COVID-19 SITUATION ANALYSIS:
EVIDENCE FOR ACTION

UNFPA Nigeria
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Plot 617/618, Diplomatic Zone, Central Area District,
P.M.B. 2851,
Garki, Abuja
SUMMARY

Overview
The outbreak of coronavirus (COVID-19) in Wuhan China in 2019, has since spread to 213 countries/territories\(^1\). The first COVID-19 case was confirmed in Africa, in Egypt on the 14\(^{th}\) February 2020, and today 53 of the 54 African countries are affected.

Cases
As of 8\(^{th}\) May 2020,
- Reported cases globally had reached 3,426,448, and 240,485 deaths.
- Africa has recorded 40,848 cases and 1,693 deaths
- UNFPA WCA region has reported 13,973 cases and 343 deaths,
- Nigeria has reported 3,912 cases and 44.5% of the cases were reported in the last seven days - (2\(^{nd}\) to 8\(^{th}\) May 2020)
- 117 total number of deaths were reported. The number of deaths almost doubled in the last one week from 68 on 1\(^{st}\) May to 117 deaths as of 8\(^{th}\) May 2020
- 34 States and FCT remained the States with reported confirmed cases. Only Cross River and Kogi States have not reported any confirmed case.
- 16 of these states are UNFPA assisted Programme States
- Nigeria ranks:
  - 60\(^{th}\) out of the 213 affected countries in the world,
  - 6\(^{th}\) out of the 53 affected countries in Africa, and
  - 2\(^{nd}\) out of the 23 countries in UNFPA West and Central Africa Region (WCAR).
- Nigeria accounts for:
  - 18.5\% of total cases and 22.3\% of total deaths in UNFPA WCAR,
  - 6.6\% of the total cases and 5.4\% of total deaths in Africa, and
  - 0.09\% of the total cases and 0.04\% of total deaths in the world.
- Transmission evidence indicate that no epidemiologic link (community transmission) was 54\%, followed by Contacts with 27\% and travel history with 10\%.
- Male – 68\% and Female – 32\%;
- Age group 31 - 40 at 24\% remained the most affected.

\(^1\) UN Nigeria COVID-19 Daily Update 13 April 2020
### Key COVID-19 Indicators as of Friday 8th May 2020

<table>
<thead>
<tr>
<th>S/N</th>
<th>Indicator</th>
<th>Nigeria 2020</th>
<th>West Africa</th>
<th>Africa</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total Population 2019</td>
<td>214,000,000</td>
<td>485,000,000</td>
<td>1.3 billion</td>
<td>7.58b</td>
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<tr>
<td>2</td>
<td>Total tests</td>
<td>23,835</td>
<td>232,521</td>
<td>1,023,987</td>
<td>44,545,145</td>
</tr>
<tr>
<td>2</td>
<td>Total cases</td>
<td>3,912</td>
<td>21,199</td>
<td>59,050</td>
<td>4,009,291</td>
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<tr>
<td>3</td>
<td>New cases</td>
<td>386</td>
<td>1,914</td>
<td>+3,731</td>
<td>+97,128</td>
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<tr>
<td>4</td>
<td>Total recovered cases</td>
<td>679</td>
<td>6,067</td>
<td>19,839</td>
<td>1,382,372</td>
</tr>
<tr>
<td>5</td>
<td>New recovered cases</td>
<td>78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Total deaths</td>
<td>117</td>
<td>343</td>
<td>2,161</td>
<td>275,976</td>
</tr>
<tr>
<td>6</td>
<td>New deaths</td>
<td>10</td>
<td>19</td>
<td>+78</td>
<td>5,550</td>
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<tr>
<td>7</td>
<td>Active cases</td>
<td>3,116</td>
<td>9,135</td>
<td>37,050</td>
<td>2,350,943</td>
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<tr>
<td>8</td>
<td>Serious/Critical cases</td>
<td>4</td>
<td>31</td>
<td>223</td>
<td>48,703</td>
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<tr>
<td>9</td>
<td>Total female cases</td>
<td>-</td>
<td>1,152</td>
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<td></td>
</tr>
<tr>
<td>10</td>
<td>Total cases who are pregnant women</td>
<td>6</td>
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<td>11</td>
<td>Most affected age group</td>
<td>31-40</td>
<td></td>
<td>60+</td>
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<tr>
<td>12</td>
<td>Persons who have had contacts with COVID-19 cases</td>
<td>9,305</td>
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<td></td>
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</tr>
<tr>
<td>13</td>
<td>Persons who have had contacts with COVID-19 cases successful traced</td>
<td>9,237</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>% of total contacts successfully traced</td>
<td>99%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>15</td>
<td>Health workers that have tested positive of COVID-19</td>
<td>56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Health workers reported death from COVID-19</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Total Ventilators</td>
<td>219</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Total tests per 1 million population</td>
<td>116</td>
<td>479</td>
<td>788</td>
<td>6,061</td>
</tr>
<tr>
<td>19</td>
<td>Total cases per 1 million population</td>
<td>19</td>
<td>43.7</td>
<td>45.4</td>
<td>514</td>
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<tr>
<td>20</td>
<td>Total deaths per 1 million population</td>
<td>0.6</td>
<td>0.7</td>
<td>1.7</td>
<td>35.4</td>
</tr>
<tr>
<td>21</td>
<td>Total recovered cases per 1 million population</td>
<td>26</td>
<td>12.5</td>
<td>15.3</td>
<td>97.8</td>
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<tr>
<td>22</td>
<td>New cases per 1 million population</td>
<td>1.8</td>
<td>3.9</td>
<td>2.9</td>
<td>3.8</td>
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<td>23</td>
<td>New deaths per 1 million population</td>
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<td>0.04</td>
<td>0.06</td>
<td>0.14</td>
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<td>24</td>
<td>Total Ventilators per 1 million population</td>
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<td></td>
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<tr>
<td>25</td>
<td>% of total tests</td>
<td>0.01</td>
<td>0.05</td>
<td>0.07</td>
<td>0.6</td>
</tr>
<tr>
<td>26</td>
<td>% confirmed cases</td>
<td>16.4</td>
<td>9.1</td>
<td>5.8</td>
<td>13.4</td>
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<tr>
<td>27</td>
<td>% of total Recovered cases</td>
<td>17.4</td>
<td>28.6</td>
<td>33.6</td>
<td>31.9</td>
</tr>
<tr>
<td>28</td>
<td>% of total Deaths</td>
<td>3.0</td>
<td>1.6</td>
<td>3.7</td>
<td>6.9</td>
</tr>
<tr>
<td>29</td>
<td>% of Active Cases</td>
<td>79.6</td>
<td>43.1</td>
<td>62.7</td>
<td>58.6</td>
</tr>
<tr>
<td>30</td>
<td>% distribution of cases by sex</td>
<td>M69%, F31%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>% of female cases</td>
<td>8.2</td>
<td></td>
<td></td>
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<tr>
<td>32</td>
<td>% of female cases who are pregnant women</td>
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<tr>
<td>33</td>
<td>Death of health workers as a % of total deaths</td>
<td>8.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>% of total ventilators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Daily laboratory testing capacity</td>
<td>2,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Number of laboratory testing centres</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Bed space available across the country</td>
<td>3,500</td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

### Key interventions and impact
- Multiple strategies including isolation, contact tracing, testing, treatment, random lockdown, social distancing.
- The extent of their effectiveness is evident in increased awareness and knowledge, strengthening of health system including increase in testing laboratories to 21 across the country.

### Key challenges
- Exponential increase in cases and deaths. Nigeria reported 1,000 cases on 24th April, 2,000 cases 7 day later on 1st May 2020, and 3,000 cases 5 days later on 6th May 2020. It may report 4,000 cases in three days. Even though variation in growth pattern with modelled growth pattern may be due to inadequate testing; the increase...
is also associated with dynamics of transmission from importation through travel that accounted for 84% in week 1 to 8 data. Weeks 9-16 data showed transmission was 43% travel history and 35% through local contact. Meanwhile, emerging data post-week 9-16 data, indicate that community transmission at 54% appear to be prevailing case in the country.

- Inadequate laboratory testing capacity:
  - Testing capacity has increased from 1,500 per day as of 30th April through 2,500 per day by 1st May 2020 in 15 laboratories; to 3,000 per day from 6th May 2020 in 21 laboratories in 18 out of the 36 States and FCT. There are plans to increase to 2,000 samples in Lagos and 1,000 samples in FCT and other centres. At the moment, 49% of States do not have testing capacity.

- Low supply of reagents for testing
- Inadequate Ventilators and Respirators for emergency cases. As of 14th April, there were about only 219 ventilators comprising 169 in 16 States\(^2\) and 50 A30 donated by UN system in Nigeria\(^3\). While, the country needs 500 ventilators to assist with cases every day, experts say 10,000 ventilators are required nationwide. Similarly, there only 50 respirators while the country require 50,000 respirators.

- Apathy towards effective COVID-19 mitigation strategies – relaxation of random lockdowns, at national and across the states; non-compliance with social distancing, low use of PPEs

- Inadequate disaggregated data by age-sex to inform programming at all levels - national, state, LGA, ward and community levels

- COVID-19 morbidity and fatality among health workers – Case of Kano Testing Centre

- Huge population – 214 million and

- Vast land area – 923,768km\(^2\)

- Federal structure - 36 States and the FCT, which universal implementation of curbing measures across the states, difficult.

Main recommendations
- Establish and operate testing laboratories in all states of the federation
- Ensure availability of maternal health and life-saving commodities in all facilities
- Ensure compliance to COVID-19 spread mitigation strategies
- Collect and disseminate disaggregated COVID-19 case data by age-sex to inform programming
- Also collect and disseminate SRH service and GBV incidence data for programming
- Develop and implement post-COVID investment plan

Implications for UNFPA Programme
- COVID-19 pandemic has resulted in delay in 2020 programme delivery including the disruption of SRH/FP and GBV services and EAD exercise for the next census
- It has disrupted the provision of social services – routine healthcare and educational services; that contribute to improved quality of life for women, girls and young people.
- Intermittent lockdowns across the country have crippled economic activities, with notable implications for the informal sector where women are the majority
- It has resulted in re-programming of funds to curb COVID-19 spread nationwide:
  - Provide breathing support services for emergencies – respirators and ventilators for critical cases requiring oxygen and breathing support
  - Support isolation centres - bed space for those that will require hospitalisation
- Ensure availability of SRH/FP and GBV services

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\(^3\) UN (2020), Press Release – ‘UN procures ventilators and other medical supplies to boost Government of Nigeria’s response to COVID-19’, Abuja, 14 April
1. OVERVIEW
Coronavirus was first described in 1935, but isolated in humans in 1965. The on-going outbreak of coronavirus was identified on 31st December 2019 – tagged COVID-19 - in Wuhan China, and has since spread to 213 countries/territories and still counting.

Following increased numbers and spread to multiple countries, the World Health Organisation (WHO) characterised the coronavirus outbreak as a pandemic on the 11th March 2020.

On the 14th February 2020, the first case of coronavirus was confirmed in Africa, specifically in Egypt. Nigeria reported its first coronavirus case on the 27th February 2020, which was also the first reported case in West Africa.

2. METHODOLOGY
Following the first case of COVID-19 in the country on the 27th of February 2020, the Data/M&E team has been collecting the number of confirmed COVID-19 cases and deaths, based on reports of the confirmed cases by the Nigeria Centre for Diseases Prevention and Control (NCDC) and some authoritative sites in the world including WHO and European Centre for Diseases Prevention and Control (ECDC). To ensure the accuracy and reliability of the process, data collection is carried out on a daily basis from relevant sources between 18.00 and 24 hours, and used to constantly update the report. This helps to monitor and interpret the dynamics of the COVID-19 pandemic in the country and other parts of the world.

3. REPORTED CASES
This section reviews reported cases in the world, Africa, UNFPA WCAR and Nigeria as of the 8th May, 2020.

3.1. COVID-19 Reported Cases in the World
Globally, a total of 212 countries and territories affected with total of 4,009,291 cases and 275,976 deaths as of 8th May 2020. Figure 3.1 present the trend of new cases over time while Figure 3.2 depict the trend of total cases over time. Figure 3.3 display the distribution of COVID cases by continent while Figure 3.4 below present the distribution of cases of COVID deaths by continent. Further, Figure 3.5 shows the percentage geographic distribution of cases deaths and confirmed cases in the 14 days while Figure 3.6 shows the geographic distribution of COVID-19 cases worldwide.
Figure 3.1: New cases over time globally as of 8th May 2020

Figure 3.2: Total cases over time globally as of 8th May 2020

Figure 3.3: Geographic distribution of COVID-19 cases worldwide, as of 8th May 2020

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6 Op-cit
7 Ibid
Figure 3.3a: Geographic distribution of cumulative number of reported COVID-19 cases per 100,000 population, worldwide, as of 9 May 2020

Figure 3.3b: Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100,000 population, worldwide, as of 9 May 2020
Figure 3.4: Distribution of cases of COVID-19 cases by Continent as of 8th May 2020

Figure 3.5: Distribution of cases of COVID-19 deaths by Continents as of 8th May 2020

Figure 3.6: Percentage distribution of cases deaths and confirmed cases in the 14 days By Continents as of 8th May 2020

Source

3.2. COVID-19 Reported Cases in Africa
Since the first confirmed COVID-19 case in Africa was reported on 14th February 2020 in Egypt, the virus has spread to 53 of the 54 countries on the continent. The rapid spread of COVID-19 in Africa has sparked-off a wide ranges estimates. WHO warns that cases in Africa may reach 10 million in the coming months while UNECA predicts that between 300,00 and 3.3 million people in Africa could die from the virus and 1.2 billion could become infected if the spread is not contained; but the number of total

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9 Op-cit
10 Op-cit
infections could drop to 122 million by the end of the pandemic, if intense social distancing measures are implemented\textsuperscript{12}.

Similarly, scientists from the London School of Hygiene and Tropical Medicine predict that Africa could see up to 450,000 people test positive for Covid-19 virus by the second week of May, specifically stating that each East African country will report at least 10,000 Covid-19 cases by 10\textsuperscript{th} May\textsuperscript{13}. Public hospitals across 41 countries in Africa reportedly have fewer than 2,000 ventilators, and 10 countries do not have ventilators at all\textsuperscript{14}. UNECA estimates that fund needed for testing, personal protective equipment and treatment will cost $44 billion in the best-case scenario and/or $446 billion in the worst-case scenario. UNECA further warns of severe economic pain across Africa amid the pandemic, with growth contracting 2.6% in the worst-case scenario and an estimated 27 million people pushed into extreme poverty. The World Bank says sub-Saharan Africa could fall into its first recession in a quarter-century.

As of 8\textsuperscript{th} May 2020, Africa reported 57,860 cases and five countries reporting the most cases were South Africa 8,895, Egypt 8,476, Morocco 5,711, Algeria 5,369 and Ghana 4,012. Meanwhile, 2,155 deaths were recorded with five countries reporting the most deaths as Egypt 503, Algeria 488, Morocco 186, South Africa 178 and Nigeria 117. Figure 3.5 present map of Africa showing 53 countries with confirmed COVID-19 cases. Figure 3.6 present confirmed COVID-19 cases in Africa over time while Figure 3.7 present the distribution of confirmed COVID-19 cases in Africa by 53 countries. Nigeria reported 3,912 cases ranking 6\textsuperscript{th} on the continent.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{map.png}
\caption{Map of Africa showing countries that have reported confirmed COVID-19 cases}
\end{figure}

\textsuperscript{12} UN Economic Commission for Africa (UNECA)
\textsuperscript{14} WHO
3.3. COVID-19 Reported Cases in UNFPA WCAR

UNFPA WCAR comprises 23 countries. Nigeria reported the first case COVID-19 in UNFPA WCAR on the 27th February, and since then, all 23 countries in the region are affected. As of 8th May 2020, WCA 21,199 cases out of which 14,608 cases were active. It has recorded 524 deaths (2.5%) and 14,608 recoveries. Figure 3.8 present the distribution of confirmed, recovered, deaths and active cases in UNFPA WCAR. Figure 3.9 shows the percentage distribution confirmed cases in UNFPA WCAR. Figure 3.10 depict the % distribution of Death Cases in UNFPA WCAR. Figure 3.11 is the percentage distribution of Active Cases in UNFPA WCAR while Figure 3.12 is the percentage distribution of recovered cases in UNFPA WCAR. Further, Figure 3.13 showcase the percentage distribution confirmed, recovered, deaths and active cases by countries in UNFPA WCAR.

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Figure 3.8: Distribution of confirmed, recovered, deaths and active cases in UNFPA WCAR

Figure 3.9: Percentage distribution confirmed cases in UNFPA WCAR
3.4. COVID-19 Reported Cases in Nigeria

With 3,912 cases as of 8th May 2020, Nigeria ranks 60th out of 213 affected countries in the world, about 5th out the 53 affected countries in Africa, and 2nd out of the 23 countries in UNFPA WCAR. Nigeria accounts for 18.5% of cases in West Africa, 6.6% of the total cases in Africa and 0.0% of the total cases in the world. Similarly, with 117 death cases, Nigeria accounts 22.3% of total death cases in West Africa, 5.4% of total deaths in Africa and 0.04% of total death cases in the world. 34 States and the FCT have reported confirmed cases. However, the exponential increase in the number of cases can be attributed to the increase in the number of laboratories from 17 at the end April to 21 on 5th of May 2020. The plan to scale up to 1 laboratory per State and to test 2 million in the next three months targeting 50,000 test per day may results in upsurge in confirmed cases.

Figures 3.14, 3.15 and 3.16 below show the trends of coronavirus in the country highlighting the total of confirmed cases, number of new cases as well as total deaths, respectively. On the other hand, Figures 3.17 and Figure 3.18 present the trend total confirmed COVID-19 cases, new cases and death cases in Nigeria using column chart and line graphs respectively.
Figure 3.14: Total COVID-19 cases by dates from 27th February to 8th May 2020
Clearly, increase over time was exponential

Figure 3.15: New COVID-19 cases in Nigeria by dates from 27th February to 8th May 2020

Figure 3.16: COVID-19 death cases by dates from 27th February to 1st May 2020

Figure 3.17 Number of total, new and death cases of COVID-19 in Nigeria
Data Source: NCDC

**Note:** There is the need to compare data on the number of people tested (even though limited to a group of people) and the number of confirmed cases to understand the dynamics of the spread.

## 4. CASE DISAGGREGATION

4.1. Cases by geo-political zones

Figure 4.1 below depict the distribution of COVID-19 cases by the six geo-political zone in Nigeria. Although all the geo-political zones of the country have been affected by COVID-19, the severity varies with the South-West Zone accounts for highest percentage of COVID-19 infections with 48.7% with states affected, distantly followed by the North-West with 26.5%. Meanwhile, South-East has the least proportion of 0.6%.

The main reason for the concentration of cases in the south-west can be explained by notably the influence of index case, but also is a major immigration and emigration hub in the country. However, North-West has taken over the second position from North-Central due to increasing non-compliance COVID-19 interventions. The role of immigration and emigration from Abuja also explains its third position after Lagos and
Kano; but also due to the influence of high-profile government officials and their contacts.

4.2. Cases by states
Charts are used to demonstrate the spread of COVID-19 cases across the country. Figure 4.2 shows the percentage distribution of confirmed cases in 34 affected states and the FCT, which reveal that Lagos State accounted for 42.6%, Kano State accounted for 14.0% while FCT Abuja accounted for 8.6% of the total of 3,912 confirmed cases as of 8th May 2020. Figure 4.3 presents distribution of the number of confirmed and active cases by the 34 States and FCT. Similarly, Figure 4.4 illustrates the distribution of the number of discharged cases in each of the 17 States and FCT. Figure 4.5 illustrates the distribution of the number of death cases in 16 States and FCT. Figure 4.6 illustrates the distribution of the number of confirmed, active (on admission), discharged and death cases in each of the 34 States and FCT. Further, Figure 4.7 present map of Nigeria showing the 34 states and FCT that have reported COVID-19 cases.
Figure 4.3: Distribution of the laboratory confirmed and number of cases on admission by the 34 States and FCT

<table>
<thead>
<tr>
<th>State</th>
<th>No. of Cases (Lab Confirmed)</th>
<th>No. of Cases (on admission)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagos</td>
<td>42.6</td>
<td>42.6</td>
</tr>
<tr>
<td>Kano</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>FCT</td>
<td>8.6</td>
<td>8.6</td>
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<tr>
<td>Borno</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Katsina</td>
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<td>3.5</td>
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<tr>
<td>Bauchi</td>
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<td>3</td>
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<tr>
<td>Ogun</td>
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<tr>
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<td>66</td>
<td>66</td>
</tr>
<tr>
<td>Kano</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>FCT</td>
<td>5.9</td>
<td>5.9</td>
</tr>
<tr>
<td>Ogun</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Kaduna</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Delta</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Sokoto</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Jigawa</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Osun</td>
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<td>1.8</td>
</tr>
<tr>
<td>Ondo</td>
<td>0.4</td>
<td>0.4</td>
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<tr>
<td>Anambra</td>
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<td>0.1</td>
</tr>
<tr>
<td>Lagos</td>
<td>66</td>
<td>66</td>
</tr>
</tbody>
</table>

Figure 4.4: Percentage Total Number of Laboratory Confirmed Cases by 34 States and FCT

Figure 4.5: Percentage discharged cases by 17 States and FCT
Figure 4.6: Percentage death cases by 16 States and FCT

Figure 4.6: Distribution of Confirmed cases, On admission, Discharged and Death Cases by the 34 States and FCT

Figure 4.7: Map of Nigeria showing 34 states and FCT that have reported COVID-19 cases as of 8th May 2020
4.3. Confirmed cases by residence
This situation analysis did not obtain any COVID-19 data that has been disaggregated by nature of residence (urban versus rural). However, in case of Nigeria, most of the cases appear to be reported in the urban areas.

4.4. Confirmed cases by age-sex disaggregation
As of the 3rd April 2020, 55% of the 209 confirmed cases were male while 27% were females. However, data from week 9 to week 16 shows that male accounted for 71% (348 cases) while female made up the balance of 29% (145 cases). As of 1st May 2020; 8.2% (1,152) of the 13,391 cases in UNFPA WCAR were female with 6 pregnant women

Earlier updates showed that COVID-19 affected all ages, most especially ages between 31 to 60 years; however, the age distribution of confirmed cases between week 9 and week 16 showed that age group 31-40 years accounted for 21% to be the most affected age group. Figure 4.8 below present the age and sex distribution of confirmed COVID-19 cases in the WHO African Region from 25th February to 31st March 2020 while Figure 4.9 and Figure 4.10 present the Age-Sex Distribution of Confirmed Cases in Nigeria.

Figure 4.8: Age and sex distribution of confirmed COVID-19 cases in the WHO African Region 25 February-31 March 2020

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16 Novel Coronavirus (COVID-19) Update, No 14, 4th April 2020
18 UNFPA WCA dashboard
19 Novel Coronavirus (COVID-19) Update, No 14, 4th April 2020
20 SITREP, COVID-19 WHOAFRO, 2020-04-01
In all three Figures, male population were most infected. Specifically, information in Figure 4.8 indicate that young women age 20 to 31 years and men age 30 to 60 years were the most vulnerable. On the other hand, the data in Figure 4.9 shows that prior to week 9, male age-group 51 to 60 years with 11 percent followed by male age-group 31-40 years with 8 percent accounted for the most confirmed cases while female age 11 to 30 years were the most infected. However, between week 9 and week 16 as shown in Figure 4.10, there was change in the age-distribution for sex. Male age-group 31 to 40 years with 70 percent followed by male age-group 41-50 years with 65 percent accounted for the most confirmed cases while female age 21 to 40 years were the most infected.

In Lagos State, the government revealed that 70% of initial 44 cases were males, 30% was female, 1 was an infant while 1 was a young person under age 30 years\(^ \text{22} \). However, the analysis could obtain information on age and economic quintile/social class/status of the returnees. These categories of Nigerians are probably upper and/or middle class. Disaggregated data on their status from either Lagos State or NCDC will


\(^{22}\) m.guardian.org
be very useful. Table 3.1 below depict changes in some indicators between 20th April and 3rd May 2020.

Table 3.1: Difference in basic Indicators between 20th April and 3rd May 2020

<table>
<thead>
<tr>
<th>S/N</th>
<th>Indicator</th>
<th>Monday 20 April 2020</th>
<th>%</th>
<th>Sunday 3 May 2020</th>
<th>%</th>
<th>Difference</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sample Tested</td>
<td>8,587</td>
<td>NA</td>
<td>18,538</td>
<td>NA</td>
<td>9,949</td>
<td>116</td>
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<tr>
<td>2</td>
<td>Confirmed Cases</td>
<td>665</td>
<td>NA</td>
<td>2558</td>
<td>NA</td>
<td>1,893</td>
<td>285</td>
</tr>
<tr>
<td>3</td>
<td>Discharged Cases</td>
<td>188</td>
<td>NA</td>
<td>400</td>
<td>NA</td>
<td>212</td>
<td>113</td>
</tr>
<tr>
<td>4</td>
<td>Confirmed Fatalities</td>
<td>22</td>
<td>3</td>
<td>87</td>
<td>3</td>
<td>65</td>
<td>295</td>
</tr>
<tr>
<td>5</td>
<td>Affected States and FCT</td>
<td>25</td>
<td>35</td>
<td>10</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Number of Males</td>
<td>463</td>
<td>70</td>
<td>1,767</td>
<td>69</td>
<td>1,304</td>
<td>282</td>
</tr>
<tr>
<td>7</td>
<td>Number of Females</td>
<td>202</td>
<td>30</td>
<td>791</td>
<td>31</td>
<td>589</td>
<td>292</td>
</tr>
<tr>
<td>8</td>
<td>Provenance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Travel History</td>
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<td>210</td>
<td>8</td>
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<tr>
<td></td>
<td>Contacts</td>
<td>261</td>
<td>39</td>
<td>726</td>
<td>29</td>
<td>465</td>
<td>178</td>
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<tr>
<td></td>
<td>No Epidemiological Link</td>
<td>95</td>
<td>14</td>
<td>1,435</td>
<td>56</td>
<td>1,340</td>
<td>1,411</td>
</tr>
<tr>
<td></td>
<td>Incomplete</td>
<td>99</td>
<td>15</td>
<td>187</td>
<td>7</td>
<td>88</td>
<td>89</td>
</tr>
</tbody>
</table>

5. CASE ESTIMATES

5.1. Case estimates in Nigeria
Lagos State Government estimated that cases of COVID-19 may reach 39,000 in the State23, and suggest that good social distancing and active contact tracing can reduce the cases by one-third to 13,000. Similarly, Kaduna States estimates 57,000 new cases due to non-compliant with lockdown order24. These are probably an underestimate since it only based on known cases with no estimates of dark numbers - the unknown asymptomatic carriers.

In a press briefing on the 26th March 2020; Lai Mohammed, Minister of Information said 4,370 people of interest were being traced25. Meanwhile, NCDC is currently tracking 6,000 persons of interest26, but currently put at 9,221 with 98% (9,062) followed through27. Currently, the total number of people of interest was 9,305 with 99% (9,237) successfully followed28. These conflicting figures suggest that the figures could be far higher. There is an urgent need for transparency in the protocols being used for tracing to facilitate the role for UNFPA that leads on this.

23 m.guardian.org
26 NCDC
28 COVID -19 Situation Report Situation Report 63, Friday, 1st May 2020
Using the NCDC data of 9,305 that was successfully tracked as of 1st May 2020, which excluded dark numbers; we make the following conservative estimates and assumptions:

**Assumption 1:**
If 50% of 9,305 being tracked are positive, and each infect 4 other persons (likely a spouse, a child, a house help - Driver/Cleaner and close friend); then there may be 18,610 cases in Lagos State alone.

**Assumption 2:**
If each of the 18,610 cases infect at least 2 other persons (likely spouse and child); then cases would even reach 37,220 in Lagos State.

**Assumption 3:**
If 33% of 37,220 cases in Lagos are in each of remaining 35 States and FCT; then COVID-19 cases would reach 442,188 cases across Nigeria (12,283 cases x 36)

**Assumption 4:**
If in line with Lagos State projection that 30% of confirmed cases were females; then about 132,656 cases would be females.

**Assumption 5:**
If 132,656 cases are female, then 25% - 33,164 will be women of reproductive age in need integrated SRH services including family planning.

Assumption 6:
If 33,164 will be women of reproductive age, then 50% - 16,582 will be pregnant, and will need maternal health services – ANC, delivery services, PNC, etc.

These estimates would justify the speculations about an exponential increase in coronavirus infections in the country; unless contacts of confirmed cases are tracked in a timely manner. A growth pattern of COVID-19 in comparable countries where testing is conducted in section 5.2 and transmission dynamics in section 5.3; gives some insights as to what to expect in the country/Nigeria.

In modelling the cases using the R-Statistics, researchers have shown that most Africa countries will report 1,000 cases early April 2020, and the 10,000 cases between middle of April and May 2020. Nigeria is projected report 1,000 cases between 2nd and 9th April 2020 and 10,000 cases between Apr 17 and Apr 23 or 30th April the latest.

Further, a research estimated the impact of suppression strategies on infections and deaths over 250 days for two different suppression strategies triggered according to different thresholds for mortality incidence (0.2 and 1.6 deaths per 100,000 population per week) predicts that everyone in Sub-Saharan Africa will be infected with 2.4 million deaths if nothing is done to mitigate, or report 454,968,000 with 1,204,000 deaths scenario of suppression at 1.6 deaths per 100,000 population per week.

---

5.2. Growth pattern in countries that conduct testing
In comparable countries that conduct testing, the growth pattern appears to vary. The following trajectory graphs below makes comparisons of growth patterns for cases per million. China had a particular fast rise. Just 10 days after the 100th confirmed case the country already confirmed the 10,000th case.

The trajectory of China and South Korea shows that the rise in cases is not necessarily constant over time. Both countries saw a rapid initial rise but then implemented severe countermeasures, and the trajectory became flatter, meaning that the spread of the disease has slowed down. Further and specifically in South Korea, the first test was approved on 7 February, when the country had just a few cases. However, the country identified more than 2900 new cases just in the next 12 days later, after someone who had attended a 7-day event from 9th to 16th February where about 500 attendees sat shoulder to shoulder, tested positive.

Figure 5.1 illustrates the picture in Africa, where daily reported cases are not constant over time, but also increasing exponentially.

![Figure 5.1: Growth patterns for cases per million in Africa](https://ourworldindata.org/coronavirus)

5.3. Transmission dynamics
Observed major types of transmission dynamics are as follows:

- A zoonotic source reported by those visiting or working in the Huanan Wholesale Seafood Market. This is yet to be proven

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33 Max Roser, Hannah Ritchie and Esteban Ortiz-Ospina (2020), [https://ourworldindata.org/coronavirus](https://ourworldindata.org/coronavirus)

34 Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19); 16-24 February 2020, P.10
• Traffic and human mobility flows - within and in and out of Wuhan/South Korea\textsuperscript{7&35}.
• Limited human-to-human transmission\textsuperscript{7&8}.
• Special settings - though do not appear to be major drivers, but subject to studies\textsuperscript{7&8}
  o Health care settings
  o Other closed settings - Prisons, and in a long-term living facility such as schools, churches, etc; due to factors such as proximity and contact among people and the potential for environmental contamination – China/South Korea
• With respect to children aged 0-18 years old; no child was positive between November 2019 and in the first two weeks of January 2020 within Wuhan\textsuperscript{7}.
• There is both the limited knowledge and expert opinions as at 20\textsuperscript{th} March 2020 that COVID-19 can be transmitted from mother-to-child\textsuperscript{36}.

As observed with Nigeria and other African Countries, three of the four transmission dynamics; (namely migration (international and internal), human contacts and special setting) are active. In Lagos State, the government revealed that 84\% of the imported cases were Nigerians returning from abroad, direct contact accounted for 14\% while there was no idea about where the remaining 2\% contracted the infection\textsuperscript{37}. However, week 9 to week 16 data shows changing trend with 43\% (210 cases) had travel history, 35\% (175 Cases) were contacts while incomplete and unknown accounted for 19\% (92) and 3\% (16) respectively\textsuperscript{38}. Further, No Epidemiologic Link (community transmission) – 54\%, followed by Contacts –27\% and Provenance travel history – 10\% with incomplete – 9\%\textsuperscript{39}. These transmission dynamics strongly support the implementation of social distancing measures.

6. HUMANITARIAN AND DEVELOPMENT CONTEXT IN NORTHEAST NIGERIA
The humanitarian and development context in the North-East of the country portents a fertile ground for the threat of the COVID-19 pandemic, particularly for its 1.8 million\textsuperscript{40} Internally displaced persons (IDPs). The COVID-19 outbreak is predicted to have significant impacts on various sectors\textsuperscript{41} including people affected in humanitarian crises. This may compounds the conditions of persons with pre-existing humanitarian settings (refugees and migrants – IDPs living in camps and camp-like settings), and marginalised people such as Women, the elderly, adolescents, youth, and children, persons with disabilities, indigenous populations, refugees, migrants, and minorities experience the highest degree of socio-economic forms deprivations/non-inclusion due to lack of access to effective surveillance and early-warning systems, and health

\textsuperscript{37}m.guardian.org
\textsuperscript{38}NCDC (2020), “NCDC Gives Breakdown Of Tests, Cases, Deaths In Affected States” https://www.independent.ng/ncdc-gives-breakdown-of-tests-cases-deaths-in-affected-states/, 18\textsuperscript{th} April
\textsuperscript{39}COVID -19 Situation Report Situation Report 63, Friday, 1\textsuperscript{st} May 2020
\textsuperscript{40}The Covid-19 Pandemic in Nigeria, Brief 2, April 3 2020, Potential Impact on the North-East
\textsuperscript{41}Relief web (2020), COVID-19: How to include marginalized and vulnerable people in risk communication and community engagement Update #1 20/04/2020 Sources: IFRC, OCHA, WHO Posted 22 Apr 2020
and education services. Refugees and migrants\textsuperscript{42} face similar health threats from COVID-19 as their host populations. These frequently neglected, stigmatized, and may face difficulties in accessing health services that are otherwise available to the general population\textsuperscript{43}. Yet, inadequate access to essential services and exclusion may makes early detection, testing, diagnosis, contact tracing and seeking care for COVID-19 difficult for refugees and migrants thereby increasing the risk of outbreaks in these population and presenting an additional threat to public health.

In Nigeria, women and girls in conflict-affected states, particularly Borno, Yobe and Adamawa are at increased risk of GBV due to the deprived living conditions. Overcrowded housing conditions in camps also exacerbate the risks of intimate partner and other forms of domestic violence. The situation of children separated from their caregivers during displacements leads to an increase in the number of female-headed households, which may add a financial burden on them and expose them to exploitation and abuse. Within the context of camps, women and girls face a high risk of survival sex in exchange for mobility, safety and access to resources. Further, the risk for girls to GBV remains incredibly high as they are at heightened risk of early marriage and child labour.

Lockdowns and the economic impact of the crisis has complicated the delivery of food, medicines and other basic necessities.\textsuperscript{44} With a shortage of basic necessities, many women and girls, particularly female heads of households, will be forced to engage in transactional survival sex, contracting child marriage or forced marriage and will be more exposed to other forms of sexual exploitation and abuse. Due to poor security and infrastructure including reporting mechanisms and reduced access to already weak justice system, women and girls are more susceptible to rape and other forms of sexual violence.

7. VULNERABILITY

7.1. Evidence from existing data
National surveys such as the Nigeria Demographic and Health Surveys (NDHS) collect data on fertility, mortality, family planning, maternal health, and the social and economic situation of men, women, girls and boys. These data demonstrate the vulnerability of segments of populations such as:

- High maternal mortality ratio due to inadequate access, delays, poverty, skilled birth attendance, etc.
- High rates of GBV and harmful practices such as FGM, sexual violence, physical violence, etc. COVID-19 may complicate the already poor GBV indicators (Figure 6.1) below.

\textsuperscript{42} WHO (2020), Preparedness, prevention and control of coronavirus disease (COVID-19) for refugees and migrants in non-camp settings. 17 April.

\textsuperscript{43} IFRC, IOM, UNHCR and WHO (2020), Interim Guidance on Scaling-up COVID-19 Outbreak in Readiness and Response Operations in Camps and Camp-like Settings, Tuesday, March 17.

• Low health seeking behaviour among women, girls and young people. Fifty-two (52%) of Nigerians reported at least one problem associated with accessing health care for themselves. The least and most common problems women face in accessing health care are getting permission to go for treatment (11%), getting money for treatment (46%), and 44% are least likely to make decisions about their own health care.

• High prevalence of No One Present (NOP) during delivery, notably highest in the Northern part due to socio-demographic factors such as religion, age at birth, birth order and residence.

• Low socio-demographic indicators among the underserved populations such as 1) Out-of-school children – 43.6% for primary and secondary schools comprising 18.9% male and 24.7% female; 2) the female population that account for 49.4% of the population, 3) the young people age 15 to 24 years – 31.7% of the total population - 15.98% male and 15.8% female; 4) the poor – account 41.9% (NBS 2018); and 5) Orphaned and vulnerable children. Most health problems such as COVID-19 pandemic disproportionately affect these underserved populations.

In addition to lack of access to healthcare services in Nigeria, other relevant indicators that would help to make informed decisions on how to mitigate COVID-19 include hand washing and vaccination coverage. Information on handwashing reveals that 38% of households had soap and 63% had water available. Only 1% of households had cleansing agents other than soap available. The availability of soap and water varies across zones from a low of 12% and 44%, respectively, in the North East to a high of 61% and 85%, respectively, in the South West. Availability of soap and water increases with increasing wealth; 68% and 87% of households in the highest wealth quintile had soap and water available, as compared with 13% and 41% of households in the lowest quintile. Hand washing depend on availability of water. Yet 29% of households do not have water (piped water or water from a tube well or borehole) available to them to facilitate; which inhibit hand washing. And many households (69%) use some type of solid fuel for cooking, with 61% using wood (NDHS 2018). This has implications for increased respiratory issues.

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45 2018 NDHS - GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary school-age population (6-12 years) while the GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary school-age population (13-18 years).

46 Op cit

47 NDHS 2018
As shown in Figure 6.2; basic vaccination coverage has improved gradually increased since 2003 when only 13% of children had received all basic vaccinations, however the proportion of children who have received no vaccinations were 21% in 2013 and 19% in 2018. This may suggest that even when an effective COVID-19 vaccination is found, some populations may likely decline receive.

The data on coronavirus has hidden issues of inequality and vulnerabilities. From the vulnerability analysis above, women, girls and young people would usually be expected to find it difficult to have access to the limited mitigation strategies of coronavirus due to socio-demographic factors already highlighted above. Consequently, coronavirus interventions should address.

Evidence from the Ebola outbreak indicates that the indirect number of deaths from preventable causes increases dramatically and therefore it is critical that essential services is maintained. High priority areas include Essential prevention for communicable diseases, in particular vaccinations and services related to reproductive health, including care during pregnancy and safe deliveries.48

7.2. Extent of risks and vulnerability
The risk associated with COVID-19 in Nigeria may be considered high for the general population because the extent of the spread of the virus by the 5,000 people that NCDC is tracking is unknown. It may be very high for older adults and individuals with chronic underlying conditions based on the evidence from China, Europe and the US. However, an unusual pattern seems to be emerging. Data by WHO and NCDC shows that all age-groups including, economically active population and young people age may suggest the risk may be extremely high. This is corroborated by analysis of US CDC data for 2,449 patients with known ages, which reveal that 18% were between age 45 and 54 years and 29% were between age 20 and 44 years. Among those hospitalised, 18% were between age 45 and 54 years and 20% were between age 20 and 44 years.49 This emerging unusual pattern may suggest variation by geography and populations.

The risk of nation-wide community transmission of COVID-19 in the country in the coming weeks is moderate, only if effective appropriate mitigation measures are in place, but very high if insufficient mitigation measures are in place. This assessment is based on the rapidly increasing numbers of cases in 3 States (Lagos, Osun and FCT), and its reach to a total of 14 States, some of whom have already reporting cases that indicate community transmission – proportion of contact is on the increase at 19% while imported is on the decline at 51% currently.

The impact of on-going mitigation measures (quarantine of travellers, social distancing, hand washing, testing of politicians and other key suspects, and some lock down) in slowing down the transmission of the virus in the general population and in vulnerable populations is difficult to evaluate at the moment. However, it has been established that the virus spreads very quickly in the absence of effective mitigation measures. If the lock downs are hurriedly lifted too early, and nation-wide testing measures are not escalate, the surge in cases is likely to continue.

As seen in some countries, the impact of national community transmission would be high, especially if healthcare capacity is not strengthened or if health facilities are affected and a large number of healthcare workers need to be isolated or become infected. In which case, the impact on vulnerable groups would be very high, in particular for the elderly.

The risk of healthcare system capacity being overwhelmed in the country in the coming weeks is considered very high due to the already weak healthcare system, low capacity to address the pandemic, progression in increase numbers are not checked. There is high probability that many States will experience demands that far exceed currently available ICU capacity. Lagos State and the FCT are already reporting healthcare system saturation due to very high patient loads requiring intensive care and lack working equipment and logistics.

The increased pressure that would be caused by COVID-19 on the health system in many States will be dependent on the level of preparedness and surge capacity (resources, staff and hospital beds) that would be provided to the States to quickly implement proactive measures.

If incidence increases quickly and if additional surge capacity for resources, staff and hospital beds are not ensured, the impact of COVID-19 will be very high and likely result in considerable additional morbidity and mortality in COVID-19 cases. This impact will most likely affect not just the vulnerable populations of elderly and persons with chronic underlying conditions, but also the economically active populations.

8. POPULATION GROWTH
Fertility, mortality and migration determine population growth.

8.1. Migration
Migration has played a key role in the spread of coronavirus across the border and within the country.

- As at 1st April 2020, 92% of the 151 cases then were imported cases by Nigerians while 5.3% were new entrants through contacts
• Internal migration in the case of Governors – Kaduna and Bauchi who had contact with an imported case.

Research on out-migration from China shows that mobility alone is not a sufficient explanation to spread of COVID-19. Other determinants than mobility that explain differences in the spread of COVID-19 include the extensiveness of tests to detect the virus, the vulnerability of resident populations, types of border controls and the use of quarantine; which vary greatly across countries\textsuperscript{50}. Further, COVID-19 limits migration to fewer regular means of migration than there were before; thereby leading to increased irregular migration using smugglers, traffickers and other illicit groups; but also increased migration in and among developing countries with weaker health systems and rule of law\textsuperscript{51}.

8.2. Mortality
Data on age-sex, existing conditions of COVID-19 cases and deaths have been demonstrated by China CCDC (2020)\textsuperscript{52} and WHO (2020)\textsuperscript{53} as summarised in Table 7.1 below.

Mortality increases with age, with the highest mortality among people over 80 years of age (CFR 21.9%) in China. Individuals at highest risk for severe disease and death include people aged over 60 years and those with underlying conditions.

In terms of sex disaggregation, males had higher CFR of 4.7 compared to females 2.8%. By occupation, retirees reported the highest CFR at 8.9% with variation between patients who reported no comorbid conditions had a CFR of 1.4%, but patients with comorbid conditions had much higher rates: 13.2% for those with cardiovascular disease, 9.2% for diabetes, 8.4% for hypertension, 8.0% for chronic respiratory disease, and 7.6% for cancer\textsuperscript{54}.

Data on children aged 0-18 years old reported a relatively low attack rate of 2.4% (rare and mild) of all reported cases\textsuperscript{55}. Disaggregated data on mortality by age and sex in Nigeria will be compared to the situation presented in Table 5 above. None the less, increased mortality rates due to the probability of dying if infected by coronavirus are being mitigated through coronavirus interventions: creation of awareness, provision of PPEs, and provision of services such as testing, drugs, etc.

Over all, the evidence of age-specific mortality data above, suggest that older population are at a higher risk from COVID-19. As at 17\textsuperscript{th} April 2020, there were 17 deaths indicating a case fatality rate of 3\%\textsuperscript{56}. Figure 7.1 below reiterate the number alive and the number dead during week to week 16 at 17\textsuperscript{th} April 2020.

\begin{footnotesize}
\textsuperscript{50} Global Transnational Mobility Dataset (GTMD), MPC/EUI and Johns Hopkins University, CSSE. Both axes in the figure are log-transformed.
\textsuperscript{52} China CCDC (2020), The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases (COVID-19), February 17.
\textsuperscript{54} Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19); 16-24 February 2020
\textsuperscript{55} Op cit
\end{footnotesize}
Table 7.1: Age, Sex and Conditions

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<thead>
<tr>
<th>Age (Group of Ten Years)</th>
<th>Death rate</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Confirmed cases</td>
<td>All cases</td>
<td></td>
</tr>
<tr>
<td>80+</td>
<td>21.9%</td>
<td>14.8%</td>
<td></td>
</tr>
<tr>
<td>70-79</td>
<td>8.0%</td>
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**Sex**

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<tr>
<td>Female</td>
<td>2.8%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

**Pre-existing condition**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Confirmed cases</th>
<th>All cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular disease</td>
<td>13.2%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>9.2%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Chronic respiratory disease</td>
<td>8.0%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>8.4%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Cancer</td>
<td>7.6%</td>
<td>5.6%</td>
</tr>
<tr>
<td>No pre-existing conditions</td>
<td></td>
<td>0.9%</td>
</tr>
</tbody>
</table>

*Death Rate = (Number of deaths / Number of cases) = Probability of dying if infected by the virus (%). The probability differs among age group.*
8.3. Fertility
There is both the limited knowledge and expert opinions as of 20th March 2020 that COVID-19 can prevent pregnancy. However, Coronavirus mitigation strategies, notably stay at home orders have strong implications for increased fertility. About 7 million children are born in Nigeria every year58. In 2019, birth rate was 37.7 births per 1,000, and this was a declined from 38.8 births per 1,000. Similarly, total fertility rate declined from 5.5 children per woman in 2013 to 5.3 children per woman59.

A decline in a country’s mortality and fertility and the subsequent change in the age structure of the population provide a window of opportunity to harness the Demographic Dividend for sustainable development.

In addressing coronavirus, UNFPA will intervene in line with the country road map on harnessing the demographic dividend through:

- Integrated sexual and reproductive health (SRH) services and information; notably family planning.
- Education, notably of the girl child to address GBV issues - child marriage and adolescent fertility
- Generate disaggregated data to provide evidence to track any progress

9. GUIDELINES TO TEST, ISOLATE AND TRACE

9.1. Different COVID-19 Tests
The different COVID-19 test are:

- Manual molecular assays - the most common that detect the virus’ genetic material; and requires three steps: an RNA extraction kit, a PCR assay mixture, and a polymerase chain reaction or PCR machine that runs the test.60.
- Automated molecular assays - once the swab is collected.

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58 UNICEF 2017, Situation of women and children in Nigeria
59 2018 NDHS
60 WHO Technical guidance: Laboratory testing for 2019-nCoV in humans
• Rapid diagnostic tests; two types - Viral particles from nasal secretions to detect active infection, and Antibodies in the blood of an infected person to detect exposure to the virus. *(Not validated by WHO because they often give unreliable results).*

• Antibody-based or Antigen-based tests that use enzyme-linked immunosorbent assays (ELISAs).

9.2. WHO Testing Guidelines
It is difficult to provide the number of people that have been tested to date globally because countries provide the data either based on the number of tests carried out, or the number of people tested. It’s important to note that an individual is often tested multiple times.

WHO’s technical guidance for countries on laboratory testing of suspected COVID-19 recommends that:

• Countries with no confirmed cases, with sporadic cases, and clusters of cases to test all individuals suspected of having COVID-19 disease.

• Countries already dealing with large scale local transmission, and are likely to face constraints in testing every suspected case due to capacity and resources are limited, prioritise vulnerable populations at risk of developing severe disease, symptomatic health care workers - regardless of contact with a confirmed case - and the first symptomatic individuals in closed settings such as schools, prisons, and hospitals.

Country-specific testing guidelines vary per country, and therefore affects their testing rates. For example, Iceland offer free testing to its general public, including people who have no symptoms and are not under quarantine. Meanwhile, South Korea recommends testing for symptomatic patients who have come into contact with a patient who tested positive for COVID-19 and those with travel history to a country with known local transmission. Asymptomatic patients are not advised for testing.

However, testing only symptomatic populations may miss those who are already infected but are asymptomatic. None the less, the risk of getting COVID-19 from an asymptomatic individual is very low (WHO).

Some of the main reasons for testing are:

• To know what is happening in the country, notably continuous spread to communities and detect new infections

• To better respond - implement precautions and other necessary action in order to curb the spread and

• To take the pressure off of the health care system

9.3. Number of people tested by age-sex
The number of people tested disaggregated by age-sex, is work in progress in China and South Korea. In Nigeria, more than 2,000 people have so far been tested, and 70% of those who have tested positive are males. The age groups between 30 and 60 years are more vulnerable, unlike the experience of China and South Korea where vulnerability is higher from age 60 years upwards. This variation submits to
observation that the “risk profile for COVID-19 could therefore be very different in some low-income settings from that observed to date in China, Europe and North America”\textsuperscript{61}.

10. **SOCIO-ECONOMIC IMPLICATIONS**

COVID-19 is affecting the socio-economic life and programming in different ways.

10.1. Potential Impact

Some of the potential impact include:

- Sub-Saharan Africa may experience a recession for the first time in 25 years; but increase in the number of recessions in Nigeria due partly to lockdown.
- Economic growth may drop from 2.5% to 2.1% to -0.7% to -2.8%\textsuperscript{62}
- Slum in key markets as being witnessed with Oil and Gas
- Loss of Trading Partners
- Low demand for raw-materials: oil and precious metals that may result in recession in big economies for Nigeria and South Africa; Angola for oil and gold, cotton for Mali; and tourism and air traffic in South Africa, Burkina Faso and Ethiopia; and Coffee and Cocoa markets in Ethiopia
- Loss of medical personnel: over 40 health workers have tested positive, and death of 9 doctors and 1 nurse so far (NCDC)
- Loss of Jobs – AU estimate that 20 million while the UN estimates 50 million are threatened.
- Risk of Malnutrition and increased mortality
- Worsened access to routine healthcare services which may translate to higher mortality among women, young people and children
- Drop in remittances from diaspora put at 5.5% of Mali economy in 2018 and 10% of Senegal due to unemployment, lockdown and job loss abroad. Migrant remittances to Nigeria equalled US$25 billion in 2018, representing 6.1% of GDP. This also represents 14% year-on-year growth from the $22 billion receipt in 2017. The 2018 figure translates to 83% of the Federal Government budget in 2018 and 11 times the FDI flows in the same period\textsuperscript{63}.
- Delays in preparation for 2020 round of censuses, notably Nigeria to generate data for planning.

10.2. Implications for transformative results

COVID also poses threats to achievement of the transformative results

- In 2019, 1,791,014 unintended pregnancies were averted. The lockdown and social distancing in March and April 2020 due to COVID-19 affected SRH and FP services that should have averted 149,251 unintended pregnancies per month.
- Populations will be unable to access SRH/GBV services, thereby driving upwards unmet need for Family Planning
- Since violence increased by 20% during lockdown\textsuperscript{64},

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\textsuperscript{62} ADB


\textsuperscript{64} UNFPA (2020), Impact of the COVID-19 Pandemic on Family Planning and Ending Gender-based Violence, Female Genital Mutilation and Child Marriage, Interim Technical Note Information as of 27 April
36% IVP in Nigeria\textsuperscript{65} would increase to 43% affecting additional 1,872,000 women and adolescent girls.

- About 1.1 million women and girls already experienced FGM and additional 4.5 million will experience FGM if disruptions continue for the remaining part of the year.
- 44% of girls were married before their 18\textsuperscript{th} birthday and 18% were married before the age of 15\textsuperscript{66}. Similarly, 58.2% married before 18 and 18% before age of 15 years\textsuperscript{67}. Between 52.8 and 69.8 of girls will marry before their 18 birth and 21.6% will marry before the age of 15.

- To mitigate these threats to the achievement of the transformative results:
  - Take the plight of people affected by humanitarian crises and those marginalised and/or discriminated against; into consideration when planning for readiness and response operations for the COVID-19 outbreak.
  - Scale up the use for advocacy and partnership
  - Share data from the situation analysis with key stakeholders including government to inform decision intervention
  - Safeguard access to, and availability of quality SRH/GBV services
  - Strengthen supply chain
  - Increase resource mobilisation
  - Scale up humanitarian support
  - Sustain monitoring and data collection on SRH and GBV for action and tracking progress.

\textbf{11. COUNTRY RESPONSE}

\textbf{11.1. Government}

To curtail COVID-19 spread, government implement:

- Increase capacity for case identification, testing and isolation; resulting in i) expansion of laboratories from 5 by first case on 27\textsuperscript{th} March to 10 by 12\textsuperscript{th} April 2020, with plans to increase to 14 by the end of April 2020; ii) This in turn increased testing from 500 to 1,500 per day as of 30\textsuperscript{th} April through 2,500 per day by 1\textsuperscript{st} May 2020 in 15 laboratories; to 3,000 per day from 6\textsuperscript{th} May 2020 in 21 laboratories in 18 out of the 36 States and FCT with plans to increase to 2,000 samples in Lagos and 1,000 samples in FCT and other centres.
- Contact listing, tracing and isolation, achieving 99% of 9,237 people of interest as of 1\textsuperscript{st} May 2020.
- Distributed PPEs to 40,000 healthcare workers
- Trained 7,000 healthcare workers on infection prevention and control
- Deployed NCDC teams to 19 States
- Increased bed space with Lagos and FCT having 1,000 patient capacity each

\textbf{11.2. UN Strategy}

The United Nations (UN) implements the Secretary General’s three-step $2 billion global humanitarian response plan to respond to the devastating socioeconomic impacts of COVID-19. The purpose of the plan is to save many lives, to arm humanitarian agencies and NGOs with laboratory supplies for testing and medical equipment to treat the

\textsuperscript{65} 2018 NDHS
\textsuperscript{66} UNICEF (2017), Girls and Brides
\textsuperscript{67} NDHS
sick while protecting health care workers; and to support host communities that continue to generously open their homes and towns to refugees and displaced persons.

It outlines six action plans on how to prepare and respond to the emergency:

i) Develop critical measures required to help suppress the spread and protect vulnerable groups.

ii) Ensure surveillance and laboratory testing to quickly identify and safely isolate those with the virus – helping to break the chains of transmission.

iii) Prioritise treatment for those at highest risk of severe illness.

iv) Implement measures to reduce the burden on health care facilities: safe hand washing; testing, isolating cases, and contact tracing, encouraging community-level physical distancing, and the suspension of mass gatherings and international travel.

v) Share learnings and innovations to improve surveillance, prevention, and treatment, while ensuring equitable access for the poorest.

vi) Protect the health and humanitarian supply chain to protect frontline workers to travel freely to provide lifesaving care.

As part of this UN assistance support to the Government of Nigeria in support of COVID-19 Response Plan, the Resident Coordinator, Mr Edward Kallon led the UN country team to handover supplies comprising 10,000 test kits, 15 oxygen concentrators, various PPEs, vaccines, IEHK/PEP kits, and other vital health supplies.

11.3. UNFPA Strategy

UNFPA Global Response Plan is fully aligned to and part of the UN Secretary General’s three-step plan – global, regional and country levels. The implementation of this plan is active in more than 150 countries and territories including Nigeria, as part of organisation humanitarian and development spectrum. It has three Strategic Priorities, namely:

- Continuity of integrated sexual and reproductive health (SRH) services and interventions, including protection of the health workforce COVID-19,
- Addressing gender-based violence (GBV), and
- Ensuring the supply of modern contraceptives and reproductive health commodities

The accelerator interventions are: Leaving no one behind, Data, Risk communication and stigma reduction, and Youth engagement. A total of $187.5 million is required to implement the plan. Table 11.1 below is the Result Frameworks.

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68 UN Nigeria COVID-19 Daily Update 16 April 2020, No 26: 16 April 2020
69 Coronavirus Disease (COVID-19) Pandemic UNFPA Global Response Plan April 2020
Table 11.1 Result Frameworks

<table>
<thead>
<tr>
<th>Strategic Priority</th>
<th>Indicator at Country level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Continuity of integrated SRH services and interventions, including protection of the health workforce</td>
<td>1.1: Number of COVID-19 affected States with emergency obstetric and new-born care coverage, as per the international recommended minimum standards 1.2: Number of safe deliveries in UNFPA supported facilities in COVID-19 affected states 1.3: Number of women and young people who have utilised integrated SRH services in COVID-19 affected states</td>
</tr>
<tr>
<td>2. Addressing GBV</td>
<td>2.1: Number of women and girls, including disabled, subjected to violence who have accessed essential GBV services</td>
</tr>
<tr>
<td>3. Ensuring the supply of modern contraceptives and other reproductive health commodities</td>
<td>3.1: Number of COVID-19 affected states that reported no contraceptive stock-outs 3.2: Total couple-years of protection for contraceptives procured by UNFPA, including condoms in COVID-19 affected countries</td>
</tr>
</tbody>
</table>

10. KEY CHALLENGES
The main challenge is the low testing capacity due to inadequate infrastructure and services proportionate with large population. The national capacity for testing exists in the functional laboratories as shown in Figure 10.1 below; but the adequacy of these laboratories for a country like Nigeria with a land size of 923,768km² and a population of 214 million people, as well as the level of awareness leaves much to be desired. In Lagos, three laboratories conduct 150 tests per day.

Figure 10.1: Six Functional Molecular Laboratories Network with capacity to test COVID-19.

However, this has increased due to improvements in capacity and infrastructure. The number of laboratories have been increased to 21 as of 5th May 2020; thereby increasing testing capacity to 300,000 per day.
As of 14th April, there were about only 219 ventilators, comprising 169 in 16 States\(^{70}\) and the 50 A30 donated by UN system in Nigeria\(^ {71}\) to support government response. Meanwhile, the country needs 500 ventilators to assist with cases every day while experts say 10,000 ventilators are required nationwide. Similarly, there only 50 respirators while the country require 50,000 respirators. Table 10.1 below present the number of availability of ventilators in some African countries including Nigeria\(^ {72}\) while Figure 10.2 present the number of Ventilators by States.

Table 10.1: Estimated number of ventilators as of 17th April 2020\(^ {73}\)

<table>
<thead>
<tr>
<th>Country</th>
<th>Ventilators</th>
<th>Persons per ventilator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somalia</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>DR Congo</td>
<td>5</td>
<td>20,356,053</td>
</tr>
<tr>
<td>Mali</td>
<td>3</td>
<td>6,517,799</td>
</tr>
<tr>
<td>Madagascar</td>
<td>6</td>
<td>4,492,623</td>
</tr>
<tr>
<td>South Sudan</td>
<td>4</td>
<td>2,640,311</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>3</td>
<td>1,996,952</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>11</td>
<td>1,894,127</td>
</tr>
<tr>
<td>Nigeria</td>
<td>169</td>
<td>1,266,440</td>
</tr>
<tr>
<td>Malawi</td>
<td>17</td>
<td>1,246,861</td>
</tr>
<tr>
<td>Niger</td>
<td>20</td>
<td>1,138,618</td>
</tr>
<tr>
<td>Burundi</td>
<td>12</td>
<td>988,818</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>16</td>
<td>909,145</td>
</tr>
<tr>
<td>Mozambique</td>
<td>34</td>
<td>885,241</td>
</tr>
<tr>
<td>Senegal</td>
<td>20</td>
<td>786,818</td>
</tr>
<tr>
<td>Uganda</td>
<td>55</td>
<td>786,418</td>
</tr>
<tr>
<td>Liberia</td>
<td>7</td>
<td>724,757</td>
</tr>
<tr>
<td>Sudan</td>
<td>80</td>
<td>569,519</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>13</td>
<td>509,610</td>
</tr>
<tr>
<td>Namibia</td>
<td>10</td>
<td>263,007</td>
</tr>
<tr>
<td>Kenya</td>
<td>259</td>
<td>206,672</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>557</td>
<td>194,099</td>
</tr>
<tr>
<td>Ghana</td>
<td>200</td>
<td>146,701</td>
</tr>
<tr>
<td>Libya</td>
<td>350</td>
<td>19,687</td>
</tr>
</tbody>
</table>

\(^{70}\) Mac-Leva, F; Akor O; and Echeewofun S; et'al; (2020), 'COVID-19: Only 169 Ventilators in 16 States', Daily Trust, Saturday 9th May at dailytrust.com.ng

\(^{71}\) UN (2020), Press Release – ‘UN procures ventilators and other medical supplies to boost Government of Nigeria’s response to COVID-19’, Abuja, 14 April


\(^{73}\) New York Times reporting; International Rescue Committee; Norwegian Refugee Council; The CIA World Factbook
Other challenges include:

- Low supply of reagents for testing including and consumables such as PPEs
- Risk of increased poverty and malnutrition due to lock down that may in turn increase GBV and harmful practices and worsen access to routine healthcare services, which may lead to high mortality among the poor, aged, women, children and young people
- Recession
- Skilled Personnel
- Non-disaggregation of data by age-sex disaggregation are not available for programming.
- Funding
- Rapid Tests that have only 30% accuracy
- Non-declaration of Travel Details by patients
- Active cases of Lassa Fever before arrival of coronavirus
- Strike by health workers
- Weak implementation of lockdown – conduct of burial
- Disagreements on number of confirmed cases between NCDC and some State Ministries of Health - Kano

11. OPPORTUNITIES

- COVID-19 provides rare opportunity to strengthen the health sector, especially with
  - UN Business Continuity Plan – UN in Nigeria has mobilised $2 million for key support to Government to strengthen COVID-19 containment and care,
  - Nigeria Private Sector Coalition Against COVID-19: more than NGN25 billion

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74 Daily Trust, Saturday 9th May at dailytrust.com.ng

- Ministers Half Salary Contribution
- Basket Fund for COVID-19 response in Nigeria by the UN, the Government of Nigeria, the EU, etc.
- Risk communication about Covid-19 pandemic to the general public.
- Pre-Positioning Reproductive Health Kits and Lifesaving Commodities to the UN-supported humanitarian hub in the North East- a necessary practice as supply chains undergo strains during periods of pandemic response.

12. CONCEPTS

<table>
<thead>
<tr>
<th>% of Total Tests</th>
<th>Number of tested cases divided by Total number of confirmed cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Confirmed Cases</td>
<td>Number of Confirmed cases divided by Total number of total tested</td>
</tr>
<tr>
<td>% of Total Recovered Cases</td>
<td>Number of recovered cases divided by Total number of confirmed cases</td>
</tr>
<tr>
<td>% of Total Deaths</td>
<td>Number of total deaths divided by Total number of confirmed cases</td>
</tr>
<tr>
<td>% of Active Cases</td>
<td>Number of active cases divided by Total number of confirmed cases</td>
</tr>
</tbody>
</table>