



DIMENSIONS OF THE COVID-19 PANDEMIC IN THE FEDERAL CAPITAL TERRITORY, ABUJA, NIGERIA

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ABSTRACT: *Background: Coronavirus disease (COVID-19) has become a global pandemic. Gender and health refer to the socially constructed differences and the power relations between women and men, as a determinant of health. Disease outbreaks aggravate gender inequalities for women and men. Women play important roles in curbing the current COVID-19 outbreak that put them at increased risk of exposure including working as frontline healthcare workers, caregivers at home, and as mobilizers in their communities. Other gender barriers that put women at risk include limited access to information, lack of Personal Protective Equipment (PPE) such as masks, and other socio-cultural practices. Treating women and men equally is the right and smart thing to do, is entrenched in human rights and is in keeping with the United Nations' System-Wide Action Plan for Gender Equality and the Empowerment of Women. Objective: The objective of this study is to highlight the significance and implications of COVID-19 gender analysis and sex-disaggregated data in the in the Federal Capital Territory (FCT), Abuja. Materials and Methods: We retrospectively reviewed the COVID-19 database in the Public Health Department of the Federal Capital Territory (FCT), Abuja with particular focus on the confirmed COVID-19 cases between the start of the outbreak on March 20, to May 31, 2020. We analyzed the data by age, sex, location, travel history and outcome. Results: The number of suspected and confirmed COVID-19 cases during the study period was 8,722 and 660, respectively. Of the 660 confirmed cases, 204 were females and 456 were males. The number of deaths was 10 out of which 9 were males. The mean age of all the confirmed COVID-19 cases was 35 years with a range of 6 months to 87 years. All the confirmed cases came from five (Municipal, Bwari, Abaji, Gwagwalada and Kuje) out of the six area councils of the FCT. A total of 70 of the confirmed cases had prior international travel history to areas affected by the COVID-19 outbreak. Of these 70 with travel history, 44 were women. Conclusion: Men and women have the same COVID-19 prevalence, but men are more at risk of severe form of the disease including dying from it.*

KEYWORDS: COVID-19, Gender, Outbreak, Federal Capital Territory, Abuja, Nigeria



INTRODUCTION

Coronavirus disease (COVID-19) started in Wuhan, capital of Central China's Hubei province in late December 2019 and by 30 January 2020, the disease was declared a Public Health Emergency of International Concern (PHEIC) by the World Health Organization and subsequently a global pandemic^{1,2}. COVID-19 is the sixth disease to be declared as a PHEIC since 2005 when the new International Health Regulation (IHR) came into force³. According to the IHR(2005), SARS, Smallpox, wild type poliomyelitis, and any new subtype of human influenza are automatically PHEICs and thus do not require an IHR decision to declare them as such⁴.

Gender and health refer to the socially constructed differences and the power relations between women and men, as a determinant of health⁵. The health of both sexes is influenced by biological factors as well as other socio-cultural factors which determine risk factors, access and utilization of health care services and products as well as interaction with healthcare providers. In addition, health problems in men and women is also influenced by socio-economic status, ethnicity and geolocation^{6,7}. All these factors intertwine to influence the course of the disease and its outcome. In gender inequality, one group is systematically empowered over another leading to inequities between men and women in health status and provision of appropriate health services. Communities with high gender inequality have been found to be unhealthy for both men and women⁸.

Disease outbreaks aggravate gender inequalities for women and men. Women play important roles in curbing the current COVID-19 outbreak that put them at increased risk of exposure including working as frontline healthcare workers, caregivers at home, and as mobilizers in their communities⁹. Other gender barriers that put women at risk include limited access to information, lack of Personal Protective Equipment (PPE) such as masks; and other socio-cultural practices¹⁰. Treating women and men equally is the right and smart thing to do, is entrenched in human rights and is in keeping with the United Nations' System-Wide Action Plan for Gender Equality and the Empowerment of Women¹¹.

METHODS

Study area and population

The Federal Capital Territory (FCT), Abuja is the Capital of Nigeria and lies between latitude 8.25 and 9.20 north of the equator and longitude 6.45 and 7.39 east of Greenwich Meridian. It is geographically located in the centre of the country. The FCT is bordered by the states of Niger to the West and North, Kaduna to the northeast, Nasarawa to the east and south and Kogi to the southwest. The total population is close to five million and is sub-divided into 6 Area Councils (Abaji, Bwari, Gwagwalada, Kuje, Kwali and Municipal) which are equivalent to Local Government Areas (LGAs) in other states of Nigeria. The Municipal Area Council is the largest of all the area councils in the FCT accounting for over 55% of the total population. In addition, there are 62 political wards and 2,652 settlements.



Brief Description of COVID-19 Surveillance Including Community Active Surveillance in FCT, Abuja

At the start of COVID-19 outbreak in the FCT, the initial strategy of detecting suspected cases was through receipt of alerts/calls from suspected cases or their proxies (e.g. relations, neighbors or clinicians) by designated members of the EOC who in turn verified that the suspected case satisfied the COVID-19 case definition before arranging for sample collection either in the homes of suspected cases or in a designated area near the International Conference Centre (ICC), Abuja. An additional strategy, the community active surveillance was added on the 13th April 2020. This strategy entailed advocacy to traditional leaders, community mobilization in high risk areas and provision of sample collection centres in these high-risk communities. Through these combined strategies, a total of 8,722 samples were collected from all the area councils as at 31st May 2020. Samples were tested at the National Reference Laboratory, Gaduwa, Abuja. Confirmed COVID-19 cases were isolated in designated health facilities by the FCT administration.

Data Collection AND Analysis

Data sources for analysis were from the COVID-19 excel database of the Public Health Department of the FCT as well as the master list of FCT settlements at the WHO office in the FCT. We abstracted data from the start of the outbreak on March 20, to May 31, 2020. We conducted gender analysis based on sex disaggregated data using Microsoft Office Excel 2010.

RESULTS

The total number of samples collected as at May 31, 2020 was 8,722 (Table 1) out of which 660(7.6%) was confirmed. Of the 8,722 samples collected, 5,899(68%) and 2,823(32%) were collected from men and women, respectively. The total number of COVID-19 positive cases among men and women was 456(69%) and 204(31%) respectively. The Municipal area council accounted for 7,054(81%) of all samples collected and 604(92%) of all the COVID-19 positive cases. The mean age of the COVID-19 cases was 35 years (range: 6 months to 87 years). The number of COVID-19 cases that died was 10 out of which 9(90%) deaths were among men. The number of deaths with comorbidity was 6(60%). The mean age of those that died of the disease was 50 years (range: 32 to 68 years). Of the 660 COVID-19 positive cases, a total of 70(10.6%) had history of international travel to countries affected by the pandemic. The number of confirmed men and women with international travel history was 26(37%) and 44(63%) respectively. A total of 68(97%) of those with history of international travel came from the Municipal council.

DISCUSSION

Initially as with every region of the world, the first COVID-19 cases in the country and indeed the FCT came from exposure to international contacts—travel, trade, tourism, or business. These initial cases were mostly clustered in Municipal area council and so was the community active surveillance. Of the 70 confirmed cases with international travel history, 40(57%) came back from Saudi Arabia and 14(20%) from the United Kingdom. These countries had their first



COVID-19 cases before Nigeria and are among the most frequented countries by Nigerians. The rising new COVID-19 cases where there is no recent history of travel to infected areas or recent contact with confirmed cases was strongly suggestive of community transmission.

The FCT had one of the highest number of samples taken per million of population (>2,500) in the country. This was due to the intensive community active surveillance instituted in order to improve access to COVID-19 testing to population with poor knowledge of COVID-19 in addition to digitally marginalized population who do not have access to COVID-19 testing information, do not have phones or credit in their phones due to poverty. There was more than twice the number (5,899) of men tested as women (2,823). This sex difference may be artificial especially in our society where female movements in some communities are restricted due to cultural practices and hence their access to COVID-19 testing is limited¹². Indeed, Women have been shown to utilize screening tests more than their male counterparts by a large margin in primary care and in the greater use of additional diagnostic procedures¹³. The sex difference in testing may also have accounted for the difference in the confirmed cases among men (456) and women (204) by almost the same margin.

The FCT has relatively younger age group of COVID-19 cases. The most affected age group was 15-34 with a mean age of 35 years. This may have contributed to the observed relatively low case fatality (1.5%); but the economic impact may be significant considering the productivity of this age group. Six (60%) of the 10 confirmed COVID-19 cases that died in the FCT were over 50 years and had comorbidities (mostly hypertension and diabetes). Older population (>50 years) are more vulnerable to the disease and more likely to have the severe form of the disease given that they tend to have weaker immune system and are likely to have underlying chronic illnesses¹⁴⁻¹⁶.

Of the 10 COVID-19 cases that died in the FCT, 9(90%) were males. While men and women may have the same prevalence, it is almost unanimous that men with COVID-19 are more at risk for worse outcomes including need of intensive care and death independent of age¹⁷. Although the mean age of all the COVID-19 cases was 35 years, the mean age of those that died was 50 years. Many postulates tried to explain this observation as caused by the genes, hormones, the immune system, high risk behavior (e.g. smoking) and prevalence of chronic diseases (e.g. heart disease, diabetes and cancer)¹⁸. This gender role in mortality has also been observed in SARS patients where the percentage of males who died was higher than in women ($P = 0.015$)¹⁹.

While the disease itself may be subtle on women, especially in terms of case fatality, its larger extended impact on women and girls is enormous. Many women were trapped at home during lockdowns with their abusers while being cut off from normal support services²⁰. Spikes in domestic violence, rape and teen pregnancies were reported^{21,22}. The death of men breadwinners and lockdowns with attendant loss of jobs and earnings meant additional economic hardship to women and girls in a family. In addition, meagre family resources may be redirected to cater for the needs of boys over girls.

We conclude that Men and women have the same COVID-19 prevalence, but men are more at risk of severe form of the disease including dying from it. We also recommend that COVID-19 gender analysis and sex-disaggregated data at all levels be available to guide policies and actions. The current COVID-19 palliatives being distributed by the Governments should prioritize women and girls. Key health services for women and girls in the health facilities,



such as reproductive and sexual health services should be preserved. Investment in girl child education should be made to prevent dropout.

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APPENDIX

Table 1: Distribution of COVID-19 tests conducted and confirmed cases by Area Councils in the FCT, Abuja, March-May 2020

Area Council	No(%) tested		No(%) positive		Total	
	Male	Female	Male	Female	No(%) tested	No(%) positive
Municipal	4847(56)	2207(25)	434(66)	170(26)	7054(81)	604(92)
Bwari	634(7)	319(4)	11(2)	15(2)	953(11)	26(4)
Abaji	195(2)	114(1)	6(1)	9(1)	309(3)	15(2)
Kuje	110(1)	87(1)	3(0)	4(1)	197(2)	7(1)
Kwali	57(1)	78(1)	0(0)	0(0)	135(2)	0(0)
Gwagwalada	56(1)	18(0)	2(0)	6(1)	74(1)	8(1)
Total	5899(68)	2823(32)	456(69)	204(31)	8722(100)	660(100)

Table 2: Age/Sex distribution of confirmed COVID-19 cases in the FCT, March-May 2020

Age group	Male		Female		Total	
	No.	%	No.	%	No.	%
<15 years	14	2	15	2	29	4
15-34 years	206	31	115	18	321	49
35-54 years	186	28	65	10	251	38
55-74 years	48	7	9	1	57	9
75+ years	2	1	0	0	2	0
Total	456	69	204	31	660	100