COVID-19 in Kenya

Yesterday, Today and Tomorrow

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Group CEO
Amref Health Africa

October 22th, 2020
On your mark......

30th Jan 2020
WHO declared PHEIC

28th February 2020
National Emergency Response Committee established

I. THAT, the national isolation and treatment facility at Mbagathi Hospital be completed and ready to receive patients within seven days from the date hereof.

II. THAT, the identification and preparation of isolation and treatment facilities in LEVEL V AND REFERRAL HOSPITALS across the country be concluded by the 15th March, 2020.

III. THAT, THE NATIONAL EMERGENCY RESPONSE COMMITTEE ON CORONAVIRUS is hereby established.

IV. THAT, the Cabinet’s Ad-Hoc Committee on Health and the Inter-Ministerial Technical Committee on Government Response to the Coronavirus Outbreak are hereby subsumed into the National Emergency Response Committee and stand dissolved.
Organisation of the Kenya National Response

National Emergency Response Committee (NERC)

COVID-19 TASKFORCE
COORDINATION - with weekly meetings

Gov agencies, Development partners, civil society, private sector worked together in the National Task Force
13\textsuperscript{th} March 2020

MoH Website – 13\textsuperscript{th} March 2020

- Wash your hands with soap and water, or use alcohol-based hand sanitizer.
- Maintain a distance of at least 1 meter (5 feet) between yourself and anyone who is coughing or sneezing.
- Persons with a cough or sneezing should stay home or keep a social distance, but avoid mixing with others in a crowd.

- Stay at home if you feel unwell with symptoms like fever, cough and difficulty in breathing.
- Suspend all public gatherings, meetings, religious crusades games events etc. Normal church services can go on provided they provide sanitizing/and hand washing.
- Suspend all inter – school events, but keep schools open.
- Public transport providers are directed to provide hand sanitizers for their clients and regular cleaning of the vehicles.
- Temporary suspension of prison visits for the next 30 days.
- Kenyans must not abuse social media platforms or indulge in spreading misinformation that can cause fear and panic.
- Travel restrictions outside the country unless absolutely necessary and no travel to disease Epicenter countries.
- Dissemination of information on daily basis.
Soon after...

15th March - School closures

23rd March – Other closures

International travel | Churches and mosques | Bars | Weddings
### Why the strong response?

Transmissibility and virulence (mortality) of coronaviruses.

*Data approximate.*

<table>
<thead>
<tr>
<th>Low mortality</th>
<th>Higher mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="#" alt="High transmission" /> Current human coronaviruses 229E, NL63, OC43, HKU1.</td>
<td>COVID-19. Around 1% mortality, CFR around 1.5%. Very high transmissibility.</td>
</tr>
<tr>
<td><img src="#" alt="Low transmission" /> Not worth worrying about.</td>
<td>MERS. 2494 cases, 858 deaths. 35% CFR. SARS. 8422 cases 774 deaths. 11-15% CFR.</td>
</tr>
</tbody>
</table>
Special appreciation to a back office team, Emergency Operations Centre that has consistently produced the situation report daily without fail for 217 days!
Kenya case progression

- Cough – 52%
- Fever – 35%
- Difficulty in breathing – 26%
There is no single wave...It’s a composite

The Second peak is a factor of increased force of transmission in ‘second generation’ urban counties – Nakuru, Kisumu, Eldoret

Key factors in force of transmission:

1. Crowding
2. Contact
3. Closed spaces
Where are we in the epi-curve?

Outbreaks have a characteristic "shape"

Flu in a school in 1978

Foot and mouth in the UK 2001

Plague in Mumbai in 1906

Ebola in West Africa in 2014-15

COVID-19 in China in 2020
The positivity rate is a good measure
What determines the shape of the curve?

Illustration by Dr. Githinji Gitahi

- Total Population
- People Susceptible (S)
- People Infected (I)
- People Recovered or "Removed" (R)

Social distancing and hand washing can reduce the speed to I.

NB: At any one time, S + I + R = Total Population
Cant stop the curve, flatten it

In the absence of a vaccine or effective drug we have to rely on social and public health measures. ‘Flattening the curve’. And raising the bar (expand capacity). Keeps within healthcare capacity. Prevents overshoot of COVID-19 cases.
What's Kenya's ‘flat curve’?

<table>
<thead>
<tr>
<th>Country</th>
<th>Doctors &amp; Nurses</th>
<th>IC-19 Beds</th>
<th>Ventilators</th>
<th>Approx.</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>11</td>
<td>29</td>
<td>19</td>
<td>59</td>
</tr>
<tr>
<td>S. Korea</td>
<td>9</td>
<td>11</td>
<td>19</td>
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</tr>
<tr>
<td>UK</td>
<td>11</td>
<td>7</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Naisa</td>
<td>3</td>
<td>8</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>SSA</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Other variables:
- Equity
- UHC
- Risk factors
- Age
+ Co-morbidity

Source: Gitinji Gitahi
1.9% Case Fatality Rate - Risk burden

73% of all infected are between 20-49yrs

66% of all deaths are above 60yrs of age

Source: Kenya Emergency Operation Centre
Why a lower case fatality?

Young, Not obese, low prevalence of DM and Hypertension
Options for us.....

Broadly four approaches, if you have no vaccines or drugs.

- Reduce chance of infection- handwashing, respiratory hygiene.
- Isolate cases, their households, ideally their contacts.
- Reduce links between households.
- Make it less likely that the most vulnerable are exposed.
Lockdowns?
But is this the answer??

Source: https://www.apple.com/covid19/mobility
Impact – Rent as a proxy

Awareness of Any Rent Evictions:
by Total

*TIFA Research October 2020
Unacceptable trade off!

- Teenage pregnancy
- Unsafe abortions
- Maternal mortality
- Child mortality
- Unintended negative impact on essential services

- Hunger
- Mental Health
- Violence
- Livelihoods
- Fam Ecm

- Barriers to stay-at-home orders high

- Reduced GDP
- Poverty
- Taxes
- Health Exp.
- Inequality

- Social unrest
- Political Instability
- Corruption Scandals

Africa CDC

[Graph showing Sub-Saharan Africa]

[Map of Africa]

[Table showing barriers to stay-at-home orders]
No perfect response – it’s a balance!

Do nothing

- What’s the cost to human life?
- What’s the cost to the health system and other services like Cancer?
- Economic suppression inevitable (global trade down)

Lock down

- How long is a lockdown?
- What’s the signal to un-lock?
- When is the curve flat enough
- Effect on other health services like cancer care
- Cost to economy (>70% economic activity reduction?)

- Full activity
- Herd immunity (60% 70% ?)
- Risk health system collapse

Vaccine expected mid-2021
- Longer for Africa - Production and distribution timelines
- Preparedness – testing, data management, surveillance
- Protecting the vulnerable
- Social and economic support

Source: Githinji Gitahi
Thank you

www.amref.org/coronavirus
@Amref_Worldwide
Contact information

COVID-19 specific:
info.COVID-19@amref.org
www.amref.org/coronavirus

General contact information:
Email: info@amref.org
Website: www.amref.org
Twitter: @Amref_Worldwide
Facebook: Amref Health Africa
Important links

• Africa Centre for Disease Control and Prevention: http://www.africacdc.org/covid-19-and-resources

• Amref Information Centre: https://amref.org/coronavirus/

• Johns Hopkins University, Coronavirus Resource Center: https://coronavirus.jhu.edu/map.html

• OSHA COVID-19 Guidelines: https://www.osha.gov/SLTC/covid-19/

• WHO: https://www.who.int/emergencies/diseases/novel-coronavirus-2019
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- Countries with programs and Amref Health Africa Offices
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Overview – Amref Health Africa

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2. Headquartered in Africa since 1957
3. More than 12 million beneficiaries annually
4. Over 150 health projects in 35 countries of Africa
5. $120m annual expenditure
6. 1313 staff (90% in Africa)

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