



# Exploring Admitted Covid-19 Patients Perception and Quality of Care at a Treatment center in Rivers State.

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## ARTICLE INFO

## ABSTRACT

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Coronavirus disease (COVID-19), often known as SARS-CoV-2, is a novel RNA coronavirus that emerged in late 2019 in Wuhan, China. COVID-19 was declared a pandemic by the World Health Organization in early 2020. The goal of this study was to explore the perception and quality of care offered to COVID-19 patients at a treatment center in Eleme, Rivers State. A semi-structured questionnaire was used to interview 117 people who were conveniently chosen for a cross-sectional descriptive study. Participants' characteristics and responses were summarized using descriptive statistics. The overall mean age of the participants was 43.6±14.2 years, with males accounting for 88(75.2%) of the study participants. A significant number of individuals 56 (50%) said the attention/care they received was good and should be continued. In conclusion, COVID-19 patients have a wide range of experience in this facility, however there is room for improvement.

## INTRODUCTION

SARS-CoV-2 commonly known as Coronavirus disease (COVID-19), is a new RNA coronavirus that arose in late 2019 in Wuhan, China (1). On January 30, 2020, the World Health Organization (WHO) declared the situation a Public Health Emergency of International Concern (PHEIC). The World Health Organization declared COVID-19 a pandemic on March 11, 2020, putting everyone's health and well-being in jeopardy, especially those with comorbid diseases (2,3). The disease has spread to almost every country on the planet, with 167,011,807 confirmed cases and 3,472,068 deaths as of May 25, 2021 (4). The Americas, Europe, Southeast Asia, and the Mediterranean are the most impacted regions of the world, with Africa and Western Pacific having a lower frequency (4). As of May 25, 2021, the WHO estimates that there are over 3.5 million confirmed cases of COVID-19 across Africa, with over 85,000 deaths (4). Nigeria has had over 166,000 confirmed cases of COVID-19 and over 2,000 deaths nationwide, with Rivers State, an oil-rich state, ranking fifth in terms of prevalence (5).

COVID-19 patients have a wide range of clinical symptoms that affect different body systems, including the respiratory and digestive systems (6). Mild self-limited disease to severe pneumonia, acute respiratory distress syndrome, septic shock, and systemic multiple organ failure syndromes are examples of these symptoms. To improve patients' experiences throughout their COVID-19 hospitalization, a full therapy package may be required. Many affluent countries, for example, have used physical activity programs and strengthening aerobic capacity after COVID-19 to manage these patients (7-9). More so, patients treated for COVID-19 may provide useful data that can be used to improve management and treatment, particularly in resource-constrained locations where international recommendations may not be feasible. There are only few available data that have reported the attention/care given to COVID-19 patients in Nigeria (10) and England (14). A recent study has shown the experiences of discharged COVID-19 patients in Kano State, Nigeria using a qualitative method of data collection (10). As a result, the purpose of this study was to explore the quality of care given to COVID-19 patients at a treatment center in Eleme, Rivers State using a larger sample and a quantitative approach of data collection (Questionnaire based). The findings of this study are expected to provide data for informed policy on how to improve current interventions as well provide valuable information on COVID-19 patient experiences from an African perspective.

## MATERIALS AND METHODS

At the General Hospital in Nchia, Eleme, Rivers state, a cross-sectional descriptive study with 117 participants was conducted. Before interviewing patients who were admitted and discharged from this center due to COVID-19, we received consent from both the participants and the appropriate authority. The participants in the study were chosen through convenience sampling. As a result, all adult patients who had been at the point discharged from the treatment center were eligible to participate in the study. All authors created a semi-structured interview questionnaire, which was face validated by research supervisors before the start of the main investigation. The survey gathered data on demographics, clinical features, and experience. The interviews were conducted in English, and those who did not speak English fluently were assisted by an interpreter for about twenty minutes. The research took place over five months (November 2020 to March 2021). The Statistical Package for Social Sciences (SPSS) version 23 and Microsoft Excel 2016 were used to analyze the data. To summarize the characteristics and responses of the participants, descriptive statistics were employed.

## RESULTS

A total of 117 participants were included in the study. Table 1 shows the distribution of the socio-demographic characteristics of the participants including age, sex, education, occupation, marital status, religion, contact history, travel history, and places traveled to. A major proportion of 88(75.2%) of the participants were males. The overall mean age of study participants was  $43.6 \pm 14.2$  years with male mean age being  $43.5 \pm 12.6$  years and female mean age being  $43.9 \pm 18.5$  years. A majority of the study participants 45(38.5%) were between 35-49 years and was closely followed by those between 18-34 years 36(30.8%). A majority of the study participants 113(96.6%) were non-health workers. A majority of the study participants 111(94.9%) have had tertiary education. Some 91(78.4%) of the study participants were married. A majority of the study participants 110(94.0%) were Christians. A majority of the study participants 107(98.2%) had no contact history with a case. A few participants 10(9%) have had a travel history and of the participants who had travel history, some 2(20%) had traveled outside the country.

**Table 1: Frequency Distribution of Socio-Demographic Characteristics of Participants (N=117)**

<b>Variables</b>	<b>n (%)</b>
<b>Age (years)</b>	
<17	1(0.9)
18-34	36(30.8)
35-49	45(38.5)
≥50	35(29.9)
Total	117(100)
<b>Sex</b>	
Male	88(75.2)
Female	29(24.8)
Total	117(100)
<b>Education</b>	
Primary	6(5.1)
Tertiary	111(94.9)
Total	117(100)
<b>Occupation</b>	
Health Workers	4(3.4)
*Non-workers	113(96.6)
Total	117(100)
<b>Marital Status</b>	
Single	25(21.6)
Married	91(78.4)
Total	116(100)
<b>Religion</b>	
Christian	110(94)
Muslim	7(6)
Total	117(100)
<b>Contact History</b>	
Yes	2(1.8)
No	107(98.2)
Total	109(100)
<b>Travel History</b>	
Yes	10(9)
No	101(91ss)
Total	111(100)
<b>Places Traveled To</b>	
In-Nigeria	8(80.0)
*Out-of-Nigeria	2(20.0)
Total	10(100)

\*Drillers, Seafarers, Lawyers, Public/Civil Servants \*Germany, Britain, Croatia

Figure 1 shows the distribution of the clinical characteristics and drug use a prior diagnosis of the participants including diabetes mellitus (DM), allergy, asthma, vomiting, diarrhea, dysphagia, sore throat, myalgia, headache, fatigue, cough, fever, anosmia, ageusia, HIV (Human Immunodeficiency Syndrome), swelling and antimalarial use. Mostly, the participants presented with headache 36(30.8%), fatigue 40(34.2%),

cough 45(38.5%), and fever 45(38.5%). A proportion of 14(12.4%) of the participant had taken treatment before diagnosis and of this proportion 5(41.7%) used the antimalaria drug only, 4(33.3%) used a combination of antimalaria and other drugs and 3(25%) used other drugs without antimalaria.

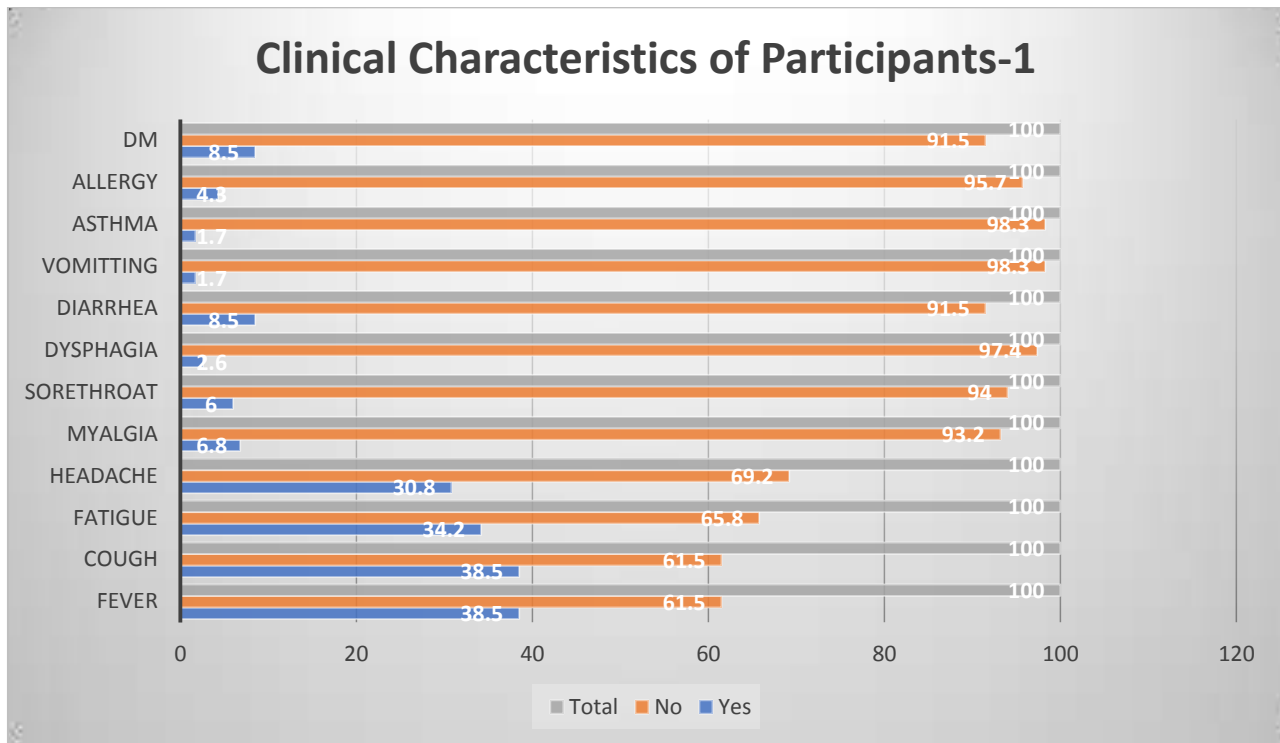


Figure 1a: Frequency (Percentage) Distribution of Clinical Characteristics of Participants (N=117)

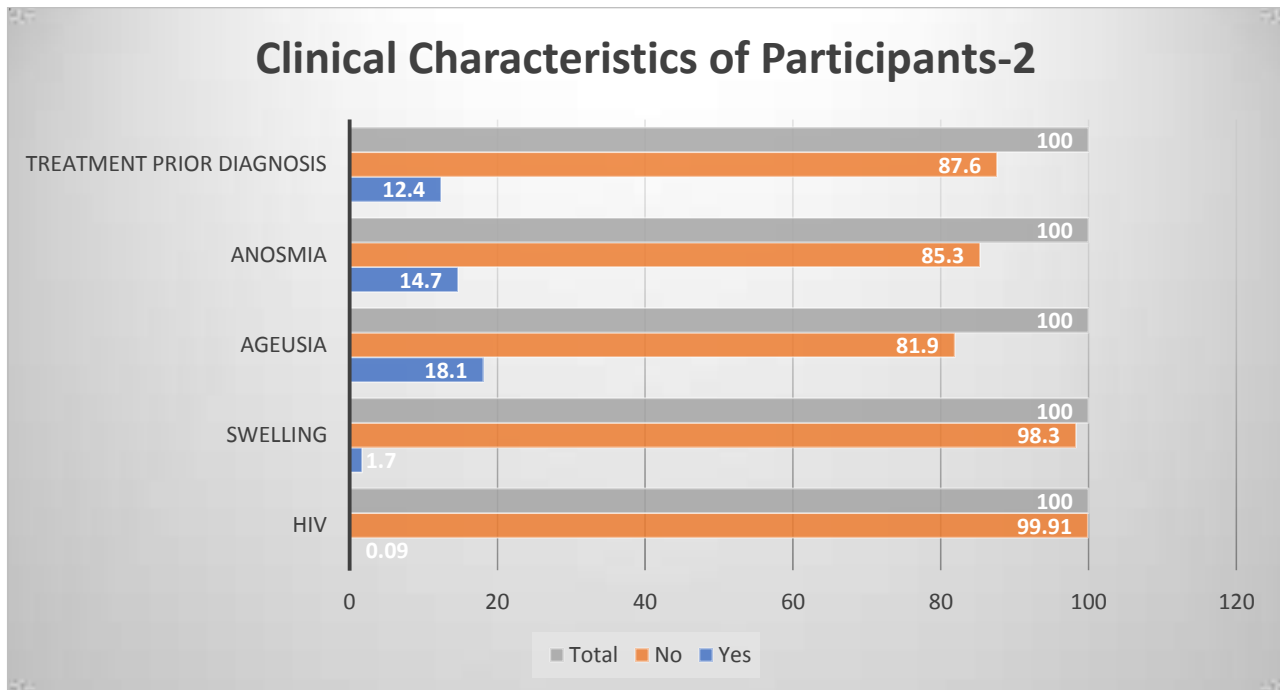
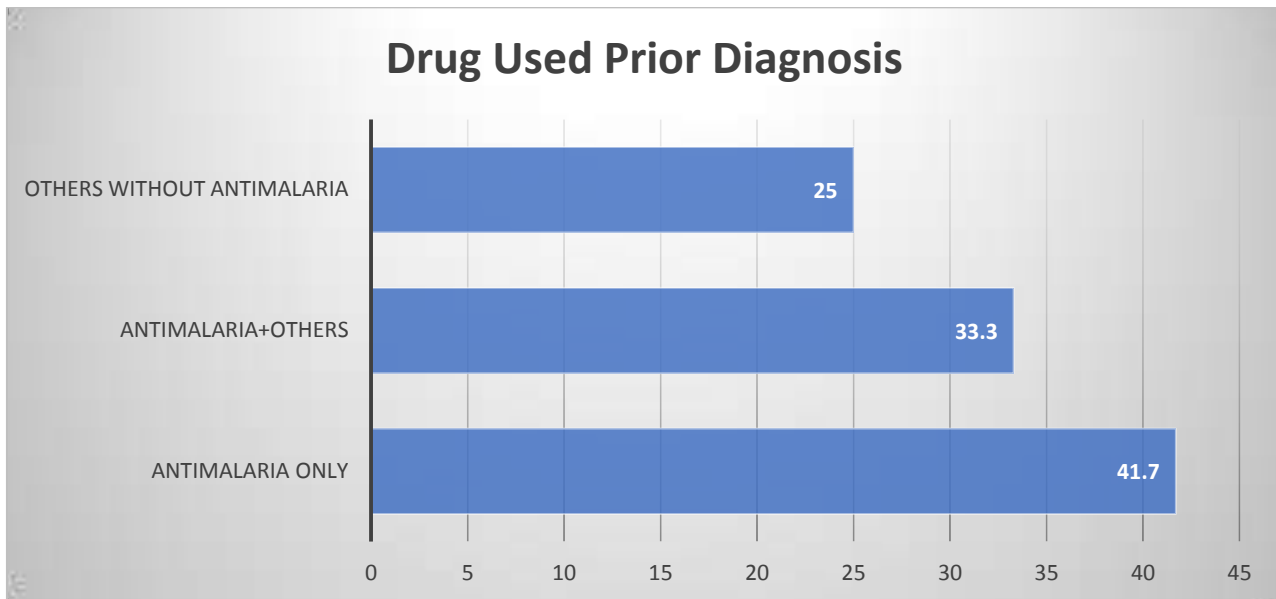


Figure 1b: Frequency (Percentage) Distribution of Clinical Characteristics of Participants (N=117)



**Figure 1c: Frequency (Percentage) Distribution of Drug Use Prior Diagnosis of Participants (N=117)**

Others- Vitamin C, Anti-hypertensives, Anti-inflammatory and Anti-pyretic

Tables 2 shows the distribution of perception of attention/care received by participants at the treatment center. A majority of the study participants 93(80.9%) felt they were treated excellently. All participants reported they were given their drugs regularly. A large proportion of participants 96(83.5%) reported they were satisfied with their feeding with some 10(8.9%) suggesting improvement in diet and nutrition especially adding fruits to a meal. Some 56(48.3%) felt the attitude of the health

workers was very good though 6(5.4%) advised there should be an improvement on health personnel pieces of training and incentives. A few proportions 3(2.6%) of participants reported they enjoyed the exercises and games provided with 5(4.5%) of participants suggesting improvements in exercises/rehabilitation therapy. A good proportion 56(50%) of participants felt the attention/care received at the center was good and should be kept up.

**Table 2a: Perception of Attention/Care Received by Participants at Treatment Center (N=117)**

<b>Variables</b>	<b>n (%)</b>
<b>I felt I was treated</b>	
Good	9(7.8)
Very Well	13(11.3)
Excellent	93(80.9)
Total	115(100)
<b>Drugs were given regularly</b>	
Yes	117(100)
Total	117(100)
<b>My feeding was</b>	
Non-satisfactory	3(2.6)
Fair	16(13.9)
Satisfactory	96(83.5)
Total	115(100)
<b>The attitude of Health Personnel</b>	
Fair	1(0.9)
Good	14(12.1)
Very Good	56(48.3)
Excellent	45(38.8)
Total	116(100)
<b>I enjoyed the Internet Services</b>	
Yes	2(1.7)
No	114(98.3)
Total	116(100)
<b>I enjoyed the TV provided</b>	
Yes	112(96.6)
No	4(3.4)
Total	116(100)
<b>I enjoyed the indoor games provided</b>	
Yes	3(2.6)
No	113(97.4)
Total	116(100)
<b>I enjoyed the indoor games provided</b>	
Yes	3(2.6)
No	113(97.4)
Total	116(100)

**Table 2b: Perception of Attention/Care Received by Participants at Treatment Center (N=117)**

<b>Variables</b>	<b>n (%)</b>
<b>Advice to the facility</b>	
Improved diet with fruits/nutrition/feeding	10(8.9)
Health Personnel Training and Improved Incentive, Improved facility waiting time/Ward arrangement for newly diagnosed	6(5.4)
Improvement on Environmental Hygiene	14(12.5)
Improved Exercise/Rehabilitation/Games	5(4.5)
Good, keep it up	56(50.0)
Good, but there is room for improvement	21(18.8)
Total	112(100)

## DISCUSSION

The purpose of this study was to explore the perception and quality of care offered to COVID-19 patients at a treatment center in Eleme, Rivers State. The major outcomes of this study indicated that participants presented with headaches, fatigue, fever, and cough more. The quality of care, on the other hand, was rated as good by some participants. This report is similar to finding from a previous study reporting quality of care to be excellent (10). Study participants stated that there was room for improvement in the areas of caregiver/patient interaction and healthcare provider welfare and ward arrangement for newly diagnosed cases in the isolation center. This report is similar to finding from a previous study suggesting improvement in the welfare of health care providers (10). This finding is significant because healthcare providers have long advocated for a better welfare package (11). Bringing this information to light may thus be beneficial to relevant authorities seeking to improve the quality of healthcare delivery in similar low-resource settings, particularly during this pandemic, when healthcare workers are afraid of jeopardizing their livelihoods.

It's worth noting that many of the isolation centers are equipped with brand new, cutting-edge medical technology (12). However, the participants mentioned a low use of other complementary treatments such as rehabilitation, which could help patients increase their physical activity and raise their immunity to COVID-19 patients (13). There are areas in which the study excels. These include looking into the perspectives of patients at the point of being discharged from the hospital to avoid recall bias. This is critical for gathering accurate and trustworthy data. In addition, all interviews were done by the same researchers to ensure that the data was collected consistently. However, a larger-sized/random study is needed in further studies for generalization.

## CONCLUSION

In conclusion, COVID-19 patients have a wide range of experience in this facility. However, they tend to agree that the level of service and health infrastructure was very commendable. Nevertheless, a few areas involving caregiver/patient contact and health worker wellbeing and environmental hygiene may require further improvement.

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