

COVID-19, HIV and TB in South Africa

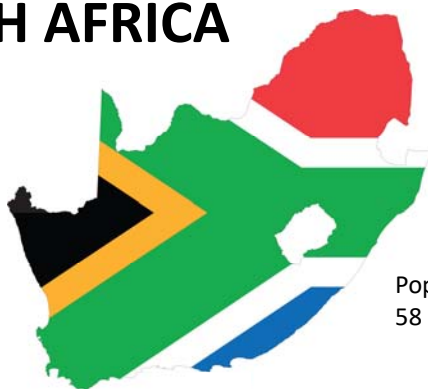
Graeme Meintjes

Department of Medicine
University of Cape Town



21 April 2020
IAS COVID-19 webinar

SOUTH AFRICA



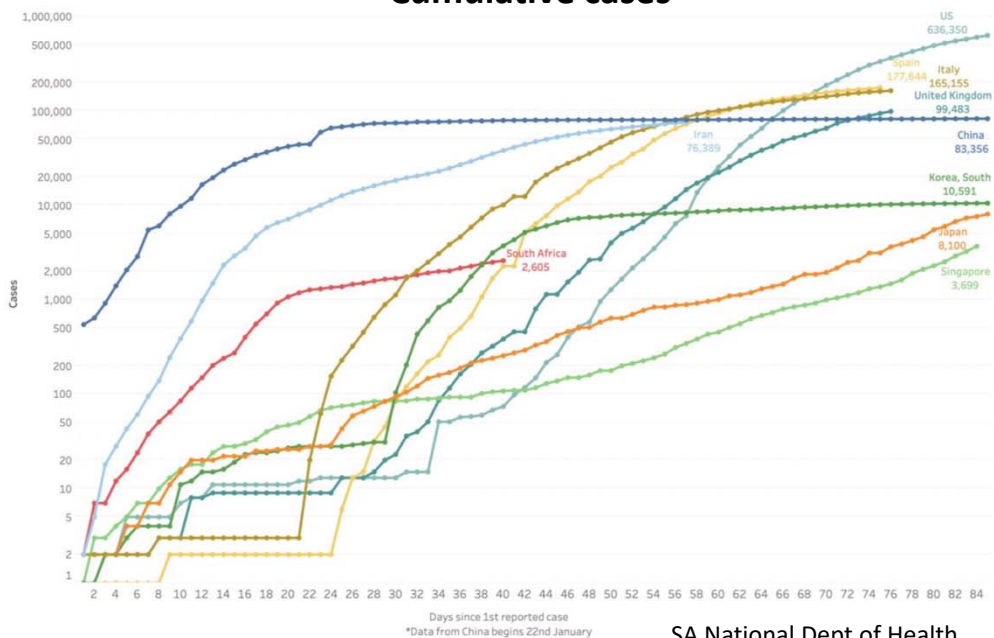
Population:
58 million

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

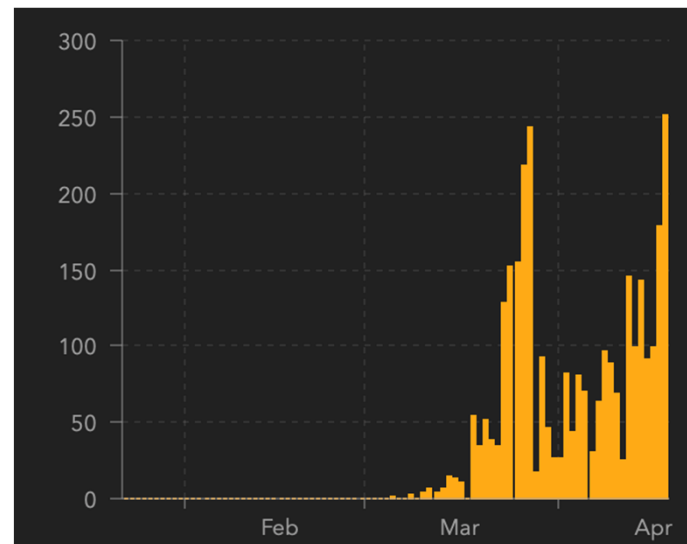
National lockdown imposed on 27 March (when 1170 cases)

19 April: 3158 cases, 54 deaths, 114711 tests

Cumulative cases



Daily new cases



COVID-19 Dashboard CSSE at JHU

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

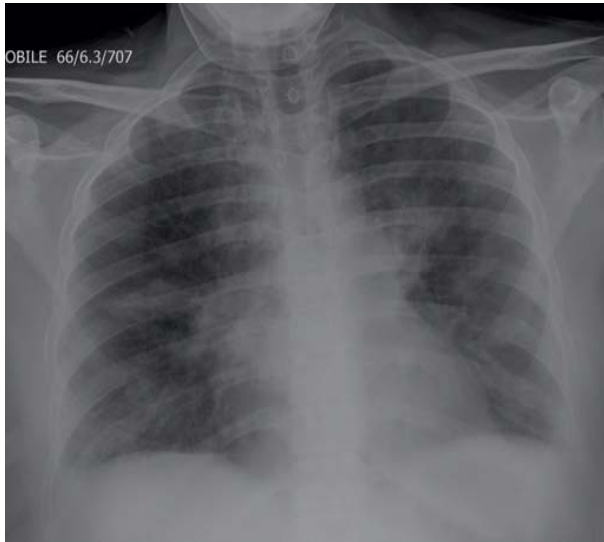
Preparing to participate in WHO SOLIDARITY trial



Home or hotel
self-isolation or quarantine

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



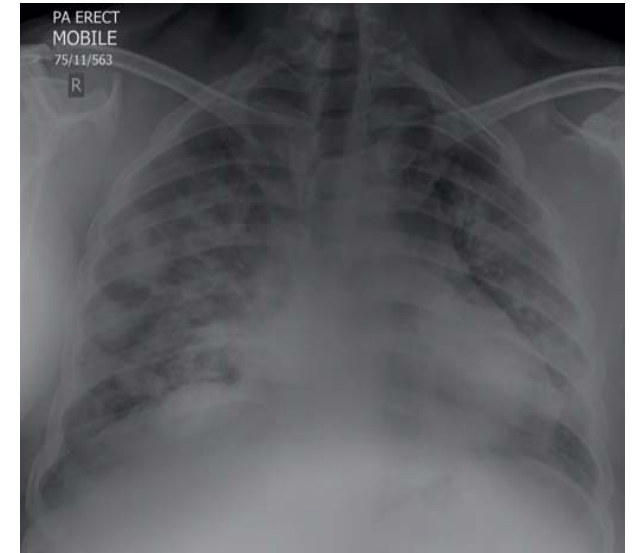
31yr HIV+ patient with CD4 = 3
Previous TB and plasma CrAg+
Cough, SOB with recent deterioration
Treated for PCP and cryptosporidiosis
Investigated for recurrent TB
PUI then COVID-negative

Admitted to PUI ward then
General Ward



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

Admitted to PUI ward then
General Ward



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

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.