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Research Article

Assessing the Experiences of Inhabitants of Ndama Road, Foya City, with COVID-19 from March-December 2020

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Abstract

This research titled "Experiences of inhabitant of Ndama Road, Foya City, Foya District with COVID-19 from March to December 2020" aimed to spot challenges faced by inhabitants as a result of COVID-19, to assess inhabitants' views on the methods of prevention of COVID-19, to determine the level of compliance of inhabitant with WHO guideline for prevention of COVID-19. Using a quantitative method, data was collected and analyzed. 738 participants were selected using probably sampling method, participants were selected randomly to have a true representation of the population. Participants collected and filled out questionnaires. The study finding showed that 27% of the respondents experienced reduction in their monthly salary, 41% experiences reduction in their business profits. 14% experiences reduction in their farm products. 18% experience reduction of other income from other family members. The finding also showcases that many social gatherings such as schools, religious centers, cinema and video center were closed. 46% of the respondents strongly agree to the WHO method of prevention and 27% agreed WHO method of prevention. A Total of 61% of the respondents' use the WHO method of prevention. Base on the findings the researcher recommended that there should be provision of socials activities to reduce the stress posed by COVID-19, loans to entrepreneurs to help them recover their loss, provide accelerated learning for students to help enhance their growth and extra curriculum to help mitigate the stress, depression and frustration posed by COVID-19, The findings showed that, there should be more awareness about the method of prevention of the disease, and design better strategy for future pandemic.

Keywords

COVID-19, Pandemic, Prevention, Inhabitant, Quarantine, Mitigate, Disease, Epidemic

1. Introduction

1.1. Background

COVID-19 is a severe disease that was discovered in Wuhan, Republic of China. COVID-19 disease claimed many lives and lead to the relocation of many occupants of Wuhan city. Some occupants even flew with signs and symptoms of the disease leading to the prompt spread of the disease in China, which serve as a significant spread, leading to a pandemic [8]. Immediately the WHO declared the disease as PHEIC [8]. The World Health Organization (WHO) pronounced an official name for the disease that is causing the 2019 novel Corona virus outbreak. The coined name: Corona virus disease 2019, shortened as COVID-19 [10], "CO" represent Corona "VI" represent virus and "D" for disease (Ciotti et al., 2020) [1]. Formerly this disease was referred to as

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"2019 novel corona Virus or "2019-nCoV" [21]. The infection is caused by a lately Corona Virus first recognized in Wuhan, China, in December 2019 [10]. Most of those who had COVID-19 have mild symptoms; COVID-19 can also cause severe diseases and even lead to death. Corona viruses belong to a large family of viruses that are common in people and many different species of animals, including camels, cattle, cats, and bats [14].

There are many types of human Corona Viruses, COVID-19 is a new disease caused by a new Corona virus that has not previously been seen in humans. The two previous corona virus that affected people were Middle East Respiratory Syndrome (MERSCoV) and, severe acute respiratory syndrome (SARS-CoV) [13]. AS of February 28, 2020, there were 80,000 confirmed cases reported worldwide [9]. This was done through proper assessment and effective case reporting system. These two viruses have their origin in bats [10]. On March 11, 2020, World Health Organization (WHO) released a report declaring the fresh Corona Virus (COVID-19) a pandemic, calling it a Public Health Emergency of International Concern [25]. The pandemic posed serious threat to the lifestyle of many environments. This leaded to changes in the lifestyle of people. Many cases reported across various continents; Africa as a continent reported the least number of cases and deaths. It was reported that in the United States 4.3 million people were infected with SARS-COV-2 and more than 290,000 deaths [23].

On Monday, March 16, 2020, Africa oldest independent Nation, Liberia recorded it first COVID-19 case [5]. 31 confirmed cases of COVID-19 were recorded in Liberia as of April 2020 [17].

Many public gathering places were closed, and the Nation was declared a state of Emergency. The virus continues to spread across other countries. The government continued to take measures that could help stop the virus from spreading. This posed serious threat to the economic, social and political stability to the country and its citizens [14]. This research in due diligence is conducted solemnly to determine "The Experience of inhabitant of Ndama Road Community, Foya City with COVID19."

COVID-19 created a Global Health Pandemic (GHP) thus becoming a Public Health Emergency of international Concern/PHEIC. It shaped the world economic, social and posed psychological challenges among individual living in an environment affected with COVID-19. When the Spread of the disease was at its peak among countries and continents the entire world went on a shut-down, this leads to drastic decrease in the world economy. The earth inhabitant could not undertake, normal activities, thus creating depression. The World Health Organization (WHO), CDC, epidemiologist, Laboratory Scientists, statisticians and researchers conducted series of experiment and from previous pandemic experiences crafted methods of prevention of COVID-19 due to myth and many other believe about the disease many countries did not working in accordance with these preventive measures as expected. This experience varies from region to region. With these challenges and the different view about the preventive measures and the level of compliance among affected communities, this research is conduct among Inhabitants of Ndama road, Foya city, Foya District to assess experiences with COVID-19 with specific aim and objectives and research question.

COVID-19 became a global health emergency problem. The findings are very much significant to the Foya District Health Team, County Health Team, Ministry of Health and World Health Organization (WHO) to help combat epidemic diseases and it effects. It enriches the above organizations regarding the challenges faced by inhabitants', their views on the methods of prevention and the way they comply with the methods of prevention.

1.2. Literature Review

Covid-19 posed a grave economic, social and psychological dispute to affected communities across the world. It became the world very big ordeal and global problem [18]. This research is posted on giving information on challenges faced by inhabitant because of COVID-19, inhabitants' views on the methods of prevention of COVID 19 and their level of compliance with the WHO protocol for the prevention of the disease.

COVID-19 did not just pose health emergency but also financial emergency. The economy situation, show the supreme down fall the world has ever seen for the past decades [11]. COVID-19 made many businesses counting their expenditure and government lose a lot of proceeds. Lock-down procedures made many businesses to fall. Liberia faced it fall in GDP to 1.7%, this was a serious economic downgrade [17]. Production of good and products declined, businesses closed, and production companies were closed, many employees' salaries were cut down to 50%, the importation and exportation of commodities came to a standstill [17]. Major economic agencies were closed. This posed a serious drought to the Liberia economy. Most institutions in an out of Liberia moved from a normal face to face learning method to an online method [2]. This created a high economic impact, investing in ICT infrastructure posed a very high economic burden. Institutions must recruit an ICT professional and train their workers on how to use these platforms [2].

Corona Virus Disease (COVID-19) plague created severe health effect and ante-social development, in poor marked variation and weakened country with growing poverty and extreme poverty [17]. It weakens social-cohesion, and expression of social discontent. The shift in school activities created disturbance in most social activities, students could not meet in person because aside from online [2]. Quarantine and physical distance measures, which were needed to stop the rapid spread of the disease and save lives, are leading to joblessness and reducing personal and household labor income [17]. The social distance measure primarily affecting

the broad strata of social life of people. Most countries halted non-essential services to maintain social distancing.

Preventive measures include physical or social distancing, quarantining, ventilation of indoor spaces, covering cough and when sneezing, hand washing and keeping hands away from the face and the use of face mask in communities to help mitigate it source [12]. The use of face masks or covering has been recommended in public setting to minimize the risk of transmission, this high recommended for places where there is high transmission of the disease [12]. Social distance, simply mean staying out of congregate setting as much as possible. By reducing close contact with people, it reduces chances of getting the disease [3]. It is recommended that social distance is vital for everyone during the epidemic especially when transmission is very high. Self-quarantine and Mandatory quarantine are very important in preventing the spread of the disease [12]. Result suggests that quarantine is the most effective and cost less, when it started early. In combination with other measures have great impact. Always cover your mouth and nose with tissue when you cough or sneeze or use the inside of your elbow [12]. This has proven to be very much effective. It is good to throw used tissues in trash and wash your hands with soap and water [3].

As a result of the emergency of corona virus disease 2019, outbreak a situation of, Socio-economic crisis and deep psychological agony rapidly occurred worldwide [20]. In a generation where people will love to move from place to place, travel to see family and loved ones. This can often lead to a great frustration and uncertainty, pervasive and anxiety boredom and loneliness because of being isolated [20].

The world is a place where people move around, communicate and do many things in common. Quarantine and some other public health measures have posed a serious threat and a high occurrence of subjects with psychological symptoms, emotional disturbances depression, stress, mood alterations and irritability insomnia, post-traumatic stress symptoms anger and emotional exhaustion [19]. Psychological impact in the general population have posed specific and uncontrolled fears related to infection, pervasive anxiety, frustration and boredom, loneliness has been hypothesized to impair subjective well-being and quality of life and enhance social life [19].

People with COVID-19 have an open collection of symptoms some from mild symptom to severe illness [22]. Some of these symptoms are fever or chill, cough, shortness of breath or difficulty in breathing, fatigue, muscle or body ache, headache, new loss of taste, sore throat, congestion, running nose, nausea or vomiting, and diarrhea [22]. Older adults and people who have severe underlying medical conditions like heart and lung disease or diabetes seem to be at high risk for developing more serious complicated from COVID 19 illness.

A spectrum of medical therapies to treat COVID-19 is growing and evolving rapidly. Many doctors around the world started treating every COVID-19 patient with Antiviral Medication [6]. Most patients have also been treated with anticoagulation drugs. CDC and many other scientists around the world started working on vaccine to combat the disease. Vaccines for the treatment of COVID-19 are widely spread around the world. In most cases you do not need appointments, some of the vaccines are. Pfizer-Bio Tech, this vaccine is given to people 12 years and above and individuals need 2 shot 21 days apart [6, 7]. Moderna, given to people 17 years and older, 2 shots four weeks apart [24]. Johnson and Johnson given to 17 years and older one shot 2 weeks after shot one (Livingston et al., 2021) [15].

Public health intervention and non-pharmaceutical measurement were successful in decreasing the diffusion of COVID-19. Travel restriction border measures, quarantine of travelers arriving from affected countries, city lockdowns, restriction of mass gathering, isolation and quarantine of confirmed cases and close contacts, social distance measures, compulsory mask-up, contact tracing and testing, school closures and personal protective equipment use among health workers were effective in extenuating the spread of COVID-19 [4].

There are several myths about the COVID-19, which range from its prevention and treatment. Some say: You can protect yourself from COVID-19 by injecting, swallowing, bathing in or rubbing onto your body bleach, disinfectant or rubbing alcohol. This is not true. COVID-19 is caused by a virus, and disinfectant does not kill virus. Some says the Corona virus was deliberately created and released. COVID -19 vaccines alter DNA. The vaccine causes infertility. Hard immunity will slow the spread. I have had COVID-19, so I am immune. Drinking hot water rinses the COVID 19 from the throat. Vaccine makes you sick [16].

2. Research Hypothesis

The null hypothesis of this research is that; COVID-19 had no significant effect on the economic, social, and psychological well-being of inhabitants and there is no association between compliance with WHO guideline and community experiences.

The alternate hypothesis is that inhabitants of Ndama Road, Foya City, experience significant economic, social and psychological challenges due to COVID-19, and their level of compliance with WHO preventive influenced their experiences.

This hypothesis was tested at a 95% confidence interval.

3. Data and Methods

3.1. Study Area

Foya is the district head quarter of Foya District, Lofa County, Republic of Liberia. It is spanning at 3,854 square miles. It's 450 km (280 miles) from Monrovia, the national capital of the Republic of Liberia. The major language spoken

in Foya is Kissi. Inhabitants depend on farming and trading for survival. 80% of the population speaks English as opposed to Kissi.

Foya is a populated district, and it is 2 hrs away from Lofa county capital Voinjama city. Liberia is bounded by three countries, Guinea to the north, Ivory Coast to the east, Sierra Leone to the west and the Atlantic Ocean in the southwest.

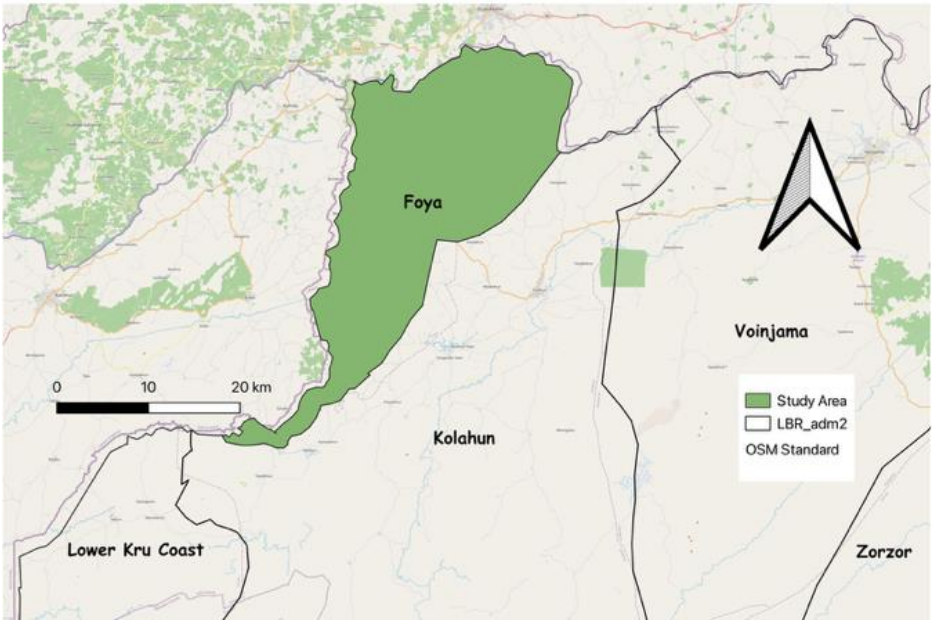

Figure 1. *Map of Foya, showing neighboring districts.*

3.2. Research Instrument

Questionnaires were used to gather data about the research topic about inhabitants of Ndama Road in Foya City during COVID-19. The questionnaire had three parts: first, an introduction explaining what the study was about. Second, about their age, education, and job. Third, participants were asked questions about the research goals, like what problems they faced because of COVID-19, what they thought about the World Health Organization's prevention methods, and how well they followed the rules. Most questions were multiple choice to keep answers consistent and easy to analyze. The questioner was sent to an ethical review board for approval. It was approved taking into consideration ethical standards. A pilot study was conducted using 20 participants from the research setting. The questionnaire design was chosen because it provides information in systematic manner, this information helps in meeting the research goal. Participants randomly from different groups to make sure everyone had an equal shot at being included. Men, women and youth at Ndama Road community between the age 18 years and above. 738 individuals were selected. The Cochran's formula was used to determine the sample size. With a confidence Level of 95%.

$$n_0 = \frac{Z^2 .p.(1-p)}{E^2}$$

Where:

n_0 = Initial Sample Size

Z = Z-Score for confidence Level (1.96)

p = Estimated Proportion of the population (0.5)

E = argin of Error (0.05)

$$n_0 = \frac{1.96^2 .0.5.(1-0.05)}{0.05^2} = \frac{3.92.0.5.0.95}{0.0025} = \frac{1.862}{0.0025} = 744.8$$

Apply FPC

In population of 78,000

$$n = \frac{no}{1+\frac{no-1}{N}}$$

$$n = \frac{no}{1+\frac{no-1}{N}} = \frac{744.8}{1+\frac{744.8-1}{78,000}} = \frac{744.8}{1+\frac{743.8}{78,000}} = \frac{744.8}{1.0095} = 737.764 \approx 738.$$

3.3. Data Collection

The researcher collected field data starting on March 8, 2020, and ended December 19, 2020. This was done first by obtaining official permission from the community leadership and relevant health authorities to gain access and trust within the study area. After getting approval, the researcher employed trained research assistants to help in distributing and retrieving the structured questionnaires. The stratified random sampling method employed applied by dividing the commu-

nity into two strata, male and female. 338 females within the age group 18 and above, and 400 males within the age group 18 and above, among the females, 200 were employed and 138 were unemployed and among the males, 220 were employed and 180 were unemployed. Questionnaires were administered face-to-face to participants in the different strata, especially since literacy levels varied between the strata, with the help of the research assistants available to read out and explain questions when necessary while ensuring neutrality and avoiding bias. A test to enhance participation, respondents were assured of confidentiality, and informed consent was obtained before data collection begins. By using the principle of beneficent, justice and respect for person, the researcher met ethical standards. To meet this principle, the research proposal was sent to an ethical review community for confirmation regarding ethical principles. The committee review and approved the proposal and the questions were sent to the committee for approval and, the questionnaires met ethical standards. Data was collected systematically over a set period, with daily checks to ensure completeness and accuracy of filled questionnaires. In cases where participants were unwilling or unavailable, follow-up visits were conducted to maximize response rates.

3.4. Analysis

Employing a quantitative data analysis allowed better summary of information, identifying trend and directly linking the finding of the study, aim and objectives. Questionnaires were organized into frequency tables, percentages, pie charts, and histograms to make the results easy to interpret and understand. In addition, the Statistical Package for the Social Sciences (SPSS) was used to describe and analyzed the data in figure and table. Microsoft Excel were used to process, analyze, and present the data as well.

4. Result and Discussion

4.1. Income Reduction Due to COVID-19

Table 1 and Figure 2 clearly demonstrate income reduction according to the research field data. 200 of the individuals experienced reduction in salary which account for 27%. 300 of the respondents experienced reduction in business profit, which account for 41%. 107 individuals experienced reduction in farm product sales which account for 14%. 131 of the individuals experienced reduction in incentives from family members which account for 18%.

Table 1. *Income Reduction Due to COVID-19.*

Variable	Frequency	Percentage (%)
Salary	200	27
Business Profit	300	41
Selling of Farm Products	107	14
Others (Relatives Help)	131	18
Total	738	100

Source: Research Field Data 2020

Descriptive Data Analysis.

Mean	184.5
Standard Error	43.2521676
Median	165.5
Mode	#N/A
Standard Deviation	86.5043352
Sample Variance	7483
Kurtosis	-0.2674878
Skewness	0.95359279
Range	193
Minimum	107
Maximum	300
Sum	738
Count	4
Confidence Level (95.0%)	137.647701

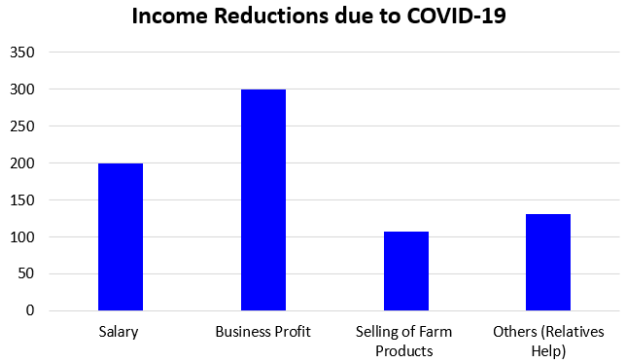

Figure 2. *Distribution of Income Reduction due to COVID-19.*

4.2. Negative Impact of Respondent Daily Activities

Table 2 and Figure 3 illustrates how COVID-19 created negative impact on inhabitant at the research setting, these social declining created a lot of psychological effect. Ac-

cording to data collected, 401 of the respondents experienced closure on religious activities which account for 54%. 102 respondents experienced closure of cinemas to watch football games which account for 14%. 103 respondents experienced closure of night club activities which accounts for 14%. 132 experienced closures of schools which account for 18%.

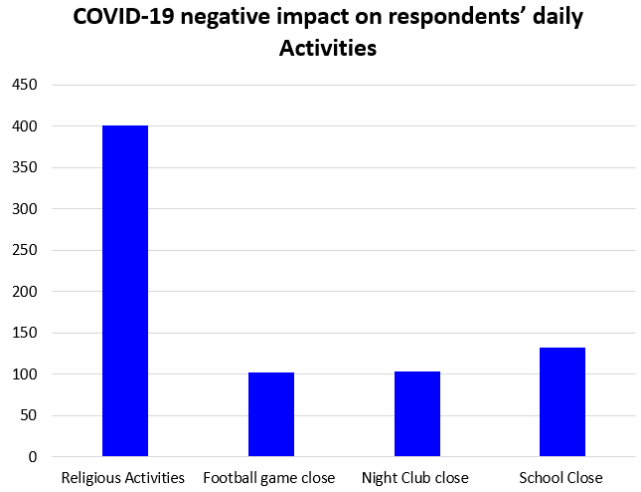

Figure 3. *Distribution of COVID-19 negative impact on respondents' daily Activities.*

Table 2. *COVID-19 negative impact on respondents' daily Activities.*

Variable	Frequency	Percentage (%)
Religious Activities	401	54
Football game close	102	14
Night Club close	103	14
School Close	132	18
Total	738	100

Source: Research Field Data 2020

Descriptive Data Analysis.

Mean	184.5
Standard Error	72.5011494
Median	117.5
Mode	#N/A
Standard Deviation	145.002299
Sample Variance	21025.6667
Kurtosis	3.80498417
Skewness	1.94620125
Range	299
Minimum	102
Maximum	401
Sum	738
Count	4
Confidence Level (95.0%)	230.731015

4.3. Views of Respondents on WHO Method of Prevention of COVID-19

Table 3 and Figure 4 illustrate respondent's views on WHO methods of prevention of COVID-19. 340 respondents strongly agree which accounts for 46%. 200 of the respondents agree which account for 27%. 140 of the respondents strongly disagree which account for 19% and 58 of the respondents disagree which account for 8%.

Table 3. *Respondents' View on WHO method of prevention of COVID -19.*

Variable	Frequency	Percentage (%)
Strong Agree	340	46
Agree	200	27
Strongly Disagree	140	19
Disagree	58	8
Total	738	100

Source: Research Field Data 2020

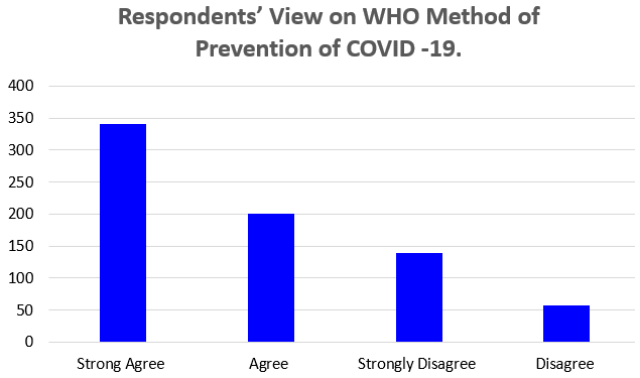

Figure 4. *Distribution of Respondents' View on WHO method of prevention of COVID -19.*

Descriptive Statistics.

Mean	184.5
Standard Error	59.4439512
Median	170
Mode	#N/A
Standard Deviation	118.887902
Sample Variance	14134.3333
Kurtosis	0.59447446
Skewness	0.65513996
Range	282
Minimum	58

Maximum	340
Sum	738
Count	4
Confidence Level (95.0%)	189.177183

4.4. Application of World Health Organization (WHO) Methods of Prevention of COVID-19

Table 4 and Figure 5 illustrates application of World Health Organization method of prevention of COVID-19. According to data collected, 450 respondents apply WHO methods of prevention which account for 61%. 288 of the respondents indicated that they don't apply WHO method of prevention which accounts for 39%.

Table 4. *Respondents' Application of WHO method of Prevention.*

Variable	Frequency	Percentage (%)
Apply	450	61
Don't Apply	288	39
Total	738	100

Source: Research Field Data 2020

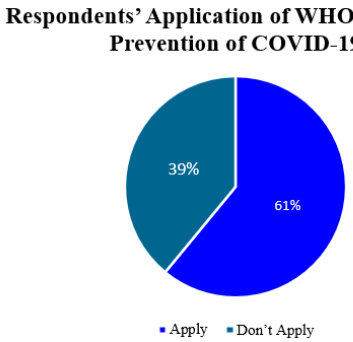

Figure 5. *Distribution of Respondents' application of WHO method of Prevention of COVID-19.*

Descriptive Statistics.

Mean	369
Standard Error	81
Median	369
Mode	#N/A
Standard Deviation	114.551299
Sample Variance	13122
Kurtosis	#DIV/0!
Skewness	#DIV/0!
Range	162
Minimum	288
Maximum	450
Sum	738
Count	2
Confidence Level (95.0%)	1029.20258

4.5. Result

Table 1 and Figure 2 illustrate respondents' income reduction, account to the data collected. 200 of the individuals experienced reduction in salary which account for 27%. 300 of the respondents experienced reduction in business profit, which account for 41%. 107 individuals experienced reduction in farm product sales which account for 14%. 131 of the individuals experienced reduction in incentives from family members which account for 18%.

Table 2 and Figure 3 illustrates how COVID-19 created negative impact on inhabitant at the research setting, these social declining created a lot of psychological effect. According to data collected, 401 of the respondents experienced closure on religious activities which account for 54%. 102 respondents experienced closure of cinemas to watch football games which account for 14%. 103 respondents experienced closure of night club activities which accounts for 14%. 132 experienced closures of schools which account for 18%.

Table 3 and Figure 4 illustrate respondent's views on WHO methods of prevention of COVID-19. 340 respondents strongly agree which accounts for 46%. 200 of the respondents agree which account for 27%. 140 of the respondents strongly disagree which account for 19% and 58 of the respondents disagree which account for 8%

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5. Discussions of Results

The findings from Table 1 and Figure 2 indicate that COVID-19 had a significant economic impact on the inhabitants of Ndama Road, Foya City. A large portion of respondents (41%) reported a reduction in business profits, showing that self-employed and small business owners were heavily affected by lockdowns and restrictions. Due to the lockdown imposed, with the sole aim of mitigating the Virus, exportation of commodities reduced drastically. This reduction of exportation and importation of products saw decline in trade. Thus, reducing sale and significantly reducing business profits. Additionally, 27% of respondents experienced a decrease in their monthly salaries, reflecting the struggles of employed individuals whose income was cut due to reduced work opportunities. Farmers were not spared either, as 14% of respondents recorded losses in farm product sales, while 18% reported a decline in financial support from relatives. Collectively, these findings highlight the diverse ways in which the

pandemic disrupted sources of livelihood and heightened economic vulnerability within the community. In the research setting and Africa significant amount of the population depend on business.

In terms of social and psychological effects, results from Table 2 and Figure 3 show that COVID-19 restrictions had a profound negative impact on community life. More than half of the respondents (54%) experienced disruption in religious activities due to closure of churches and mosques, which likely affected their spiritual and social well-being. Recreational activities were also restricted, with 14% reporting the closure of cinemas for football viewing and another 14% noting the closure of nightclubs. Education was equally disrupted, as 18% of respondents experienced school closures, interrupting students' learning and development. These findings demonstrate how restrictions on social gatherings not only limited communal interactions but also contributed to stress, frustration, and psychological strain.

Furthermore, Table 3 and Figure 4 reveal the respondents' perceptions of WHO's methods of COVID-19 prevention. The data show that a majority of the inhabitants held positive views of these measures, with 46% strongly agreeing and 27% agreeing that they were effective. However, a notable minority—19% strongly disagreed and 8% disagreed—expressed skepticism or mistrust regarding the guidelines. This mixed perception suggests that while public health campaigns were largely successful in promoting acceptance of preventive measures, a segment of the community remained unconvinced, possibly due to myths, misinformation, or cultural beliefs surrounding the pandemic.

Finally, Table 4 and Figure 5 highlight the actual application of WHO prevention methods within the community. The majority of respondents (61%) reported that they applied the recommended measures, such as mask-wearing, hand washing, and social distancing, indicating relatively strong compliance. However, 39% admitted that they did not apply these measures, suggesting gaps in adherence that could have posed risks for community transmission. This finding underscores the importance of continuous health education and community engagement to ensure not only awareness but also consistent behavioral change during pandemics.

6. Conclusion

The findings of this study clearly demonstrate that COVID-19 had profound and far-reaching effects on the inhabitants of Ndama Road, Foya City, affecting their economic stability, social lives, psychological well-being, and adherence to public health guidelines. Economically, the pandemic reduced salaries, business profits, farm sales, and external support, thereby undermining the livelihood of households and increasing financial vulnerability. Socially, the closure of schools, religious centers, nightclubs, and recreational venues disrupted daily routines, limited opportunities for interaction, and created conditions that contributed to stress, anxiety, and frustration. These social restrictions not only weakened communal bonds but also highlighted the psychological toll of isolation and reduced access to normal social support systems.

At the same time, the study reveals that while a majority of inhabitants viewed WHO preventive methods positively and demonstrated substantial compliance, a significant minority remained skeptical or failed to apply these measures. This suggests that although public health messaging reached a large part of the population, cultural perceptions, myths, and misinformation may have reduced adherence among others. The relatively high level of compliance, however, played a crucial role in reducing the spread of the virus in the community, showing the importance of sustained community engagement, awareness campaigns, and health education in pandemic response.

In conclusion, COVID-19 was not only a health crisis but also an economic, social, and psychological emergency for the people of Ndama Road, Foya City. The study highlights the urgent need for holistic response strategies that go beyond medical interventions to include economic support systems, social protection measures, psychosocial care, and community-based education programs. These measures are vital not only for addressing the immediate effects of the pandemic but also for strengthening resilience against future public health emergencies. By learning from these experiences, policymakers, health authorities, and community leaders can design more effective strategies that balance disease prevention with the preservation of livelihoods and social well-being.

Abbreviations

COVID-19	Coronavirus Disease 2019
WHO	World Health Organization
PHEIC	Public Health Emergency of International Concern
nCoV	Novel Coronavirus
SARS-CoV	Severe Acute Respiratory Syndrome Coronavirus
MERS-CoV	Middle East Respiratory Syndrome Coronavirus
CDC	Centers for Disease Control and Prevention
GHP	Global Health Pandemic
ICT	Information and Communication Technology
SPSS	Statistical Package for the Social Sciences
FPC	Finite Population Correction

Author Contributions

Sahr Gbeinda is the sole author. The author read and ap-

proved the final manuscript.

Conflicts of Interest

The author declares no conflicts of interest.

References

[1] Ciotti, M., Ciccozzi, M., Terrinoni, A., Jiang, W.-C., Wang, C.-B., Bernardini, S., 2020. The COVID-19 pandemic. Crit. Rev. Clin. Lab. Sci. 57, 365-388. https://doi.org/10.1080/10408363.2020.1783198

[2] Ali, W., 2020. Online and Remote Learning in Higher Education Institutes: A Necessity in light of COVID-19 Pandemic. High. Educ. Stud. 10, 16. https://doi.org/10.5539/hes.v10n3p16

[3] Allam, M., Cai, S., Ganesh, S., Venkatesan, M., Doodhwala, S., Song, Z., Hu, T., Kumar, A., Heit, J., Study Group, C.-19, Coskun, A. F., 2020. COVID-19 Diagnostics, Tools, and Prevention. Diagnostics 10, 409. https://doi.org/10.3390/diagnostics10060409

[4] Ayouni, I., Maatoug, J., Dhouib, W., Zammit, N., Fredj, S. B., Ghammam, R., Ghannem, H., 2021. Effective public health measures to mitigate the spread of COVID-19: a systematic review. BMC Public Health 21, 1015. https://doi.org/10.1186/s12889-021-11111-1

[5] Babalola, O. J., Sesay, H. W., Blebo, L. S., Whesseh, F. K., Umeokonkwo, C. D., Adewuyi, P. A., Amo-Addae, M., 2022. The influence of first wave of COVID-19 outbreak on routine healthcare services, Liberia, August 2020: a mixed study approach. BMC Health Serv. Res. 22, 684. https://doi.org/10.1186/s12913-022-08074-3

[6] CDC, 2025. Types of COVID-19 Treatment. COVID-19. URL https://www.cdc.gov/covid/treatment/index.html (accessed 9.6.25).

[7] CDC, 2024. Pfizer COVID-19 Vaccine Summary. Vaccines Immun. URL https://www.cdc.gov/vaccines/php/info-by-product/pfizer-covid-19-summary.html (accessed 9.11.25).

[8] Chauhan, S., 2020. Comprehensive review of coronavirus disease 2019 (COVID-19). Biomed. J. 43, 334-340. https://doi.org/10.1016/j.bj.2020.05.023

[9] Cucinotta, D., Vanelli, M., 2020. WHO Declares COVID-19 a Pandemic. Acta Bio Medica Atenei Parm. 91, 157-160. https://doi.org/10.23750/abm.v91i1.9397

[10] Dhama, K., Khan, S., Tiwari, R., Sircar, S., Bhat, S., Malik, Y. S., Singh, K. P., Chaicumpa, W., Bonilla-Aldana, D. K., Rodriguez-Morales, A. J., 2020. Coronavirus Disease 2019-COVID-19. Clin. Microbiol. Rev. 33, e00028-20. https://doi.org/10.1128/CMR.00028-20

[11] Duggan, J., n.d. Is the World Bank's COVID Crisis Lending Big Enough, Fast Enough? New Evidence on Loan Disbursements.

[12] Güner, R., Hasanoğlu, İ., Aktaş, F., 2020. COVID-19: Prevention and control measures in community. Turk. J. Med. Sci. 50, 571-577. https://doi.org/10.3906/sag-2004-146

[13] Harvey, T. S., 2023. COVID-19, Framing and Naming a Pandemic: How What Is Not in a Disease Name May Be More Important than What Is. Pathogens 12, 346. https://doi.org/10.3390/pathogens12020346

[14] He, F., Deng, Y., Li, W., 2020. Coronavirus disease 2019: What we know? J. Med. Virol. 92, 719-725. https://doi.org/10.1002/jmv.25766

[15] Livingston, E. H., Malani, P. N., Creech, C. B., 2021. The Johnson & Johnson Vaccine for COVID-19. JAMA 325, 1575. https://doi.org/10.1001/jama.2021.2927

[16] Kordyukova, L. V., Shanko, A. V., 2021. COVID-19: Myths and Reality. Biochem. Mosc. 86, 800-817. https://doi.org/10.1134/S0006297921070026

[17] Nordgreen, L., Kumar, M., n.d. Economic impacts of and policy responses to the coronavirus pandemic: early evidence from Liberia.

[18] Park, C. L., Russell, B. S., Fendrich, M., Finkelstein-Fox, L., Hutchison, M., Becker, J., 2020. Americans' COVID-19 Stress, Coping, and Adherence to CDC Guidelines. J. Gen. Intern. Med. 35, 2296-2303. https://doi.org/10.1007/s11606-020-05898-9

[19] Pedrosa, A. L., Bitencourt, L., Fróes, A. C. F., Cazumbá, M. L. B., Campos, R. G. B., De Brito, S. B. C. S., Simões E Silva, A. C., 2020. Emotional, Behavioral, and Psychological Impact of the COVID-19 Pandemic. Front. Psychol. 11, 566212. https://doi.org/10.3389/fpsyg.2020.566212

[20] Serafini, G., Parmigiani, B., Amerio, A., Aguglia, A., Sher, L., Amore, M., 2020. The psychological impact of COVID-19 on the mental health in the general population. QJM Int. J. Med. 113, 531-537. https://doi.org/10.1093/qjmed/hcaa201

[21] Shi, Y., Wang, G., Cai, X., Deng, J., Zheng, L., Zhu, H., Zheng, M., Yang, B., Chen, Z., 2020. An overview of COVID-19. J. Zhejiang Univ.-Sci. B 21, 343-360. https://doi.org/10.1631/jzus.B2000083

[22] Signs and symptoms of COVID-19 - Google Search [WWW Document], n.d. URL https://www.cdc.gov/covid/signs-symptoms/index.html (accessed 9.6.25).

[23] Stawicki, S., Jeanmonod, R., Miller, A., Paladino, L., Gaieski, D., Yaffee, A., De Wulf, A., Grover, J., Papadimos, T., Bloem, C., Galwankar, S., Chauhan, V., Firstenberg, M., Di Somma, S., Jeanmonod, D., Garg, S., Tucci, V., Anderson, H., Fatimah, L., Worlton, T., Dubhashi, S., Glaze, K., Sinha, S., Opara, I., Yellapu, V., Kelkar, D., El-Menyar, A., Krishnan, V., Venkataramanaiah, S., Leyfman, Y., Saoud Al Thani, H., B Nanayakkara, P., Nanda, S., Cio è-Pe ña, E., Sardesai, I., Chandra, S., Munasinghe, A., Dutta, V., Dal Ponte, S., Izurieta, R., Asensio, J., Garg, M., 2020. The 2019-2020 novel coronavirus (severe acute respiratory syndrome coronavirus 2) pandemic: A joint american college of academic international medicine-world academic council of emergency medicine multidisciplinary COVID-19 working group consensus paper. J. Glob. Infect. Dis. 12, 47. https://doi.org/10.4103/jgid.jgid_86_20

[24] The Moderna COVID-19 (mRNA-1273) vaccine: what you need to know, n.d. URL https://www.who.int/news-room/feature-stories/detail/the-moderna-covid-19-mrna-1273-vaccine-what-you-need-to-know (accessed 9.11.25).

[25] WHO Declares COVID-19 a Pandemic - PMC [WWW Document], n.d. URL https://pmc.ncbi.nlm.nih.gov/articles/PMC7569573/ (accessed 9.25.25).

Biography

Sahr Gbeinda, was born in Koidu Town, Sierra Leone. As a proud Sierra Leonean and member of the Kono tribe, my journey began at the Kointaya Refugee Camp, as a very little boy where I started my Primary Education and later move in Sierra Leone and continue at the Roman Catholic Boys Primary School in Koidu, where I earned the National Primary Schools Certificate. I then attended Saint Patrick's Boys Secondary School, completing my BECE and earned the Basic Education Certificate Examination Certifcate. Seeking further education, I started my Senior Secondary School at the Koudu Secondary School and later migrated to Liberia, where I obtained the West African Senior Schools Certificate Examination Certificate. My academic pursuits continued at the Zorzor Rural Teachers Training Institute/ZRTTI where I obtained a Teaching Certificate. I later enrolled at Cuttington University, where I earned a BSc in Biology major and Chemistry minior with Honours. Professionally, my career started at the Christian Revival Church Association Mission Secondary School in Zorzor, Lofa County Liberia, where I served as one of the Vice Principal's. In Health my career started at the Zorzor Primary Health Care center, starting from health data collector to Data enterer. I served as head Survey Officer and later Head Survey Officer at Innovative Marketing Solution involved in conducting health-related surveys for organizations like WFP and UNICEF.In addition to my studies and professional experiences, I have acquired several certifications in public health, leadership, and management through WHO and the YALI Network. My key interests are in Medicine, public health, technology, Molecualar Biology, and Education as I continue to shape my academic and career aspirations.