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# COVID 19 Compliance Level and Fear of Infections among Citizens of Rivers State: Implications for Counselling

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***Abstract:*** *This study investigated covid 19 compliance level and fear of infections among citizens of Rivers State with implications for counselling. The study employed the correlational research design. Using the Fluid Survey sample calculator, a sample size of 382 was drawn from a population of 81,430 respondents in the three Senatorial Districts of River State using the purposive sampling technique. The data were collected through a researcher-developed structured questionnaire titled "Covid 19 Compliance Level and Fear of Infections" (CCLFI) with a reliability coefficient of 0.69 established using Pearson's Product Moment Correlation (PPMC). In analysing the data, simple percentage was used to answer the research questions while, Chi Square ($X^2$) statistic was used to test the hypotheses at 0.05 level of significance. It was found that regular hand washing, face masks and respiratory hygiene, social/physical distancing and self-isolation significantly relate with fear of infections among citizens of Rivers State. The study concluded that strategies for preventing transmission of the disease include maintaining overall good personal hygiene, washing hands, avoiding touching the eyes, nose, or mouth with unwashed hands, and coughing or sneezing into a tissue, and putting the tissue directly into a waste container, observing social/physical distancing and self-isolation among others. Based on the findings, it was recommended amongst others that healthy individuals are to wear face masks or cloth face coverings (like scarves or bandanas) at least in certain public settings, wash their hands often with soap and water for at least 20 seconds, especially after going to the toilet or when hands are visibly dirty, before eating and after blowing one's nose, coughing or sneezing, observe social distancing and possibly go for self-isolation when symptoms of the disease is eminent. The counselling implications of this study is that counsellors should apply Reality Therapy in other to assist individuals become psychologically strong, rational, take responsibility, and formulate a realistic plan in coping with the pandemic. Also, counsellors should apply Rational Emotive Behaviour Therapy (REBT) to help citizens in the state to live more rational and productive lives, stop thinking irrationally, and eliminate self-defeating habits.*

***Key words:*** *COVID 19, Compliance Level, Fear of Infections, Citizens, Rivers State.*

**Introduction**

The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing global pandemic of coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Mapa, 2020). The outbreak was first identified in Wuhan, China, in December 2019. The World Health Organization declared the outbreak a Public Health Emergency of International Concern on 30 January 2020, and a pandemic on 11 March. As of 22 June 2020, more than 9.03 million cases of COVID-19 have been reported in more than 188 countries and territories, resulting in more than 469,000 deaths; more than 4.47 million people have recovered (Ponto, 2020). The virus that caused the outbreak is known as SARS-CoV-2, a newly discovered virus closely related to bat coronaviruses pangolin coronaviruses, and SARS-CoV. The scientific consensus is that COVID-19 has a natural origin (Ministry of Health of Nigeria, 2020). The probable bat-to-human infection may have been among people processing bat carcasses and guano in the production of traditional Chinese medicines. Most people who contract COVID-19 recover. For those who do not, the time between the onset of symptoms and death usually ranges from 6 to 41 days, typically about 14 days. As of 22 June 2020, approximately 469,000 deaths had been attributed to COVID-19 (Bourouiba, 2020).). The virus is primarily spread between people during close contact, most often via small droplets produced by coughing, sneezing, and talking. The droplets usually fall to the ground or onto surfaces rather than travelling through air over long distances.

However, Velavan and Meyer (2020) asserted that speech-generated droplets may remain airborne for tens of minutes. Less commonly, people may become infected by touching a contaminated surface and then touching their face. It is most contagious during the first three days after the onset of symptoms, although spread is possible before symptoms appear, and from people who do not show symptoms. Common symptoms include fever, cough, fatigue, shortness of breath, and loss of sense of smell. Complications may include pneumonia and acute respiratory distress syndrome. The time from exposure to onset of symptoms is typically around five days but may range from two to fourteen days. There is no known vaccine or specific antiviral treatment. Primary treatment is symptomatic and supportive therapy (Ting, Scott, & Workman, 2020). Strategies for preventing transmission of the disease include maintaining overall good personal hygiene, washing hands, avoiding touching the eyes, nose, or mouth with unwashed hands, and coughing or sneezing into a tissue, and putting the tissue directly into a waste container. Those who may already have the infection have been advised to wear a surgical mask in public. Physical distancing measures are also recommended to prevent transmission (Stadnytskyi, Bax, Bax & Anfinrud, 2020). Health Care providers taking care of someone who may be infected are recommended to use standard precautions, contact precautions, and eye protection. No medication or vaccine is approved with the specific indication to treat the disease.

The government of Rivers State have responded by implementing travel restrictions, lockdowns, workplace hazard controls, and facility closures. Many places have also worked to increase testing capacity and trace contacts of infected persons. Hand washing is recommended to prevent the spread of the disease. The CDC (2020) recommended that people wash hands often with soap and water for at least twenty seconds, especially after going to the toilet or when hands are visibly dirty; before eating; and after blowing one's nose, coughing, or sneezing. This is because outside the human body, the virus is killed by household soap, which bursts its protective bubble (Venli, 2020). CDC (2020) further recommended using an alcohol-based hand sanitizer with at least 60 percent alcohol by volume when soap and water are not readily available. The WHO (2020) advices people to avoid touching the eyes, nose, or mouth with unwashed hands. It is not clear whether washing hands with ash, if soap is not available, is effective at reducing the spread of viral infections (Ministry of Health Nigeria, 2020).

Surfaces may be decontaminated with a number of solutions (within one minute of exposure to the disinfectant for a stainless steel surface), including 62–71 percent ethanol, 50–100 percent isopropanol, 0.1 percent sodium hypochlorite, 0.5 percent hydrogen peroxide, and 0.2–7.5 percent povidone-iodine. Other solutions, such as benzalkonium chloride and chlorhexidine gluconate, are less effective. The CDC recommends that if a COVID-19 case is suspected or confirmed at a facility such as an office or day care, all areas such as offices, bathrooms, common areas, shared electronic equipment like tablets, touch screens, keyboards, remote controls, and ATM machines used by the ill persons should be disinfected (Huang, Wang & Li, 2020).

Recommendations for wearing cloth masks have been a subject of debate. The WHO (2020) originally recommended that healthy people wear masks only if they are at high risk, such as those who are caring for a person with COVID-19. But as a way to manage and control the spread of this disease, the Government of Rivers State passed it as a law to arrest and prosecute citizens without facemask. Abuja, Lagos and other States have encouraged the use of face masks or cloth face coverings more generally by members of the public to limit the spread of the virus by asymptomatic individuals as a precautionary principle. Several national and local governments have made wearing masks mandatory. Surgical masks are recommended for those who may be infected, as wearing this type of mask can limit the volume and travel distance of expiratory droplets dispersed when talking, sneezing, and coughing.

Social distancing (also known as physical distancing) includes infection control actions intended to slow the spread of disease by minimizing close contact between individuals. Methods include quarantines; travel restrictions; and the closing of schools, workplaces, stadiums, theatres, or shopping centres. Individuals may apply social distancing methods by staying at home, limiting travel, avoiding crowded areas, using no-contact greetings, and physically distancing themselves from others. Many governments are now mandating or recommending social distancing in regions affected by the outbreak. Non-cooperation with distancing measures in some areas has contributed to the further spread of the pandemic (Watts & Kommenda, 2020). Older adults and those with underlying medical conditions such as diabetes, heart disease, respiratory disease, hypertension, and compromised immune systems face increased risk of serious illness and complications and have been advised by the CDC to stay home as much as possible in areas of community outbreak.

In late March 2020, the WHO and other health bodies began to replace the use of the term "social distancing" with "physical distancing", to clarify that the aim is to reduce physical contact while maintaining social connections, either virtually or at a distance. The use of the term "social distancing" had led to implications that people should engage in complete social isolation, rather than encouraging them to stay in contact through alternative means. Some authorities have issued sexual health guidelines for the pandemic, which include recommendations to have sex only with someone you live with, and who does not have the virus or symptoms of the virus (Peta, 2020).

Without pandemic containment measures such as social distancing, vaccination, and use of face masks, pathogens can spread exponentially. Self-isolation at home has been recommended for those diagnosed with COVID-19 and those who suspect they have been infected. Health agencies have issued detailed instructions for proper self-isolation. Many governments have mandated or recommended self-quarantine for entire populations. The strongest self-quarantine instructions have been issued to those in high risk groups. Those who may have been exposed to someone with COVID-19 and those who have recently travelled to a country or region with the widespread transmission have been advised to self-quarantine for 14 days from the time of last possible exposure (WHO, 2020).

The pandemic has caused global social and economic disruption, including the largest global recession since the Great Depression. It has led to the postponement or cancellation of sporting, religious, political, and cultural events, widespread supply shortages exacerbated by panic buying, and decreased emissions of pollutants and greenhouse gases. Schools, universities, and colleges have been closed either on a nationwide or local basis in the state, affecting approximately 98.5 percent of the state's student population. Misinformation about the virus has circulated through social media and the mass media as several individuals, government agencies, politicians, churches etc now play a lot of politics on the idea of this virus (Yuen & Wang, 2020). However, the outbreak has also provided cover for illegal activities such as deforestation of the Amazon rainforest and poaching in Africa, hindered environmental diplomacy efforts, and created economic fallout that some predict will slow investment in green energy technologies. In several countries there have been a marked reduction of spread of sexually transmitted infections, including HIV, attributable to COVID-19 quarantines, social distancing measures, and recommendations to not engage in casual sex. Similarly, in some places, rates of transmission of influenza and other respiratory viruses significantly decreased during the pandemic. The pandemic has also negatively impacted mental health globally which necessitated this study.

**Statement of the Problem**

Coronavirus fears have led to panic buying of essentials across the state, including toilet paper, dried and/or instant noodles, bread, rice, vegetables, disinfectant, and rubbing alcohol. The outbreak has been blamed for several instances of supply shortages, stemming from globally increased usage of equipment to fight outbreaks, panic buying (which in several places led to shelves being cleared of grocery essentials such as food, toilet paper, and bottled water), and disruption to factory and logistic operations. The spread of panic buying has been found to stem from perceived threat, perceived scarcity, fear of the unknown, coping behaviour and social psychological factors (e.g. social influence and trust). The technology industry, in particular, has warned of delays to shipments of electronic goods. According to the WHO director-general Tedros Adhanom, demand for personal protection equipment has risen a hundredfold, leading to prices up to twenty times the normal price and also delays in the supply of medical items of four to six months. It has also caused a shortage of personal protective equipment worldwide, with the WHO warning that this will endanger health workers. The impact of the coronavirus outbreak was worldwide. The virus created a shortage of precursors (raw material) used in the

manufacturing of fentanyl and methamphetamine. The Yuancheng Group, headquartered in Wuhan, China, is one of the leading suppliers. Price increases and shortages in these illegal drugs have been noticed on the street of the Port Harcourt the state capital.

The pandemic has disrupted global food supplies and threatens to trigger a new food crisis. The performing arts and cultural heritage sectors have been profoundly affected by the pandemic, impacting organizations operations as well as individuals both employed and independent globally. The state government have temporarily closed educational institutions in an attempt to contain the spread of COVID-19. As of 7 June 2020, approximately 1.725 billion learners are currently affected due to school closures in response to the pandemic. School closures impact not only students, teachers, and families but have far-reaching economic and societal consequences. School closures in response to the pandemic have shed light on various social and economic issues, including student debt, digital learning, food insecurity, and homelessness, as well as access to childcare, health care, housing, internet, and disability services. The impact was more severe for disadvantaged children and their families, causing interrupted learning, compromised nutrition, childcare problems, and consequent economic cost to families who could not work.

In response to school closures, UNESCO recommended the use of distance learning programs and open educational applications and platforms that schools and teachers can use to reach learners remotely and limit the disruption of education. Holy Week observances in Rivers State which occurred during the last week of the Christian penitential season of Lent, was cancelled. Many dioceses have recommended older Christians stay home rather than attend Mass on Sundays; services have been made available via radio, online live streaming and television, though some congregations have made provisions for drive-in worship. With all the Roman Catholic Parishes closing its churches and chapels and other churches emptied of Christian pilgrims, other religious bodies also cancelled in-person services and limited public gatherings in churches, mosques, synagogues, and temples. The pandemic has affected the political systems of the state, causing suspensions of legislative activities, isolations or deaths of multiple politicians due to fears of spreading the virus. Therefore, the problem of this study is to investigated Covid 19 compliance level and fear of infections among citizens of Rivers State with implications for counselling.

**Purpose of the Study**

The purpose of the study was to investigate Covid 19 compliance level and fear of infections among citizens of Rivers State with implications for counselling. In specific terms, the objectives of the study were to:

1. Find out if regular hand washing relate to fear of infections among citizens of Rivers State.
2. Ascertain if face masks and respiratory hygiene relate to fear of infections among citizens of Rivers State.

3. Establish if social/physical distancing relate to the fear of infections among citizens of Rivers State.
4. Determine if self-isolation relate to the fear of infections among citizens of Rivers State.

**Research Questions**

1. Does regular hand washing relate to fear of infections among citizens of Rivers State?
2. Does face masks and respiratory hygiene relate to fear of infections among citizens of Rivers State.?
3. Does keeping of social/physical distancing relate to fear of infections among citizens of Rivers State?
4. Does self-isolation relate to fear of infections among citizens of Rivers State?

**Hypotheses**

1. There is no significant relationship between regular hand washing and fear of infections among citizens of Rivers State.
2. There is no significant relationship between face masks/respiratory hygiene and fear of infections among citizens of Rivers State.
3. There is no significant relationship between keeping of social/physical distancing and fear of infections among citizens of Rivers State.
4. There is no significant relationship between self-isolation and fear of infections among citizens of Rivers State.

## Methods

The study employed the correlational research design. Using the Fluid Survey sample calculator, a sample size of 382 was drawn from a population of 81,430 respondents in the three Senatorial Districts of River State using the purposive sampling technique. The data were collected through a researcher-developed structured questionnaire titled “Covid 19 Compliance Level and Fear of Infections” (CCLFI) with a reliability coefficient of 0.69 established using Pearson’s Product Moment Correlation (PPMC). In analysing the data, simple percentage was used to answer the research questions while, Chi Square ($X^2$) statistic was used to test the hypotheses at the 0.05 level of significance.

**Results**

**Research Question 1:** Does regular hand washing relate to the fear of infections among citizens of Rivers State?

Table 1: Descriptive statistic showing if regular hand washing relate to the fear of infections among citizens of Rivers State.

| S/No | Statement | East [$n_1$ = 114] | | South East [$n_2$ = 165] | | West [$n_3$ = 103] | |
|---|---|---|---|---|---|---|---|
| | | Yes | No | Yes | No | Yes | No |
| | | F (%) | F (%) | F (%) | F (%) | F (%) | F (%) |
| 1 | It creates a safer working environment for medical staff and the patients. | 104(91.2) | 10(8.8) | 135(81.8) | 30(18.2) | 97(94.2) | 6(5.8) |
| 2 | Removes the any infectious disease from our hands even when we have contacted them from other people or objects. | 110(96.5) | 4(3.5) | 145(87.9) | 20(12.1) | 100(97.1) | 3(2.9) |
| 3 | You keep your workplace free from the disease. | 102(89.5) | 12(10.5) | 150(90.9) | 15(9.1) | 95(92.2) | 8(7.8) |
| 4 | Regular hand washing obstructs this infections. | 99(86.8) | 10(13.2) | 160(97.0) | 5(3.0) | 96(93.2) | 7(6.8) |
| 5 | It helps in the reduction of bacteria content on your hands. | 112(98.2) | 2(1.8) | 155(93.9) | 10(6.1) | 100(97.1) | 3(2.9) |

The total sample of Rivers East, Rivers South-East, and Rivers West used for the study is 382, while $n_1$, $n_2$ , and $n_3$ are the sub-samples of Rivers East, Rivers South-East, and Rivers West respectively.

The information in Table 1 presents that respondents from Rivers East, Rivers South-East and Rivers West acknowledged that regular hand washing relate to the fear of infections among citizens of Rivers State with high level of percentage scores not less than 81%. The respondents from the three Senatorial Districts of Rivers State have high percentage from 81% - 99%, implying that regular hand washing basically relates to fear of infections among citizens of Rivers State.

**Research Question 2:** Does face masks and respiratory hygiene relate to the fear of infections among citizens of Rivers State?

Table 2: Descriptive statistic showing if face masks and respiratory hygiene relate to the fear of infections among citizens of Rivers State.

| S/No | Statement | East [$n_1$ = 114] | | South East [$n_2$ = 165] | | West [$n_3$ = 103] | |
|---|---|---|---|---|---|---|---|
| | | Yes | No | Yes | No | Yes | No |
| | | F (%) | F (%) | F (%) | F (%) | F (%) | F (%) |
| 6 | Reduce respiratory illnesses in shared. | 109(95.6) | 5(4.4) | 158(95.8) | 7(4.2) | 101(98.1) | 2(1.9) |
| 7 | Mitigates the impact of the influenza. | 111(97.4) | 3(2.6) | 161(97.6) | 4(2.4) | 97(94.2) | 6(5.8) |
| 8 | Help in reducing the spread of the disease and other respiratory viruses. | 110(96.5) | 4(3.5) | 155(93.9) | 10(6.1) | 98(95.1) | 5(4.9) |
| 9 | Public mask wearing is most effective at stopping spread of the virus when compliance is high. | 96(84.2) | 18(15.8) | 145(87.9) | 20(12.1) | 94(91.3) | 9(8.7) |
| 10 | Reduces the transmissibility per contact by reducing transmission of infected droplets in both laboratory and clinical contexts. | 105(92.1) | 9(7.9) | 157(95.2) | 8(4.8) | 95(92.2) | 8(7.8) |

The total sample of Rivers East, Rivers South-East, and Rivers West used for the study is 382, while $n_1$, $n_2$, and $n_3$ are the sub-samples of Rivers East, Rivers South-East, and Rivers West respectively.

Table 2 presents that respondents from Rivers East, Rivers South-East and Rivers West acknowledged that face masks and respiratory hygiene relate to the fear of infections among citizens of Rivers State with high level of percentage scores not less than 84%. The respondents from the three Senatorial Districts of Rivers State have high percentage from 84% - 99%, implying that face masks and respiratory hygiene relate with fear of infections among citizens of Rivers State.

**Research Question 3:** Does keeping of social/physical distancing relate to the fear of infections among citizens of Rivers State?

Table 3: Descriptive statistic showing if keeping of social/physical distancing relate to the fear of infections among citizens of Rivers State?

| S/No | Statement | East [$n_1$ = 114] | | South East [$n_2$ = 165] | | West [$n_3$ = 103] | |
|---|---|---|---|---|---|---|---|
| | | Yes | No | Yes | No | Yes | No |
| | | F (%) | F (%) | F (%) | F (%) | F (%) | F (%) |
| 11 | It helps in slowing the spread of disease. | 101(88.6) | 13(11.4) | 129(78.2) | 36(21.8) | 89(86.4) | 14(13.6) |
| 12 | It minimizes exposure to potential infections. | 100(87.7) | 14(12.3) | 142(86.1) | 23(13.9) | 91(88.3) | 12(11.7) |
| 13 | It allows people to avoid complete quarantine and isolation. | 102(89.5) | 12(10.5) | 151(91.5) | 14(8.5) | 94(91.3) | 9(8.7) |
| 14 | This reduces demand for medical services and resources. | 99(86.8) | 15(13.2) | 149(90.3) | 16(9.7) | 87(84.5) | 16(15.5) |
| 15 | It stretches limited supplies of medically necessary gear. | 104(91.2) | 10(8.8) | 152(92.1) | 13(7.9) | 90(87.4) | 13(12.6) |

The total sample of Rivers East, Rivers South-East, and Rivers West used for the study is 382, while $n_1$, $n_2$, and $n_3$ are the sub-samples of Rivers East, Rivers South-East, and Rivers West respectively.

The information in Table 3 presents that respondents from Rivers East, Rivers South-East and Rivers West acknowledged that keeping of social/physical distancing relate to the fear of infections among citizens of Rivers State with high level of percentage scores not less than 78%. The respondents from the three Senatorial Districts of Rivers State have high percentage from 78% - 99%, implying that keeping of social/physical distancing relate to fear of infections among citizens of Rivers State.

**Research Question 4:** Does self-isolation relate to the fear of infections among citizens of Rivers State?
Table 4: Descriptive statistic showing if self-isolation relate to the fear of infections among citizens of Rivers State.

| S/No | Statement | East [$n_1$ = 114] | | South East [$n_2$ = 165] | | West [$n_3$ = 103] | |
|---|---|---|---|---|---|---|---|
| | | Yes | No | Yes | No | Yes | No |
| | | F (%) | F (%) | F (%) | F (%) | F (%) | F (%) |
| 16 | Staying indoors and avoiding contact with other people for up to 14 days reduces the spread of the virus. | 104(91.2) | 10(8.8) | 145(87.9) | 20(12.1) | 97(94.2) | 6(5.8) |
| 17 | It is a measure sometimes used when an infection is spreading in the community. | 105(92.1) | 9(7.9) | 153(92.7) | 12(7.3) | 95(92.2) | 8(7.8) |
| 18 | This prevents spreading of the disease to your family and friends. | 112(95.6) | 2(4.4) | 158(95.8) | 7(4.2) | 100(97.1) | 3(2.9) |
| 19 | You ask people not to visit your house for your duration. | 108(94.7) | 6(5.3) | 151(91.5) | 16(8.5) | 101(98.1) | 2(1.9) |
| 20 | Self-isolation can be boring or frustrating. | 112(98.2) | 2(1.8) | 161(97.6) | 4(2.4) | 98(95.1) | 5(4.9) |

The total sample of Rivers East, Rivers South-East, and Rivers West used for the study is 382, while $n_1$, $n_2$, and $n_3$ are the sub-samples of Rivers East, Rivers South-East, and Rivers West respectively.

Table 4 presents that respondents from Rivers East, Rivers South-East and Rivers West agreed that self-isolation relate to the fear of infections among citizens of Rivers State with high level of percentage scores not less than 87%. The respondents from the three Senatorial Districts of Rivers State have high percentage from 87% - 99%, implying that keeping of self-isolation relate to fear of infections among citizens of Rivers State.

**Test of Hypothesis 1:** There is no significant relationship between regular hand washing and fear of infections among citizens of Rivers State.

**Table 5: Relationship between regular hand washing and fear of infections among citizens of Rivers State.**

| Chi-Square Tests | | | |
|---|---|---|---|
| | Value | Df | Asymptotic Significance. (2-sided) |
| Pearson Chi-Square | 7.611[a] | 1 | .268 |
| Likelihood Ratio | 8.789 | 1 | .186 |
| Linear-by-Linear Association | 1.031 | 1 | .310 |
| N of Valid Cases | 382 | | |

a. 8 cells (66.7%) have expected count less than 5. The minimum expected count is .03.

Since the p-value in table 5 above is less than the chosen significance level ($\alpha = 0.05$), we therefore reject the null hypothesis, and conclude that there is a significant relationship between regular hand washing and fear of infections among citizens of Rivers State. Based on the results, we can state that ($X^2(1) = 7.611$, $p < .001$).

**Test of Hypothesis 2:** There is no significant relationship between face masks/respiratory hygiene and fear of infections among citizens of Rivers State.

**Table 6: Relationship between face masks/respiratory hygiene and fear of infections among citizens of Rivers State**

| Chi-Square Tests | | | |
|---|---|---|---|
| | Value | Df | Asymptotic Significance. (2-sided) |
| Pearson Chi-Square | 12.920[a] | 1 | .205 |
| Likelihood Ratio | 6.340 | 1 | .200 |
| Linear-by-Linear Association | 4.081 | 1 | .269 |
| N of Valid Cases | 382 | | |

a. 8 cells (68.9%) have expected count less than 5. The minimum expected count is .03.

Since the p-value in table 6 above is less than the chosen significance level ($\alpha = 0.05$), we therefore reject the null hypothesis, and conclude that there is a significant relationship between face

masks/respiratory hygiene and fear of infections among citizens of Rivers State. Based on the results, we can state that ($X^2$ (1) = 12.920, $p$ < .001).

**Test of Hypothesis 3:** There is no significant relationship between keeping of social/physical distancing and fear of infections among citizens of Rivers State.

**Table 7: Relationship between keeping of social/physical distancing and fear of infections among citizens of Rivers State.**

| Chi-Square Tests | | | |
|---|---|---|---|
| | Value | Df | Asymptotic Significance. (2-sided) |
| Pearson Chi-Square | 18.653[a] | 1 | .249 |
| Likelihood Ratio | 12.165 | 1 | .217 |
| Linear-by-Linear Association | 6.064 | 1 | .204 |
| N of Valid Cases | 382 | | |

a. 8 cells (72.3%) have expected count less than 5. The minimum expected count is .03.

Since the p-value in table 7 above is less than the chosen significance level ($a$ = 0.05), we therefore reject the null hypothesis, and conclude that there is a significant relationship between keeping of social/physical distancing and fear of infections among citizens of Rivers State. Based on the results, we can state that ($X^2$ (1) = 18.653, $p$ < .001).

**Test of Hypothesis 4:** There is no significant relationship between self-isolation and fear of infections among citizens of Rivers State.

**Table 8: Relationship between self-isolation and fear of infections among citizens of Rivers State.**

| Chi-Square Tests | | | |
|---|---|---|---|
| | Value | Df | Asymptotic Significance. (2-sided) |
| Pearson Chi-Square | 17.103[a] | 1 | .251 |
| Likelihood Ratio | 9.274 | 1 | .231 |
| Linear-by-Linear Association | 5.712 | 1 | .189 |
| N of Valid Cases | 382 | | |

a. 8 cells (68.6%) have expected count less than 5. The minimum expected count is .03.

Since the p-value in table 8 above is less than the chosen significance level ($a$ = 0.05), we therefore reject the null hypothesis, and conclude that there is a significant relationship between self-isolation and fear of infections among citizens of Rivers State. Based on the results, we can state that ($X^2$ (1) = 17.103, $p$ < .001).

**Discussion of Findings**

The study investigate covid 19 compliance level and fear of infections among citizens of Rivers State with implications for counselling and that regular hand washing, face masks and respiratory hygiene, social/physical distancing, self-isolation significantly relate with fear of infections among citizens of Rivers State. The findings of significant relationship between regular hand washing and fear of infections among citizens of Rivers State are supported respectively by CDC (2020) that hand washing is recommended to prevent the spread of the disease. The CDC (2020) recommends that people wash hands often with soap and water for at least twenty seconds, especially after going to the toilet or when hands are visibly dirty; before eating; and after blowing one's nose, coughing, or sneezing. This is because outside the human body, the virus is killed by household soap, which bursts its protective bubble (Venli, 2020). CDC further recommended using an alcohol-based hand sanitizer with at least 60 percent alcohol by volume when soap and water are not readily available. The WHO (2020) advises people to avoid touching the eyes, nose, or mouth with unwashed hands. It is not clear whether washing hands with ash, if soap is not available, is effective at reducing the spread of viral infections (Ministry of Health Nigeria, 2020).

The study further found that face masks/respiratory hygiene significantly relate to fear of infections among citizens of Rivers State. In consonance with these findings, CDC (2020) recommended that healthy people wear masks only if they are at high risk, such as those who are caring for a person with COVID-19. But as a way to manage and control the spread of this disease, the government of the Rivers State passed it as a law to arrest and prosecute citizens without facemask. Abuja, Lagos and other states have encouraged the use of face masks or cloth face coverings more generally by members of the public to limit the spread of the virus by asymptomatic individuals as a precautionary principle. Several national and local governments have made wearing masks mandatory. Surgical masks are recommended for those who may be infected, as wearing this type of mask can limit the volume and travel distance of expiratory droplets dispersed when talking, sneezing, and coughing.

It was also found that significant relationship exist between keeping of social/physical distancing and fear of infections among citizens of Rivers State. In line with this finding, Watts and Kommenda (2020) opined that social distancing (also known as physical distancing) includes infection control actions intended to slow the spread of disease by minimizing close contact between individuals. Methods include quarantines; travel restrictions; and the closing of schools, workplaces, stadiums, theatres, or shopping centres. Individuals may apply social distancing methods by staying at home, limiting travel, avoiding crowded areas, using no-contact greetings, and physically distancing themselves from others. Many governments are now mandating or recommending social distancing in regions affected by the outbreak. Non-cooperation with distancing measures in some areas has contributed to the further spread of the pandemic (Watts & Kommenda, 2020). Older adults and those with underlying medical conditions such as diabetes, heart disease, respiratory disease, hypertension, and compromised immune systems face

increased risk of serious illness and complications and have been advised by the CDC to stay home as much as possible in areas of community outbreak. In late March 2020, the WHO and other health bodies began to replace the use of the term "social distancing" with "physical distancing", to clarify that the aim is to reduce physical contact while maintaining social connections, either virtually or at a distance. The use of the term "social distancing" had led to implications that people should engage in complete social isolation, rather than encouraging them to stay in contact through alternative means. Some authorities have issued sexual health guidelines for the pandemic, which include recommendations to have sex only with someone you live with, and who does not have the virus or symptoms of the virus (Peta, 2020). Without pandemic containment measures such as social distancing, vaccination, and use of face masks, pathogens can spread exponentially.

Finally, the study revealed that self-isolation to a high extent relate to fear of infections among citizens of Rivers State. In according with this finding, Yuen and Wang (2020) asserted that self-isolation at home has been recommended for those diagnosed with COVID-19 and those who suspect they have been infected. Health agencies have issued detailed instructions for proper self-isolation. Many governments have mandated or recommended self-quarantine for entire populations. The strongest self-quarantine instructions have been issued to those in high risk groups. Those who may have been exposed to someone with COVID-19 and those who have recently travelled to a country or region with the widespread transmission have been advised to self-quarantine for 14 days from the time of last possible exposure (WHO, 2020). The pandemic has caused global social and economic disruption, including the largest global recession since the Great Depression. It has led to the postponement or cancellation of sporting, religious, political, and cultural events, widespread supply shortages exacerbated by panic buying, and decreased emissions of pollutants and greenhouse gases. Schools, universities, and colleges have been closed either on a nationwide or local basis in the state, affecting approximately 98.5 percent of the state's student population. Misinformation about the virus has circulated through social media and the mass media as several individuals, government agencies, politicians, churches etc now play a lot of politics on the idea of this virus.

## Conclusion

Strategies for preventing transmission of the disease include maintaining overall good personal hygiene, washing hands, avoiding touching the eyes, nose, or mouth with unwashed hands, and coughing or sneezing into a tissue, and putting the tissue directly into a waste container, observing social/physical distancing and self-isolation among others. Health care providers taking care of someone who may be infected are recommended to use standard precautions, contact precautions, and eye protection. The government of Rivers State have responded by implementing travel restrictions, lockdowns, workplace hazard controls, and facility closures. Many places have also worked to increase testing capacity and trace contacts of infected persons.

### Implications for Counselling

The pandemic has resulted in misinformation and conspiracy theories about the scale of the pandemic and the origin, prevention, diagnosis, and treatment of the disease. False information,

including intentional disinformation, has been spread through social media, text messaging, and mass media, including the tabloid media, conservative media, and states like Kano, Lagos and Abuja to mention but a few. In some countries, such as India, Bangladesh, and Ethiopia, journalists have been arrested for allegedly spreading fake news about the pandemic. Misinformation has been propagated by celebrities, politicians (including state government, National Centre for Disease and Control (NCDC) and other prominent public figures. Commercial scams have claimed to offer at-home tests, supposed preventives, and "miracle" cures. Several religious groups have claimed their faith will protect them from the virus. Some people have claimed the virus is a bioweapon accidentally or purposefully leaked from a laboratory, a population-control scheme, the result of a spy operation, or the side effect of 5G upgrades to cellular networks. It is pertinent to establish that the necessary preventive modalities provided by the World Health organization should be welcomed. Counsellors should apply Reality Therapy in other to assist individuals become psychologically strong, rational, take responsibility, and formulate a realistic plan in coping with the pandemic. Also, counsellors should apply Rational Emotive Behaviour Therapy (REBT) to help citizens in the state to live more rational and productive lives, stop thinking irrationally, and eliminate self-defeating habits.

**Recommendations**

From the findings of the study, the following recommendations are made;

1. Healthy individuals are to wear face masks or cloth face coverings (like scarves or bandanas) at least in certain public settings.
2. Individuals are advised to wash hands often with soap and water for at least 20 seconds, especially after going to the toilet or when hands are visibly dirty, before eating and after blowing one's nose, coughing or sneezing.
3. Usage of an alcohol-based hand sanitizer with at least 60% alcohol, but only when soap and water are not readily available.
4. Individuals are to maintain and observe social/physical distancing, and those with travel history or symptoms of the disease should go into self-isolation.

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