COVID-19, HIV and TB in South Africa

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IAS COVID-19 webinar
First COVID-19 case: 5 March (initial cases all imported)

National lockdown imposed on 27 March (when 1170 cases)

19 April: 3158 cases, 54 deaths, 114711 tests
Factors that may affect COVID-19 impact in SA

• Mitigating
  • Early lockdown allowing health service & public health intervention preparation
  • Age structure of the population: 5% of population over 65 years

• Aggravating
  • HIV prevalence: 7.7 million people (13%); only 54% virally suppressed on ART
  • High incidence of TB (520/100,000) and prevalence of post-TB lung disease
  • Obesity (28% in adults) and type 2 diabetes (6-12% in adults)
  • Distancing difficult in overcrowded poor communities and public transport
  • Deficiencies in the health system are likely to be exposed
Groote Schuur Hospital

COVID-19 Testing Centre
587 tested; 38 positive

2 x Person Under Investigation (PUI) wards
Up to 20 admissions per day

COVID-19 ward
12 COVID-19 inpatients managed

Intensive care unit - only ventilated patients
4 patients ventilated

Preparing to participate in WHO SOLIDARITY trial
Management in the context of HIV and TB

• All hospitalized PUI have an HIV test
• Broader differential diagnosis in HIV+ patients
  • PCP, pulmonary TB with lower zone infiltrates, pulmonary cryptococcosis
• Patient may have a differential diagnosis of COVID-19 and TB
  • Especially if recent onset of symptoms or recent worsening of symptoms
  • Swab performed, TB sputum sent and managed in PUI side-ward until results
• Consider COVID-19 as cause of exacerbation of post-TB bronchiectasis
• If patient with HIV and COVID-19 not on ART, plan is ART at 2 weeks
31yr HIV+ patient with CD4 = 3
Previous TB and plasma CrAg+
Cough, SOB with recent deterioration
Treated for PCP and cryptococcosis
Investigated for recurrent TB
PUI then COVID-negative

24yr HIV+ patient (vertical)
On ART – virally suppressed
Post-TB bronchiectasis
Acute onset SOB
PUI then COVID-negative

39yr HIV-negative patient
Obese
No other co-morbidity
Acute SOB and cough
COVID-positive

Admitted to PUI ward then General Ward
Admitted to PUI ward then General Ward
Admitted to PUI ward then COVID Ward
Southern African HIV Clinicians Society

Advocates the following:

• 6 monthly supplies of ART be given to all clinically stable HIV-positive individuals

• Family or household member should be allowed to pick up medication

• Efavirenz to dolutegravir switch as soon as possible, if patient eligible

• Only patients with an active and uncontrolled infection or a medical condition that needs clinical monitoring should not be given 6 months of treatment. These patients will have to be assessed clinically. Many will likely have adherence problems and require adherence support.