Overview of mortality risk of COVID-19 in older people: global perspective

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2-day webinar (3-4 June 2020) organised by Federal Ministry of Health (HEPIQ-C) in Collaboration with Brain Health Initiative Nigeria (BHIN) on the effect of COVID-19 on the health and care management of older adults in West-Africa

www.bhin.org
Outline of talk

- Demographic change
- Public health challenges for an ageing society
- Cross country differences in number of deaths due to COVID-19
- Mortality risk in older people due to COVID-19
- Challenges to protect older people within existing health system
### % Population by age group, UN 2020 estimate

<table>
<thead>
<tr>
<th>Region</th>
<th>0-14 years</th>
<th>60+ years</th>
<th>80+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>17.57</td>
<td>20.31</td>
<td>2.95</td>
</tr>
<tr>
<td>North America</td>
<td>21.45</td>
<td>16.25</td>
<td>3.20</td>
</tr>
<tr>
<td>Asia</td>
<td>30.33</td>
<td>8.65</td>
<td>0.84</td>
</tr>
<tr>
<td>Africa</td>
<td>42.66</td>
<td>5.18</td>
<td>0.36</td>
</tr>
<tr>
<td>Sub Saharan Africa</td>
<td>44.32</td>
<td>4.74</td>
<td>0.30</td>
</tr>
</tbody>
</table>

*Africa will have a young population for sometime*
Life expectancy at birth (Globally)
Burden of disease

Epidemiological transition – changes in leading causes of deaths, from acute and infectious diseases to chronic and non-communicable ones.

Non-communicable diseases are big threats such as Heart disease, Stroke, Cancer, Diabetes, and Dementia.

These are also linked with disability, dependency, and long-term care needs.

Highly likely to suffer from multi-morbidities.

<table>
<thead>
<tr>
<th></th>
<th>At birth Males</th>
<th>At birth Females</th>
<th>At age 65 Males</th>
<th>At age 65 Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy</td>
<td>79.5</td>
<td>83.1</td>
<td>18.7</td>
<td>21.1</td>
</tr>
<tr>
<td>Healthy Life expectancy</td>
<td>63.4</td>
<td>64.1</td>
<td>10.5</td>
<td>11.2</td>
</tr>
<tr>
<td>Number of years in poor health</td>
<td>16.1</td>
<td>19.0</td>
<td>8.2</td>
<td>9.9</td>
</tr>
<tr>
<td>% of life in poor health</td>
<td>20.3</td>
<td>22.9</td>
<td>43.9</td>
<td>46.9</td>
</tr>
</tbody>
</table>
COVID-19 affects everyone today

COVID-19 pandemic affects all segments of the society, including young adults

- Unemployment rate has increased across countries
- Remittance has dropped in many countries, affecting families dependent on this
- Family support and healthcare services are affected
- Elderly are more vulnerable due to ill health
- Elderly are largely dependent on financial support system mainly from state and family
In China, mortality rates rise significantly among older patients.

Over 90% deaths reported to be for 60+ age group.
China data

Co-morbidities were more prevalent in the dead group.

Nearly 61% of the patients had comorbidities,

About 24% had two or more comorbidities.

COVID-19 fatality rate by co-morbidity in China (n=55924)
Trends of specific cause of deaths out of all cause (% of people in 60+ age groups)

<table>
<thead>
<tr>
<th>Year</th>
<th>Cause</th>
<th>China</th>
<th>South Africa</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>CVD</td>
<td>47.51</td>
<td>33.16</td>
<td>32.13</td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
<td>37.17</td>
<td>12.21</td>
<td>22.60</td>
</tr>
<tr>
<td></td>
<td>Diabetes</td>
<td>1.72</td>
<td>11.36</td>
<td>2.98</td>
</tr>
<tr>
<td></td>
<td>Respiratory disease</td>
<td>1.69</td>
<td>8.00</td>
<td>2.52</td>
</tr>
</tbody>
</table>
Fatality rates in different Provinces of South Africa

COVID-19 fatality rate in South Africa

- Eastern Cape
- Free State
- Gauteng
- KwaZulu-Natal
- Limpopo
- Mpumalanga
- North West
- Northern Cape
- Western Cape
Age distribution of cases and deaths due to COVID-19 in South Africa

Age distribution of test+ cases

- <40: 54.52%
- 40-49: 21.00%
- 50-59: 13.70%
- 60-69: 6.07%
- 70-79: 2.76%
- 80+: 1.96%

Deaths

- <40: 6.93%
- 40-49: 10.57%
- 50-59: 24.96%
- 60-69: 26.52%
- 70-79: 19.58%
- 80+: 13.34%

Age distribution of deaths
Age distribution of deaths due to COVID-19

**China**

- <40: 0.00%
- 40-49: 0.00%
- 50-59: 10.00%
- 60-69: 30.00%
- 70-79: 40.00%
- 80+: 10.00%

**South Africa**

- <40: 10.00%
- 40-49: 20.00%
- 50-59: 30.00%
- 60-69: 30.00%
- 70-79: 20.00%
- 80: 10.00%

**USA**

- <44: 0.00%
- 45-54: 10.00%
- 55-64: 20.00%
- 65-74: 30.00%
- 75-84: 40.00%
- 85+: 40.00%
Cases and deaths by gender in South Africa

Distribution of test+ cases

- Male: 42.0%
- Female: 57.3%

Distribution of deaths

- Male: 53.4%
- Female: 46.6%
Time series by date of deaths in England

COVID-19 deaths in hospital by date of death, England
Source: COVID-19 Patient Notification System

Previously announced deaths
Deaths announced 26/05
Deaths involving Covid-19 in care homes in England and Wales

(by date of death, for deaths registered up to May 30 2020)
Number of deaths due to covid-19 in England and Wales

Source: ONS, 2020

93% deaths in 60+ group
91% deaths in 60+ group

Mar-20
Apr-20

<1 01-04 05-09 10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75-79 80-84 85-89 90+
Deaths by age and gender in March/April 2020, England and Wales

Source: ONS
Leading causes of deaths in England and Wales 2020

Cause of deaths in England and Wales

Source: ONS
Conclusion

• Older people are affected most due to COVID-19.

• Over 90% of all deaths are among 60+ age group of people.

• Older males are in greater risk than females counterparts.

• Pre-existing health condition is a risk factor for COVID-19.

• The elderly becomes extremely vulnerable and isolated.

• Africa seems to have suffered less due to the age structure of its demography and lower rates of obesity.
Questions?

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