patients. This strain, combined with resource shortages and the heightened emotional toll on healthcare workers, underscored the fragility of the healthcare system. Moreover, the economic repercussions of the pandemic were profound and best still lingering, with various sectors suffering job losses and economic decline, especially in the informal sector. Also, the impact was largely felt in the education sector as school closure affected both educators and students, prompting the need to shift to alternative learning platforms that many educational centres in the region lacked. Similarly, the toll of the pandemic exerted more pressure on the mental health and well-being thus affecting the psychological balance of many.

Furthermore, the research highlighted shifts in social attitudes and behaviors due to the pandemic. While guidelines like total lockdowns were implemented to curb the virus, economic pressures

often led Nigerians to prioritize livelihoods over social distancing. The study verified that adapting to guidelines posed challenges, leading to changes in personal and professional spaces, like remote work and online learning. In addition, the community support played a crucial role in disseminating accurate information and fostering compliance. Additionally, the pandemic altered social interactions and relationships, with technology playing a pivotal role in maintaining connections. However, the lack of physical contact led to feelings of isolation and loneliness.

5.3 Recommendations

Based on the comprehensive examination of the social impact of the COVID-19 pandemic in Nigeria, particularly in the South West region, it is important that the economic, health and social infrastructure be improved to better position the region and make it resilient in the face of a pandemic. Specifically, the study recommends that the policy recommendations should:

1. Strengthen healthcare infrastructure as immediate and sustained investments are required to bolster the healthcare system in the South West region. This includes increasing hospital bed capacity, stockpiling essential medical supplies, and expanding ventilator availability to ensure the healthcare system can effectively handle surges in patient demand during future health crises.
2. Enhance healthcare worker support because prioritizing the well-being of healthcare professionals by providing comprehensive mental health support and ensuring adequate access to personal protective equipment (PPE). Initiatives to alleviate the strain on healthcare workers, such as offering flexible schedules and incentivizing their dedication, should be explored.
3. Diversify economic sectors to promote economic diversification by investing in non-oil sectors to reduce vulnerability to fluctuations in global oil prices which will spill to other

sectors of the economy. Encourage the growth of industries such as technology, agriculture, and manufacturing to create job opportunities and contribute to economic stability.

4. Offer social safety nets to establish programs that will mitigate the economic impact on vulnerable populations. These programs should provide financial assistance, food support, and access to healthcare to protect citizens during times of economic uncertainty.
5. Provide equitable access to education by investing in digital infrastructure and technology for remote learning. Additionally, provide targeted support to students from disadvantaged backgrounds to bridge the educational gap that can arise from school closures due to pandemic in the future.
6. Provide mental Health Support and programs that addresses the psychological impact of a pandemic and economic shock. This includes providing accessible and affordable mental health services, promoting mental health awareness, and integrating mental health education into school curricula.
7. Create resilient Food Systems by Investing in local food production and supply chains to enhance food security, particularly in urban centers. This will be in addition, to encourage urban gardening and farming initiatives to empower households to grow their own staple supplies.

5.4 Contribution to Knowledge

This study makes a substantial contribution to the existing body of knowledge by offering a comprehensive analysis of the social impact of the COVID-19 pandemic in Nigeria's South West region. Through an interdisciplinary approach that draws upon insights from public health, economics, education, psychology, and cultural studies, this research sheds light on the intricate

and interconnected challenges that emerged in the wake of the pandemic. By systematically dissecting the major dimensions of the pandemic's social ramifications, namely health, economics, education, mental health, family dynamics, and social attitudes, the study provides a holistic understanding of the profound transformations experienced by communities in the region.

Furthermore, this research introduces a policy recommendations that are grounded in the empirical findings, addressing both short-term mitigation measures and long-term resilience-building strategies. The identification of key interventions, such as strengthening healthcare infrastructure, enhancing mental health support, promoting economic diversification, and fostering community networks, contributes valuable insights to policymakers, practitioners, and scholars. The study's emphasis on the role of technology as an enabler for remote work, digital education, and virtual social engagement adds novel perspectives to the discourse on technological adaptation during crises. Ultimately, this research contributes to the broader academic discourse by enriching our understanding of the intricate interplay between health, economics, education, mental well-being, and cultural practices in the face of a global pandemic.

5.5 Suggested Areas for Further Study

Exploring the intricate ramifications of the COVID-19 pandemic in Nigeria's South West region has unveiled a range of pressing research avenues that warrant further investigation.

First, the long-term healthcare system resilience remains important to strengthen the preparedness and resilience of the healthcare system. Future research could examine how the pandemic-induced strain on healthcare resources has spurred innovative approaches to bolster healthcare infrastructure, optimize resource allocation, and enhance collaboration between public and private healthcare sectors. Additionally, investigations into the long-term mental health

impacts on healthcare workers, along with the effectiveness of support interventions, can shed light on strategies to safeguard healthcare professionals' well-being during protracted crises.

Also, another dimension worthy of investigating is the socioeconomic equity and digital inclusion. Pandemics further deepens obvious societal imbalance and a deeper exploration of the pandemic's impact on socioeconomic disparities and digital inclusion is warranted. Further research can focus on identifying strategies to bridge the digital divide and ensure equitable access to online education, remote work opportunities, and essential services for underserved communities. Examining the efficacy of social safety net programs in mitigating economic hardships among vulnerable populations, as well as the potential long-term effects of economic diversification efforts, could provide valuable insights for policymakers.

In conclusion, examining the cultural transformation and adaptation strategies that often result in shifts in cultural norms and practices can offer insights into the evolving dynamics of society. In this regard, research might delve into the post-pandemic persistence of virtual engagement for cultural events, exploring its impact on community cohesion and connection. Additionally, examining the changing paradigms of work culture and its influence on urban development, transportation, and office space utilization could provide a comprehensive understanding of the ongoing transformation in societal norms.

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