HIV, COVID-19 and Maintaining Essential Health Services: WHO Response

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Globally, as of 8:18am CEST, 1 July 2020, there have been 10,268,839 confirmed cases of COVID-19, including 506,064 deaths, reported to WHO.
COVID and HIV in SSA—Impact on Deaths from HIV and TB

COVID-19 and HIV - what is the relationship?

- Patients with severe immunodeficiency usually have high risk of complications with any infectious diseases.
- Reports of PLHIV with severe COVID-19 has been low in Europe and USA (~1-2% of reported cases) and severe cases usually have classical severe COVID-19 risk factors (Vizcara, 2020; Karmen-Tuohy, 2020; Harter, 2020).
- Lack of SARS in AIDS patients hospitalized at the same ward, despite many HCWs caring both groups got SARS-CoV (Chan, 2003).
- PLHIV low CD4 & COVID-19 similar outcomes to non-PLHIV (Guo, 2020).
- Increased (AHR=2.75) risk of COVID-19 death associated with HIV in Western Cape (Davies, 2020).

**FACTORS THAT CAN INCREASE RISK OF MORTALITY**

- Overall increased risk for infections (immunosuppression)
- COVID-19 impact on health system (limited access to services, ART refills)

**FACTORS THAT CAN REDUCE RISK OF MORTALITY**

- Reduction inflammatory capacity can mitigate COVID’s cytokine storm (immunosuppression)
- Protective effect (TAF, DTG, LPV/r)
- Viral interference?

**STAY SAFE. SAVE LIVES.**

Davies et al, 2020
Major Drugs in Clinical Development to treat COVID-19

Early Results:
- **Remdesivir (GS-75734)**
- **Low-dose Dexamethasone**
- **Anticoagulant therapy**
- **HIV protease inhibitors (LPV/r, DRV/COBI, ASC09/RTV & DAAs)**
- **Cloroquine/Hydroxichlorquine +/- Azithromycin** (a commonly used antibiotic)

Under study:
- **Broad activity antivirals** (Baloxavir marboxil, Favipiravir, Galidesivir, Umifenovir)
- **Monoclonal antibodies** (Camrelizumab, Eculizumab, Tocilizumab, Sarilumab)
- **Immunomodulators** (Interferon–alfa 2b, thymosin-alfa)
- **Convalescent plasma** (donors recovered from COVID-19)
- **Traditional Chinese Medicine**
Countries reporting on ARV disruptions due to COVID-19, 2020

Preliminary results compiled from a survey conducted by WHO between April and June 2020 (n=127)

Disclaimer: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Source: Global HIV, Hepatitis and STIs Programme (HSS), WHO, 2020
Countries reporting disruptions (partially or completely) across 25 types of health services

Percentage of countries reporting service disruptions (n=99)

<table>
<thead>
<tr>
<th>Service</th>
<th>Partially disrupted</th>
<th>Completely disrupted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental services</td>
<td>61%</td>
<td>18%</td>
</tr>
<tr>
<td>Rehabilitation services</td>
<td>60%</td>
<td>13%</td>
</tr>
<tr>
<td>Routine immunization (outreach)</td>
<td>53%</td>
<td>11%</td>
</tr>
<tr>
<td>NCD diagnosis and treatment</td>
<td>65%</td>
<td>8%</td>
</tr>
<tr>
<td>Family planning and contraception</td>
<td>59%</td>
<td>9%</td>
</tr>
<tr>
<td>Routine immunization (health facilities)</td>
<td>51%</td>
<td>13%</td>
</tr>
<tr>
<td>Treatment for mental health disorders</td>
<td>59%</td>
<td>2%</td>
</tr>
<tr>
<td>Implementation of planned ITN campaigns</td>
<td>41%</td>
<td>15%</td>
</tr>
<tr>
<td>Implementation of SMC</td>
<td>36%</td>
<td>22%</td>
</tr>
<tr>
<td>Antenatal care</td>
<td>54%</td>
<td>3%</td>
</tr>
<tr>
<td>Implementation of planned IRS campaigns</td>
<td>37%</td>
<td>12%</td>
</tr>
<tr>
<td>Cancer diagnosis and treatment</td>
<td>49%</td>
<td>6%</td>
</tr>
<tr>
<td>Sick child services</td>
<td>51%</td>
<td>6%</td>
</tr>
<tr>
<td>Palliative services</td>
<td>44%</td>
<td>16%</td>
</tr>
<tr>
<td>Management of moderate and severe malnutrition</td>
<td>45%</td>
<td>16%</td>
</tr>
<tr>
<td>Outbreak detection and control (non-COVID)</td>
<td>43%</td>
<td>2%</td>
</tr>
<tr>
<td>Malaria diagnosis and treatment</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>Facility based births</td>
<td>32%</td>
<td>2%</td>
</tr>
<tr>
<td>Continuation of established ARV treatment</td>
<td>31%</td>
<td>1%</td>
</tr>
<tr>
<td>Urgent blood transfusion services</td>
<td>19%</td>
<td>6%</td>
</tr>
<tr>
<td>Inpatient critical care services</td>
<td>16%</td>
<td>24%</td>
</tr>
<tr>
<td>24-hour emergency room/unit services</td>
<td>20%</td>
<td>23%</td>
</tr>
<tr>
<td>Emergency surgery</td>
<td>18%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Partially disrupted: 5% to 50% of patients not treated as usual
Completely disrupted: more than 50% of patients not treated as usual

*includes postnatal care, school-based services, elective surgeries, sanatorium treatment, screening programs, blood donation and collection, and polio services
National policies on frequency of ART pick-up for people who are stable on ART, 2020

ARV multi-month dispensing policy adoption (n=144)

Yes (n=129) 90%
No (n=15) 10%

Frequency of antiretroviral dispensing in national policies by WHO Region (n=129)

<table>
<thead>
<tr>
<th>Region</th>
<th>Yes (n)</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>African Region (n=39)</td>
<td>39</td>
<td></td>
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<tr>
<td>Region of the Americas (n=31)</td>
<td>31</td>
<td></td>
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<tr>
<td>South-East Asia Region (n=10)</td>
<td>10</td>
<td></td>
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<tr>
<td>European Region (n=16)</td>
<td>16</td>
<td></td>
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<tr>
<td>Eastern Mediterranean Region (n=16)</td>
<td>16</td>
<td></td>
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<tr>
<td>Western Pacific Region (n=17)</td>
<td>17</td>
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Preliminary update as of June 2020:

- 10 additional countries have reported HIVST policies in 2020
- 4 additional countries have reported HIVST implementation in 2020

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Countries identified the top priority and technical assistance needs for maintaining EHS during COVID-19 (n=99)

1. Provision of PPE and other equipment

“Unless the lock down is relaxed the service providers and the clients are reluctant to come to the service facilities. Unless we provide PPE and other protective measures both sides may not attend the health facilities” – Nepal

2. Capacity building (triage, IPC, COVID-19 case management, community information, checklist for restoring)

“Capacity building of health workers on triage, IPC and case management [and] strengthening community engagement in ensuring continuity in the uptake of essential health services” - Lao People’s Democratic Republic

3. Guidelines, tools, TA (IPC in PHC, staff safety, strengthening EHS, monitoring performance)

“The provision of an integrated tool for regular monitoring of trends in key indicators in the implementation of essential programs” (FR translation) - Burundi

4. Sharing of experiences and best practices

“Experiences from other countries on delivery of essential services under the new Normal” - Sri Lanka

5. Telemedicine strategies

“Strengthening outreach services via telemedicine and mHealth” - Philippines
What is WHO doing to mitigate the impact?

• New Guidance
  – **Surveillance:** Operational considerations for surveillance of COVID-19 using GISRS
  – **Clinical care:** Severe Acute Respiratory Infections Treatment Centre: Practical manual (section on women and children)
  – **Lab:** Guidance for laboratories shipping specimens to WHO reference laboratories that provide confirmatory testing for COVID-19 virus
  – **Logistics:** Essential Supplies Forecasting Tool

Clinical Management of COVID-19

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5. Laboratory diagnosis
12. Antivirals, immunomodulators and other adjunctive therapies for COVID-19
13. Concomitant therapy and COVID-19
14. Treatment of other acute and chronic infections in patients with COVID-19
15. Management of neurological and mental manifestations associated with COVID-19
16. Noncommunicable diseases and COVID-19
17. Rehabilitation for patients with COVID-19
18. Caring for women with COVID-19 during and after pregnancy
19. Feeding and caring for infants and young children of mothers with COVID-19
20. Caring for older people with COVID-19
21. Palliative care and COVID-19
22. Ethical principles for optimum care during the COVID-19 pandemic
23. Reporting of death during the COVID-19 pandemic
24. Clinical research during the COVID-19 pandemic

Appendix 1: COVID-19 care pathway
Appendix 2: Resources for supporting clinical management of COVID-19
Appendix 3: Palliative care therapies
References

12. Antivirals, immunomodulators and other adjunctive therapies for COVID-19

- We recommend that the following drugs not be administered as treatment or prophylaxis for COVID-19, outside of the context of clinical trials:
  - Chloroquine and hydroxychloroquine (+ azithromycin), including but not limited to:
    - Lopinavir/ritonavir
    - Remdesivir
    - Umifenovir
    - Favipiravir
  - Immunomodulators, including but not limited to:
    - Tocilizumab
    - Remdesivir-5'-P
  - Plasma therapy

14. Treatment of other acute and chronic infections in patients with COVID-19

The prevalence of acute co-infections or secondary infections co-occurring with COVID-19 has been not adequately described but appears to be low (76), and will be based on local factors and endemic or other emerging infections (44, 73, 74, 177). Antibiotic resistance increases the risk of emergence and transmission of multidrug-resistant bacteria. Infections with multidrug-resistant bacteria are more difficult to treat and associated with increased morbidity and mortality.

Acute co-infections

- We recommend for patients with:
  - Suspected or confirmed mild COVID-19, against the use of antibiotic therapy or prophylaxis;
  - Suspected or confirmed moderate COVID-19, that antibiotics should not be prescribed unless there is clinical suspicion of a bacterial infection;
  - Suspected or confirmed severe COVID-19, the use of empirical antimicrobials to treat all likely pathogens, based on clinical judgment, patient host factors and local epidemiology, and this should be done as soon as possible (within 1 hour of initial assessment if possible), ideally with broad cultures obtained first. Antimicrobial therapy should be assessed daily for de-escalation.

Chronic infections

It is currently unknown whether immunosuppression caused by chronic co-infections such as human immunodeficiency virus (HIV) puts persons at greater risk for severe COVID-19 disease. However, people living with HIV with advanced disease have an increased risk of opportunistic infections (notably TB) and related complications in general. Facility-based HIV testing services should continue and those newly diagnosed should start antiretroviral therapy as soon as possible. For people living with HIV already on treatment, continuity of antiretroviral therapy and prophylaxis for co-infections is essential, with multi-month prescribing.
Balance the demands of responding to COVID-19 with strategic planning and coordinated action to maintain quality essential health services
Recommends **practical actions that countries can take at national, sub regional and local levels to reorganize and safely maintain access to high-quality, essential health services.** It also outlines sample indicators for monitoring the maintenance of essential health services and describes considerations about when to stop and restart services as COVID-19 transmission waxes and wanes.

- **Divided into two parts**
  - Part 1: Operational Strategies for maintain essential health services
  - **Part 2: Life course and disease considerations**
  - Annex: Sample indicators for monitoring EHS

[https://www.who.int/publications-detail/10665-332240](https://www.who.int/publications-detail/10665-332240)

Maintaining essential HIV prevention and sexual health services

- Some HIV prevention activities likely to be paused or scaled down, e.g. VMMC
- But condoms, harm reduction programmed need to continue with modifications
  - Delivery of supplies with social distancing through pharmacies, vending machines, post
- Continue HIV testing including through expanding access to self-testing
- Prioritize continuation of contraception services
- PEP and PreP services
Differentiated HIV testing services (HTS) in COVID-19 Context

- **It is important to support undiagnosed PLHIV to get tested and linked to ART**
  - PLHIV, who do not know their status and are not ART and those with known risk factors (e.g. diabetes) may be at risk of COVID-19 complications

- **Safety of HTS providers needs to be ensured** during testing procedures
  - practices including PPE, hand hygiene, respiratory hygiene, and physical distancing measures.
  - increased use of phone calls, digital tools (e.g. videos, websites, social media, text messages)

- **Considerations for prioritizing and adapting HTS programmed**
  - Continuing ongoing critical clinical services (e.g. ANC, individuals with symptoms or conditions indicative of HIV or with related co-infections or other co-morbidities (e.g. TB, STIs, malnutrition), and EID of HIV-exposed children).

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**Considerations for HIVST**

- HIVST may be an acceptable alternative to maintain services while adhering to physical distancing guidance.
- It is important to strategically implement HIVST prioritizing areas and populations with the greatest needs and gaps in testing coverage.
- **HIVST approaches include:**
  - distribution for personal use and/or sexual and/or drug injecting partners of PLHIV and social contacts of key populations

- **Priority settings to consider**
  - Pick up at facilities or community sites
  - Online platforms (e.g. websites, social media, digital platforms) and distribution through mail
  - Pharmacies, retail vendors, vending machines
Ensure continued treatment - DSD and MMD

• Clinically stable populations (including key populations) can benefit from simplified ART delivery models including multi month prescriptions (3-6 month supply)

• Take-home doses of methadone or buprenorphine for stable people on opioid substitution therapy (OST)

• Ensure that there are adequate supplies of medicines to treat HIV, coinfections and comorbidities including substance dependence
Key Populations - Continued access to essential services

• Ensure that people from key population groups and/or living with or affected by HIV are offered the same access to essential clinical services continue without disruption

• It is critical that services that reach key populations such as community-based services, drop-in centres and outreach services can continue providing life-saving prevention (distribution of condoms, needles and syringes), testing and treatment (for HIV and opioid dependence) while securing safety of staff and clients

• Ensure vaccinations are up to date (including influenza and pneumococcal vaccines)
People in prisons and other closed settings

• To mitigate potential outbreaks it is crucial that prisons and immigration detention centres are embedded within the broader public health response

• Close collaboration between health and justice ministries and includes protocols for entry screening, personal protection measures, physical distancing, environmental cleaning and disinfection, and restriction of movement, including limitation of transfers and access for non-essential staff and visitors

• Develop non-custodial strategies in order to prevent overcrowding in closed settings

• Governance of prison health by a ministry of health can facilitate
A Diagnostics Consortium for COVID-19 has been developed that includes WHO, Global Fund, Unicef, Gates Foundation, ACDC, CHAI, FIND, GDF, MSF, PAHO, UNDP, Unitaid, UN DOS and World Bank

- Gathering information and data on tests in development
- Working with suppliers to negotiate access to tests as well as lower prices
- Developing an equitable minimum volumes plan for distribution to all LMICs and small island states
- Additional technologies will be brought into the consortium as available
Key considerations for HIV and TB diagnostics

WHO encourages collaboration and sharing of currently existing molecular diagnostic platforms to support the COVID-19 preparedness response

- It will be essential to maintain current critical molecular diagnostic services, especially for:
  - Early infant diagnosis
  - HIV viral load testing for people living with advanced HIV disease and those suspected of failing treatment (non-suppressed), including pregnant and breastfeeding women
  - HIV viral load testing for infants, children, and adolescents
  - Tuberculosis testing in all patient groups
    https://www.who.int/tb/COVID_19considerations_tuberculosis_services.pdf

- It is not recommended to move equipment to centralized settings in response to COVID-19 as that could cause significant disruptions to current testing networks
WHO launched the SOLIDARITY trial on 18 March 2020. The SOLIDARITY trial provides simplified procedures to enable even hospitals that have been overloaded to participate. The trial entails: an experimental antiviral compound called remdesivir; the malaria medications chloroquine and hydroxychloroquine; a combination of two HIV drugs, lopinavir and ritonavir; and interferon-beta. Many countries joined the SOLIDARITY trial—Argentina, Bahrain, Canada, France, Iran, Norway, South Africa, Spain, Switzerland, and Thailand. The COVID-19 Solidarity Response Fund has raised over US$43 million from more than 173,000 individuals and organizations. FIFA has contributed US$10 million.
The Access to COVID-19 Tools (ACT) Accelerator, is a new, groundbreaking global collaboration to accelerate development, production, and equitable access to COVID-19 tests, treatments, and vaccines.

https://www.who.int/initiatives/act-accelerator
Fighting the Infodemic, HCW Training & Information for all audiences (EPIWIN, OpenWHO.org)
Community and Civil Society Engagement

- Community and civil society-led initiatives – several supported by WHO including on HIV and COVID-19

- Analysis of levels and types of CSO engagement – including through UHC 2030 - action to address gaps

- Technical guidance and assistance to countries on engaging communities in COVID-19 service delivery and research

- DG Town Hall with CSOs and commitment to regular briefings

- ACT-Accelerator opportunities
Summary

• HIV gains at risk during COVID-19
• Essential health services need to be maintained and restarted safely
• Resilient responses includes: DSD models and multi-month provision of meds, community pick-up, use of ehealth and mhealth technology, & strong community engagement
• ACT-Accelerator, training resources and multi-stakeholder initiatives preparing the terrain to #BuildBackBetter
Thank you

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