

The Programmatic Management of TB in high burden countries during the initial COVID-19 response.

Thursday 30th April 2020

Chairpersons: Dr Francesca Conradie and Dr Grania Brigden

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ABSTRACT AND SESSION SUBMISSIONS: DEADLINE 11 MAY

The Union World Conference brings the latest science and research to the world's stage. This research plays a vital role as countries across the globe search for solutions to COVID-19 and struggle to ensure continuity of existing health systems.

Presentation

COVID-19: Global Considerations for tuberculosis (TB) care

Speaker: Dennis Falzon, WHO

Ensuring the continuation of TB service delivery during the COVID-19 pandemic

Speaker: Vivian Cox

Critical changes to services for TB patients in South Africa during the COVID-19 pandemic.

Speaker: Norbert Ndjeka, South African NTP

Questions and Answer session will follow the presentations.



COVID-19: global considerations for TB care

Dennis FALZON

WHO Global TB Programme, Switzerland

UNION Webinar *“The programmatic management of TB in high burden countries during the initial COVID-19 response”*

30 April 2020



Objective

Present the key questions in the WHO Information Note on global considerations for TB care and prevention during the COVID-19 response



World Health Organization (WHO) Information Note

Tuberculosis and COVID-19

Date: 4 April 2020

COVID-19: Considerations for tuberculosis (TB) care

As the world comes together to tackle the COVID-19 pandemic, it is important to ensure that essential services and operations for dealing with long-standing health problems continue to protect the lives of people with TB and other diseases or health conditions. Health services, including national programmes to combat TB, need to be actively engaged in ensuring an effective and rapid response to COVID-19 while ensuring that TB services are maintained.

The World Health Organization (WHO) is advising Member States that are leading the response to the unfolding COVID-19 pandemic ⁽¹⁾. The WHO Global TB Programme, along with WHO regional and country offices, has developed an information note, in collaboration with stakeholders. This note is intended to assist national TB programmes and health personnel to **urgently maintain continuity of essential services for people affected with TB during the COVID-19 pandemic**, driven by innovative people-centred approaches, as well as maximizing joint support to tackle both diseases. It is important

What should health authorities do to provide

essential TB services during the COVID-19 pandemic?

What services can be leveraged across both diseases?

TB programme staff: can share expertise and logistical support, such as in active case finding and contact tracing. Capacity building and training may be needed

Community-based care: strongly preferred over hospital treatment where possible and visits to TB treatment centres minimized

Prevention: limit transmission of TB and COVID-19 in congregate settings and health care facilities, basic infection prevention and control, cough etiquette, patient triage. TPT maintained

Diagnosis: TB laboratory networks and platforms could support COVID 19 response

TB treatment: must be ensured and medicines given to patients to take home, including TPT

Digital technologies

Proactive planning, procurement, supply and risk management

What measures should be in place to protect

staff working in TB laboratories and healthcare facilities, and community health workers, from COVID-19 infection?

TB infection prevention and control measures: many also apply to COVID-19

In diagnostic site: training on universal precautions, consistent use of the N95 respirator, handwashing, gloves, goggles or protection shield, waterproof aprons, regular decontamination of surfaces, staff distancing in the lab, ventilated workplaces and safe transportation.

Additional, temporary measures to be considered during the pandemic:

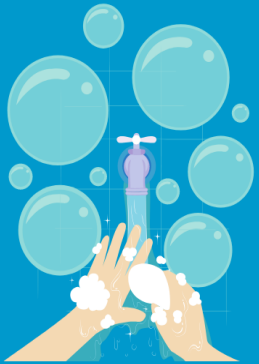
- Reduce visits for TB follow-up
- Fix TB visits on specific days or times
- TB medicines dispensed to the patient or caregiver to last until the next visit
- Sputum collection at home or in open, well-ventilated space, away from health facility

Basic protective measures in COVID-19

Protect yourself and others from getting sick

Wash your hands

- after coughing or sneezing
- when caring for the sick
- before, during and after you prepare food
- before eating
- after toilet use
- when hands are visibly dirty
- after handling animals or animal waste



Protect others from getting sick

When coughing and sneezing
cover mouth and nose with
flexed elbow or tissue



Throw tissue into closed bin
immediately after use

Clean hands with alcohol-based
hand rub or soap and water
after coughing or sneezing and
when caring for the sick



Protect others from getting sick



Avoid close contact when you
are experiencing cough and fever

Avoid spitting in public



If you have fever, cough and
difficulty breathing **seek medical**
care early and share previous travel
history with your health care provider



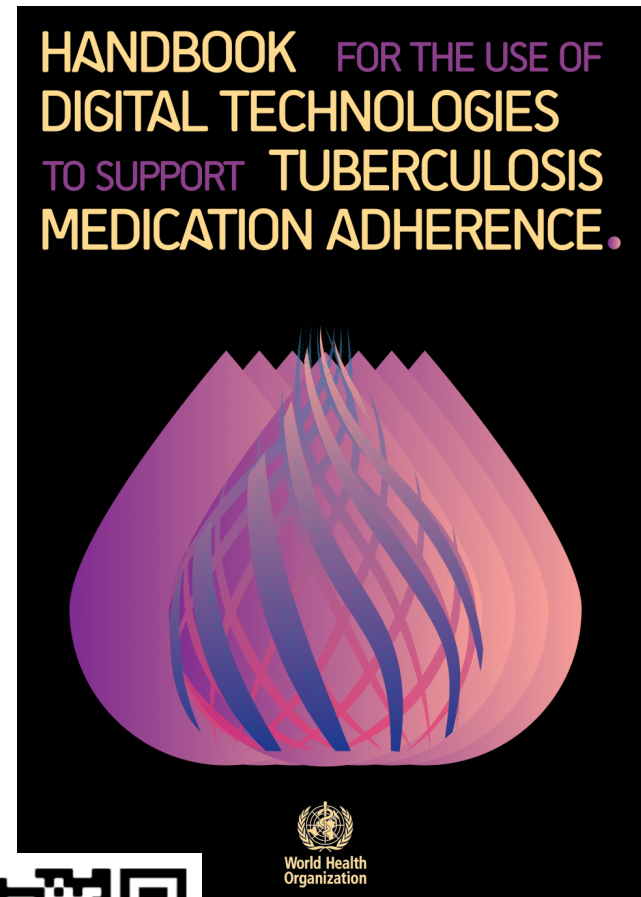
How can we protect people seeking TB care during the COVID-19 pandemic?

- Risks from ...
 - isolation of people with COVID-19 exposure or disease
 - reassignment of TB staff, community workers, diagnostic equipment and facilities
 - prolonged disruption in production and transport of consumables due to lockdown
- Uninterrupted TB prevention and care activities need to continue
- Infection control in institutions, including prisons and long-term care facilities
- Rapid roll-out of measures to reduce the need for daily healthcare visits
 - WHO recommended, all-oral TB treatments for MDR-TB
 - TB preventive treatment with shorter regimens
 - Mechanisms to deliver medicines and collect specimens at home
 - Effective use of digital technologies for patient support, such as AE reporting

COVID-19, TB and digital technologies

Digital adherence technologies are critical during the COVID-19 pandemic. As in-person encounters are minimized, healthcare workers rely more on mobile text, video-communication and other approaches to stay in touch with people, help them complete treatment and promptly manage adverse drug reactions.

Other uses of digital technology - like electronic recording, eLearning and laboratory information systems – are likewise invaluable at this time.



Should all people being evaluated for TB

also be tested for COVID19 and vice-versa? (1)

As the pandemic advances...

- more people, including TB patients, will be exposed to COVID-19
- in high TB burden settings the confirmation of COVID-19 infection does not exclude concomitant TB, and *vice versa*
- clinical course can determine need to test for either or both diseases

Simultaneous testing for both TB and COVID-19 in the same patient would generally be indicated in the presence of:

1. clinical features common to both diseases
2. simultaneous exposure to both diseases
3. a risk factor for poor outcomes to either disease

Should all people being evaluated for TB

also be tested for COVID19 and vice-versa? (2)

- Early diagnosis of both TB and COVID-19 is important in people vulnerable to unfavourable outcomes, especially the elderly and presence of diabetes mellitus and chronic obstructive pulmonary disease, including possibly lung damage from past TB sequelae
- There is a stronger case for concurrent testing for both conditions in these individuals, even if the clinical picture is atypical
- The understanding of how COVID-19 impacts TB outcomes in people with other risk factors - such as malnutrition, renal failure and liver disease - is still developing
- While untreated HIV is an important risk factor for progression to TB or for poor outcomes in TB patients, its influence on the prognosis of COVID-19 patients is unclear. Nonetheless, additional precautions for all people with advanced HIV or poorly controlled HIV are recommended by WHO

Can TB and COVID-19 be tested on the same type of specimen?

- Specimens are usually different – sputum for TB and nasopharyngeal or oropharyngeal swabs for COVID-19
- Diagnostic testing using molecular techniques is currently recommended for both conditions; serology is not recommended for both
- By 30 April 2020, four *in vitro* diagnostic molecular tests were on the WHO Emergency Use Listing for COVID-19

Date Listed	Product name	Product code(s)	Manufacturer
03 April 2020	cobas SARS-CoV-2 Qualitative assay for use on the cobas 6800/8800 Systems	09175431190 and 09175440190	Roche Molecular Systems, Inc.
07 April 2020	Primerdesign Ltd COVID-19 genesig Real-Time PCR assay	Z-Path-COVID-19-CE	Primerdesign Ltd.
09 April 2020	Abbott Realtime SARS-CoV-2	09N77-090 and 09N77-080	Abbott Molecular Inc.
24 April 2020	PerkinElmer SARS-CoV-2 Real-time RT-PCR Assay	SY580	SYM-BIO LiveScience Co., Ltd

https://www.who.int/diagnostics_laboratory/EUL/en/

Xpert® Xpress SARS-CoV-2 cartridge

- The US FDA granted an Emergency Use Authorization for Xpert® Xpress SARS-CoV-2 cartridge
- This cartridge is meant to be used on GeneXpert machines which have been widely deployed for rapid TB testing. Protecting time to test TB specimens is important if these machines will be involved in COVID-19 testing.
- WHO is currently evaluating this cartridge (below as on 27 April 2020)

Product name	Product code(s)	Manufacturer name	Dossier review	QMS Desk Assessment
Xpert Xpress SARS-CoV-2	XPRSARSCOV2-10	Cepheid		R


in process

R
information requested from
manufacturer

Are people with TB likely to be at increased

risk of COVID-19 infection, illness and death?

Is TB treatment different in people who have both TB and COVID19?

- Experience on COVID-19 infection in TB patients remains limited
 - But likely that TB plus COVID-19 gives poorer treatment outcomes
 - Left untreated TB eventually leads to death in about 50% of people
 - TB treatment and TB preventive treatment should continue as needed
 - TB patients should take precautions against COVID-19
 - No specific curative medication is currently recommended for COVID-19
- but therapeutic trials are ongoing

BCG vaccination and COVID-19

- No evidence to date that bacille Calmette-Guérin vaccine protects against infection or complications of COVID-19
- Animal and human studies suggest that BCG has non-specific effects on the immune system. Two clinical trials are now exploring if this can help mitigate COVID-19
- Until more evidence is gathered, BCG is not recommended to protect against COVID-19
- Need to safeguard BCG vaccine supplies for use in neonates, to protect them from severe forms of TB and death during this pandemic

About other measures, masks etc. ...

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Coronavirus disease (COVID-19) Pandemic

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Latest updates - Live press conference (Geneva)



20 April 2020

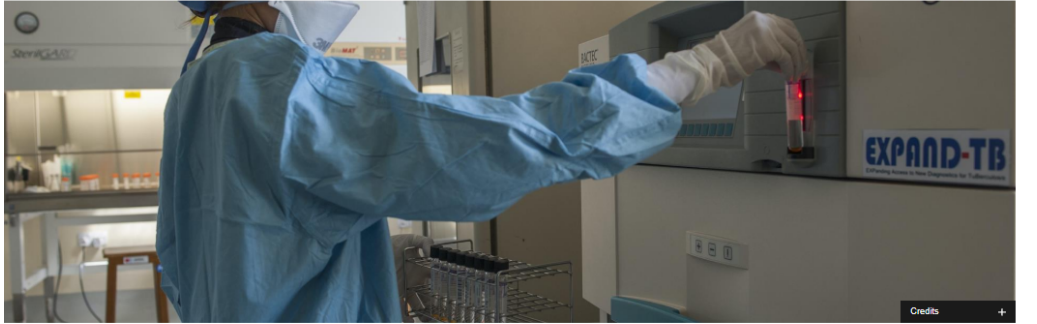
WHO Director-General's opening remarks at the media briefing on COVID-19 - 20 April 2020

[Rolling updates on coronavirus disease \(COVID-19\)](#)

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

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Updated WHO Information Note: Ensuring continuity of TB services during the COVID-19 pandemic

4 April 2020 | Departmental news

Geneva. The World Health Organization (WHO) Global TB Programme, along with WHO regional and country offices, has developed an updated [information note](#), in collaboration with stakeholders. This note is intended to assist national TB programmes and health personnel to urgently maintain continuity of essential services for people affected with TB during the COVID-19 pandemic, driven by innovative people-centred approaches, as well as maximizing joint support to tackle both diseases. It is important that the progress made in TB prevention and care is not reversed by the COVID-19 pandemic. Finding and treating people with TB remain the fundamental pillars of TB prevention and care and those would require maintained attention. This updated note has additional details on clinical management considerations to manage TB and COVID-19, as well as new information on testing.

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Related

[World Health Organization \(WHO\) Information Note Tuberculosis and COVID-19 Date: 4 April 2020](#)

Commentaries

[Bacille Calmette-Guérin \(BCG\) vaccination and COVID-19](#)
12 April 2020

<https://www.who.int/news-room/detail/04-04-2020-updated-who-information-note-ensuring-continuity-of-tb-services-during-the-covid-19-pandemic>

COVID-19 + TB

Protect vulnerable
populations from further
marginalization and from
poor access to healthcare



Programmatic Management of TB in High Burden Countries During Initial COVID-19 Response

Ensuring the Continuation of TB Service Delivery During the COVID-19 Pandemic

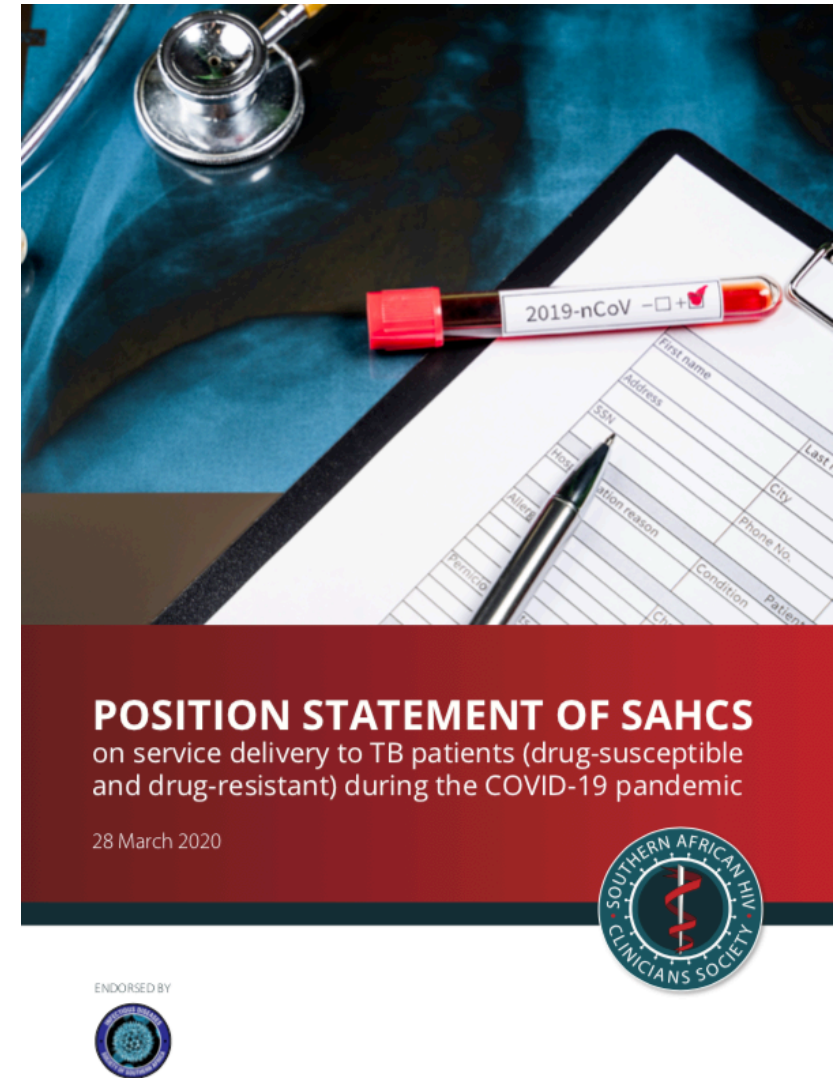
Dr. Vivian Cox

30 April 2020



Outline

- Rationale
- Structure of operational guidance
- DS-TB patients
- DR-TB patients
- Unwell patients
- Additional considerations



<https://sahivsoc.org/Files/SAHCS%20position%20statement%2028032020.pdf>

<http://www.differentiatedcare.org/Resources/Resource-Library/COVID-19-DSD-resources>

Rationale

- Early evidence that active or latent TB/MDR-TB increases susceptibility to SARS-CoV-2 ('coronavirus') infection and severe COVID-19 (viral pneumonia from SARS-CoV-2)¹
- Balance between maintaining TB service delivery and minimizing exposure to health facilities during the COVID-19 pandemic
- Prior experience of significant disruptions in provision of TB services during infectious diseases outbreaks such as 2014-2015 Ebola virus disease outbreak
 - Closure of primary care health facilities contributed to a 53% decrease in TB diagnosis rate regionally²
 - Doubling of the mortality rate for TB in Guinea³
- Planning for service delivery adaptations at the beginning of the pandemic curve can predict challenges (drug supply, primary care facility preparedness)

¹Liu Y et al. Active or latent tuberculosis increases susceptibility to COVID-19 and disease severity. medRxiv pre-print March 2020.

²Ansumana R et al. Impact of infectious disease epidemics on tuberculosis diagnostic, management, and prevention services: experiences and lessons from the 2014 – 2015 Ebola virus disease outbreak in West Africa. Int J Infect Dis. 56 (2017); 101-104.

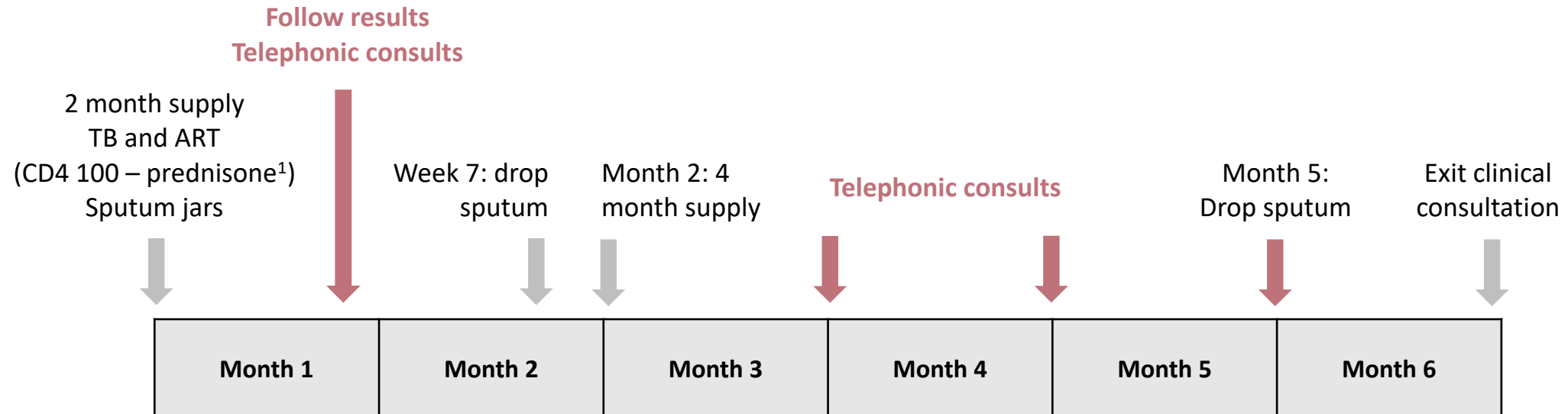
³Leuenberger D et al. Impact of the Ebola epidemic on general and HIV care in Macenta, Forest Guinea, 2014. AIDS 2015; 29:1883–7.

IDSSA/SAHCS Operational Guidance

- TB/HIV clinicians and technical advisors
- Developed for primary care level, high TB burden, resource constrained settings
- Meant as an a template/structure for country adaptation
- Does not include TB/COVID diagnostics, treatment, or infection control strategies

Drug sensitive TB patients

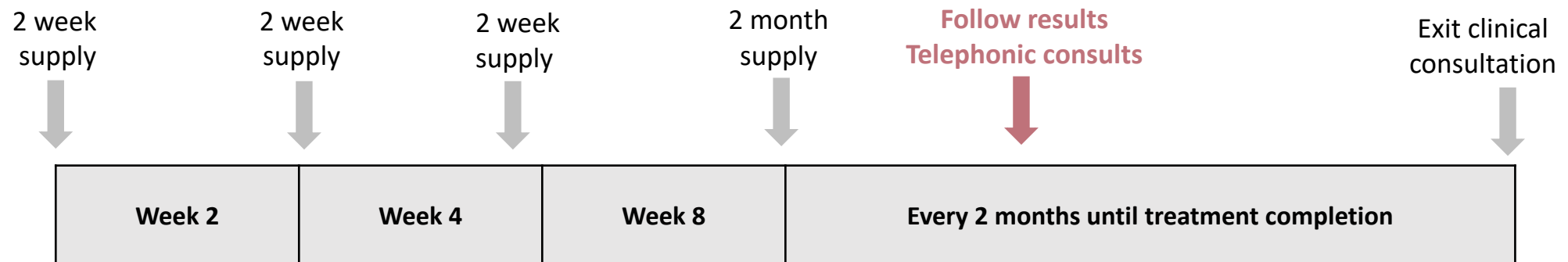
- Starting DS-TB treatment: align supply of TB and ART refills; follow up on results (including CrAG) and recall as needed; telephonic counselling
- Already on DS-TB treatment (either intensive or continuation phase): provide sufficient medication to last to Month 2 or Month 6
- Provide sputum jars for dropping off in advance



¹<https://www.ncbi.nlm.nih.gov/pubmed/30428290>

Drug resistant TB patients

- Visit schedule at 2 weeks, 4 weeks, 8 weeks, and 2 monthly thereafter
- Starting DR-TB treatment: more intensive Hb monitoring in first 2 months if on linezolid
- Month 2,4, and 6 clinical consultations: important to assess treatment effectiveness, follow sputum culture results, make treatment modifications, monitor ECGs
- Monthly culture until confirmed culture conversion, then 2 monthly thereafter



Unwell patients

- All TB patients who become unwell at home should first contact the health facility by telephone to advise whether it is necessary to come into the health facility and what is procedure on arrival
- Ensure appropriate triage system implemented on arrival including screening TB patients for COVID-19
- Where TB patient screens negative for COVID-19, triage directly to TB services.
- Where TB patient screens positive for COVID-19, provide a surgical mask, keep patient separate within COVID-19 investigative area (or at least 1.5m apart from another COVID-19 person under investigation) and inform TB services
- Visit frequency/treatment refill length should thereafter be determined at the discretion of the clinician with consideration for no unnecessary repeat in- person health facility visits during COVID-19

Additional areas of consideration

Area of consideration	Adaptation to service delivery
Patient support and telephonic monitoring interventions	<ul style="list-style-type: none">• All TB patients who have not identified a treatment supporter in the home should be encouraged to do so. Home support will be critical during time of less frequent interactions with healthcare workers and periods of lockdown.• Where resources allow, telephonic clinical follow-up and counselling can be provided at the same frequency (more if indicated) as health facility visits mandated in existing national guidelines.
Contact identification and management	<ul style="list-style-type: none">• Contact identification should continue to be conducted at the diagnosis/treatment start visit.• Patients should be advised to inform all their identified contacts of their TB diagnosis and the importance of informing any healthcare worker of their contact with a known TB case should they present at a health facility during the COVID-19 pandemic. Where possible, contact notification slips can be provided for TB contacts to present if they go to a health facility with symptoms.• At the clinical assessment exit visit, the clinician should enquire after the health of the contacts identified at treatment initiation and, if the COVID-19 pandemic is over, initiate appropriate contact management procedures.

Additional areas of consideration

Area of consideration	Adaptation to service delivery
Provision for children, pregnant and breastfeeding women	<ul style="list-style-type: none">• Same management as proposed above.• All attempts should be made to communicate and consolidate the number of clinical visits to different healthcare facilities for various indications (e.g. antenatal, TB, and HIV follow-up appointments).
Provision of the influenza vaccine	<ul style="list-style-type: none">• TB patients should not be recalled to the facility specifically for the influenza vaccine.• An influenza vaccine should only be provided if available in the clinician's consulting room during a clinical assessment visit.
Differentiating TB from COVID-19	<ul style="list-style-type: none">• TB patients and patients with high risk of TB disease (e.g. close contacts) must be screened for COVID-19 at arrival at health facilities as they may be co-infected.• Patients who present with a cough of 2 weeks or more are less likely to screen positive for COVID-19 given the duration of cough; they should be provided with a mask and proceed directly to TB services for immediate TB screening.

Conclusions

- It is time to move forward in innovative approaches to TB/DR-TB management
 - Longer medication refills
 - Move away from directly observed therapy (DOT) to self administered treatment (SAT)
 - Urgent transition from injectable-containing DR-TB regimens to an all oral regimen as recommended by the WHO
- It is imperative that we remain focused on the prevention, diagnosis, treatment, and care of TB/DR-TB – to avoid a second tragedy of the COVID-19 pandemic

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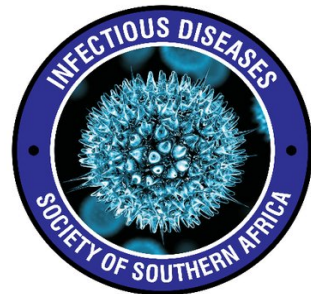
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Southern African HIV Clinician's Society

Infectious Diseases Society of Southern Africa

International AIDS Society





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REPUBLIC OF SOUTH AFRICA

EXPERIENCE OF THE RSA NTP IN ADAPTING AND MAINTAINING TB SERVICES DURING COVID-19 RESPONSE

Dr. Norbert Ndjeka

MD, DHSM (Wits), MMed (Fam Med) (MED), Dip HIV Man (SA)
Director Drug-Resistant TB, TB and HIV
National Department of Health

NO CONFLICT
OF INTEREST



PRESENTATION OUTLINE



Introduction



Overview of challenges



Guidance from the World Health Organization, IDSSA and SA HIV Clinicians Society



RSA NTP and Provincial response: 3 phases

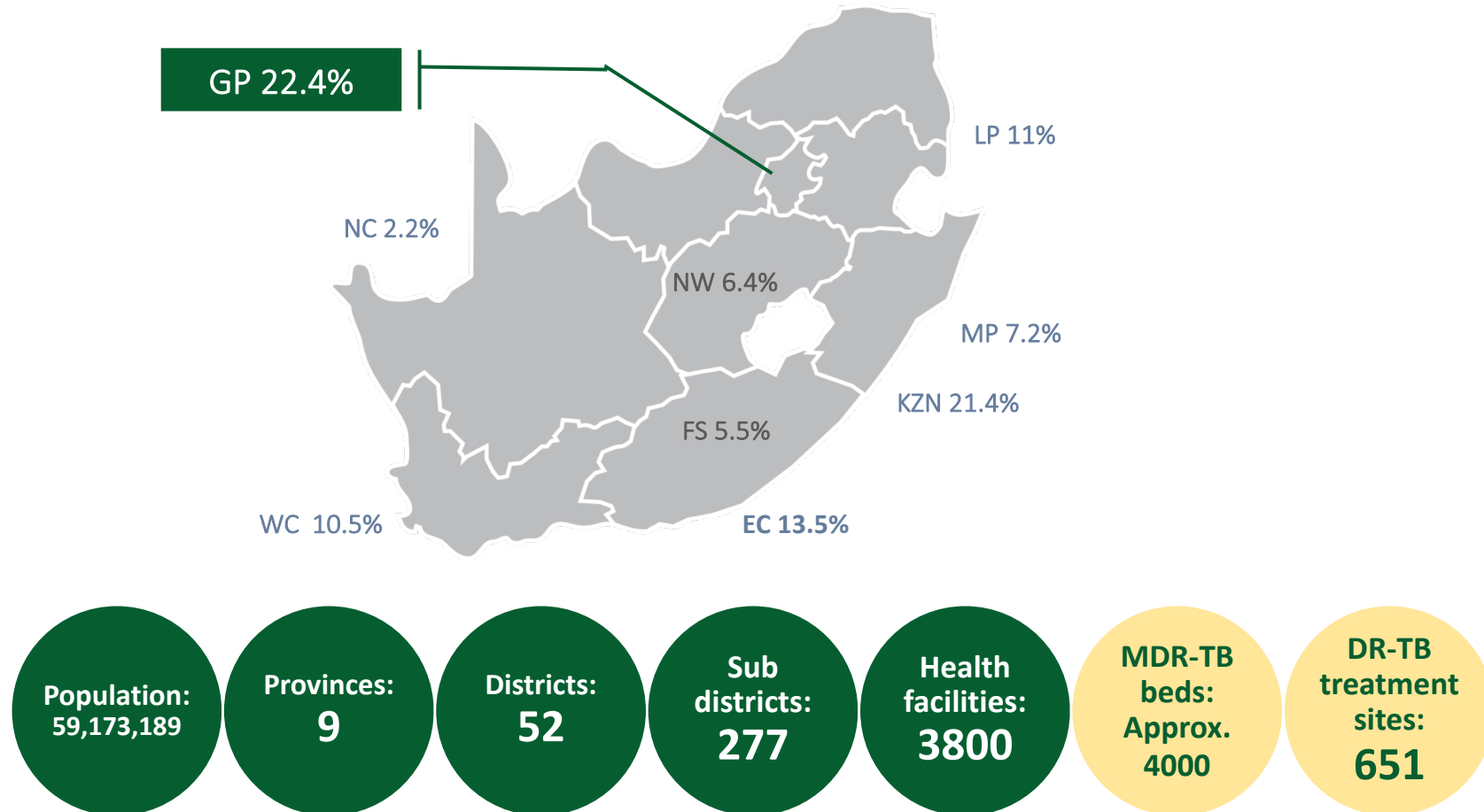


Way forward

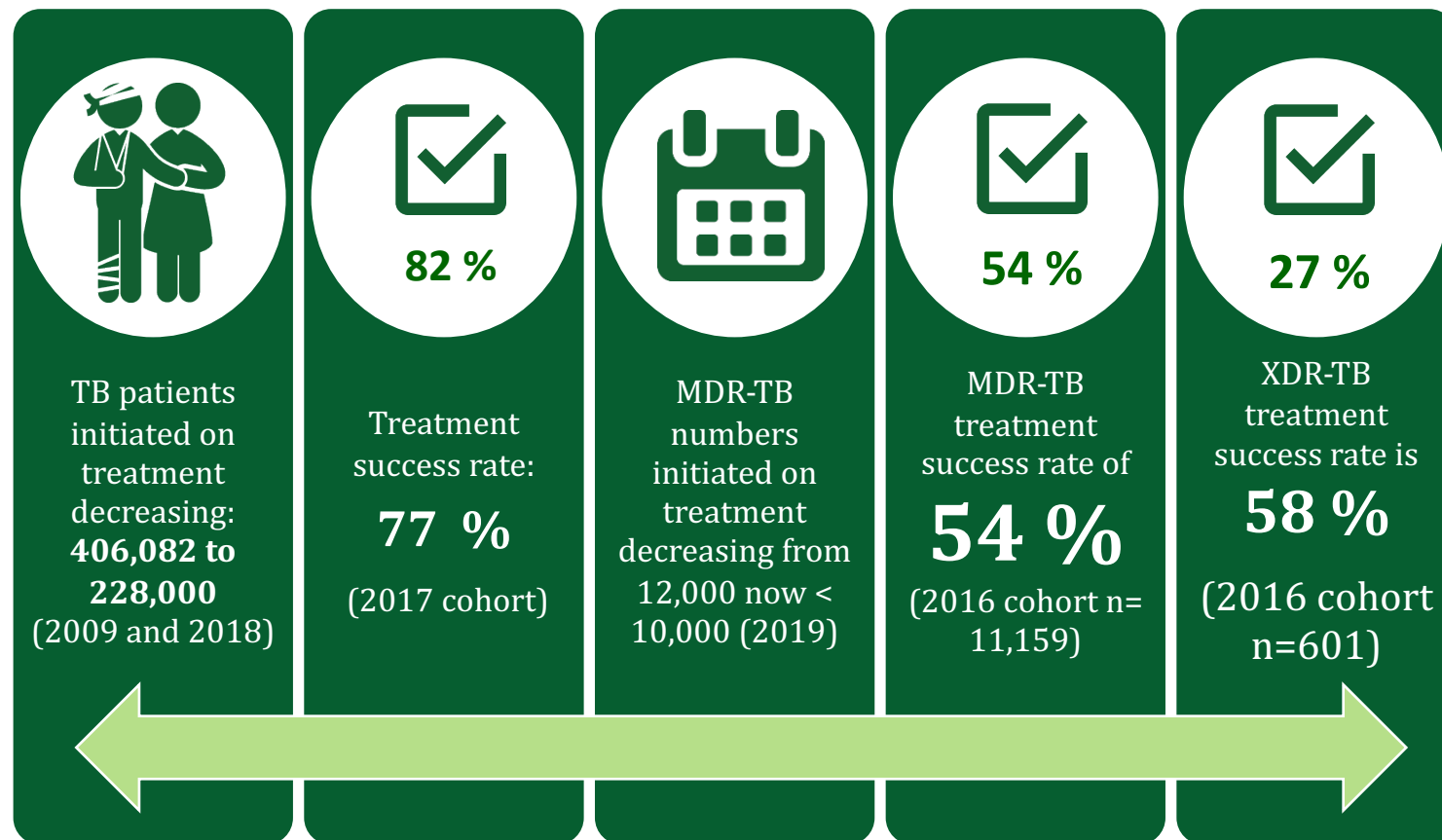
INTRODUCTION

- On 15 March 2020, the government of South Africa declared a national state of disaster in response to the growing threat of Coronavirus disease (COVID-19)
- As of 28 April 2020, 4,793 people had tested positive to COVID-19 in South Africa with 90 deaths
- Number of tests done: 178,470
- We have observed an additional 250 positive tests on daily basis
- This presentation discusses the management of TB and DR-TB patients on treatment in the context of COVID-19

HEALTH SERVICES IN SOUTH AFRICA

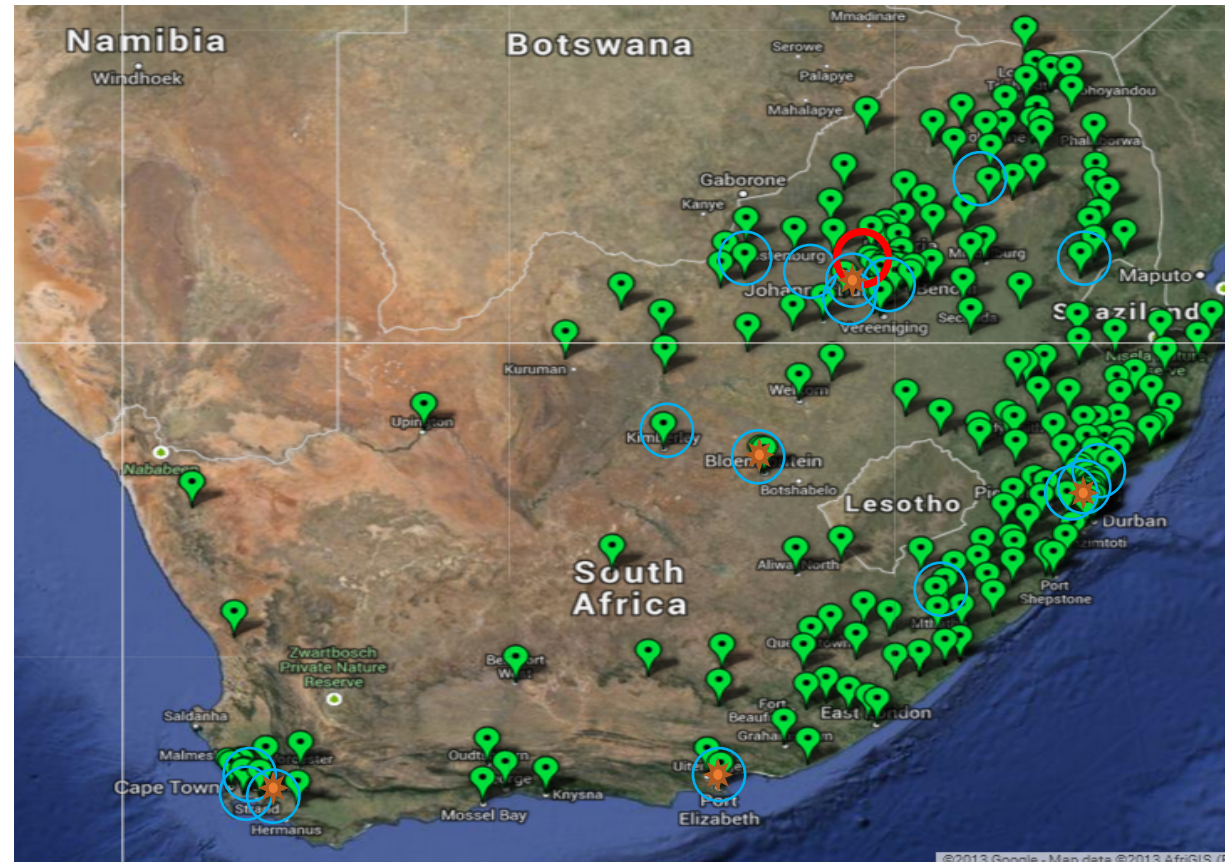


BURDEN OF TB IN RSA



DIAGNOSTIC SERVICES FOR TB/DR-TB IN SA

TB LABORATORIES

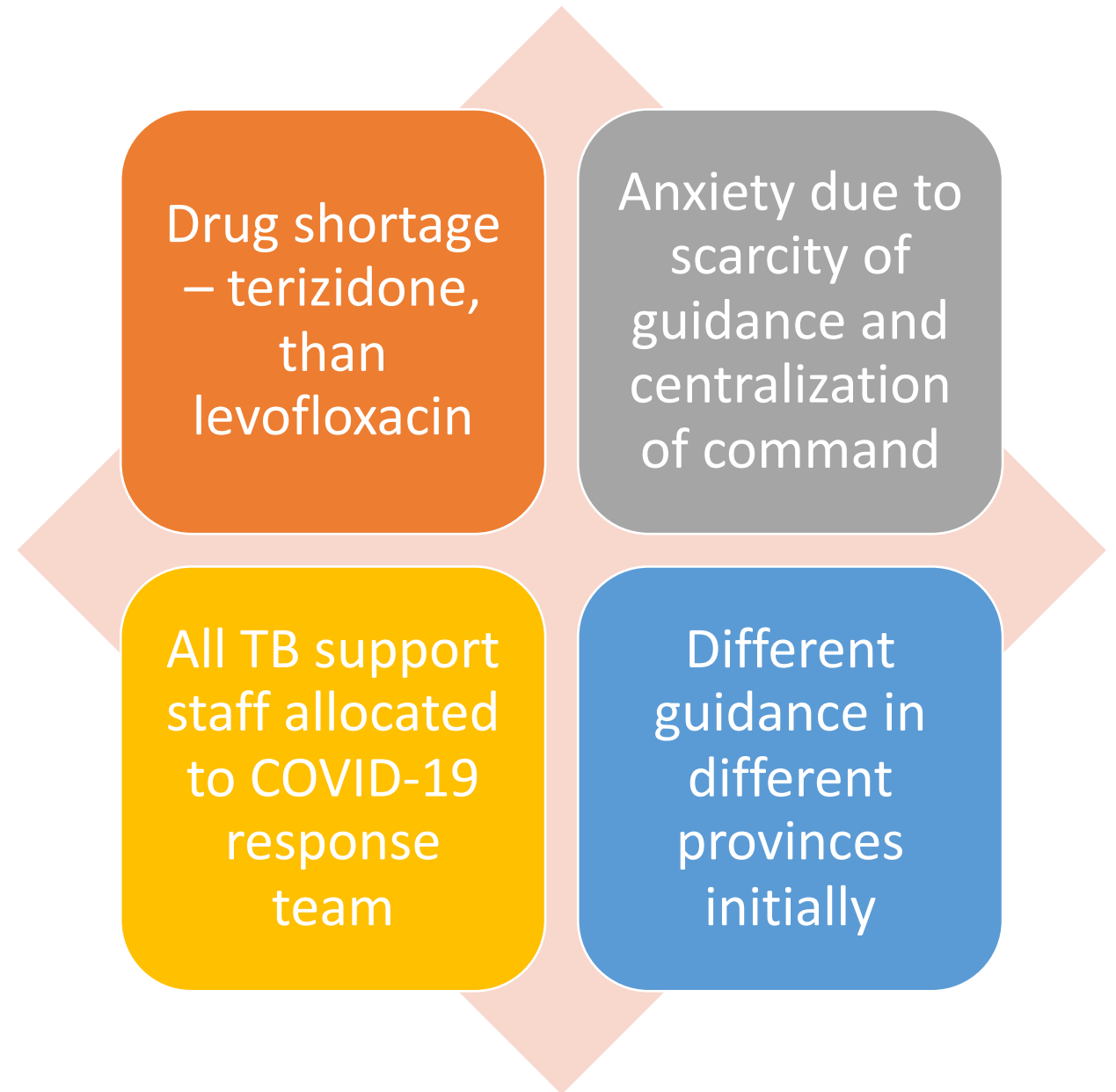


GXP sites

Culture / LPA sites
★ slt lab

WHO-SRL

OVERVIEW OF CHALLENGES



GUIDANCE FROM WHO, IDSSA & SAHIVCS



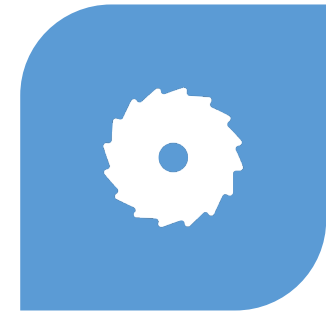
REGULAR
COMMUNICATION FROM
WHO IS VERY HELPFUL



LOCAL MINISTERIAL
ADVISORY TEAM
INFORMED BY WHO



THE IDSSA AND SAHIVCS
GUIDANCE REALLY CAME
TO OUR RESCUE



WE DECIDED TO
IMPLEMENT IT

BROAD AIM OF THE INTERVENTION

1

Reduce the risk of COVID-19 transmission for HIV and TB patients

2

Diagnose and treat COVID-19 among TB and HIV patients

3

Ensure access to TB and HIV drugs

4

Diagnose and treat HIV and TB in people with COVID-19

5

Support COVID-19 response

KEY ACTIONS

Decanting health facilities

Provision of 2 months medication

Sharing information

Strengthening of infection control practices

COVID-19 education: screening and referral

DR-TB KEY ACTIONS

Consultation with provinces to adapt the IDSSA/SAHIVCS guidance to our setting

Decanting – in some instances moving patients from smaller to bigger sites in order to create space for COVID-19 patients at various sites

Reduction of number of visits where possible: (DR-TB) patients should be provided with treatment refills to align with a health facility visit schedule for clinical assessment at 2 weeks, 4 weeks, 8 weeks, monthly and 2-monthly for patients who have TB culture-converted.

DR-TB KEY ACTIONS (2)

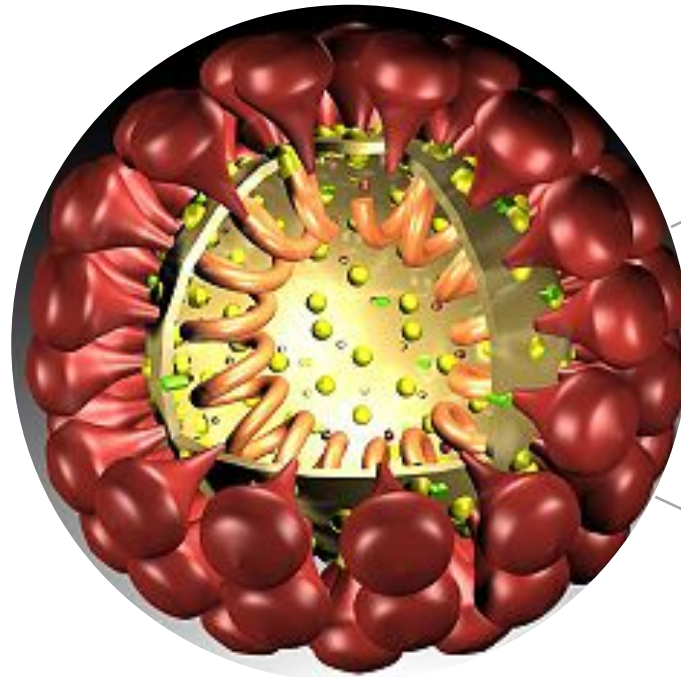
Patient education on drug monitoring e.g. LZD and BDQ

We are holding weekly zoom calls with our provincial counterpart including pharmaceutical services representatives

R & R for DR-TB patients is undergoing changes

ECG and Hb should be assessed at each clinical visit together with other monitoring parameters set out in our guidelines

APPROACH FOR IMPLEMENTATION



PHASE 1
Preparation of working
arrangements, TB
services maintained

PHASE 2
Most Staff allocated to
COVID-19 response Team

PHASE 3
Integration of COVID-
19 Activities in TB
Services



COVID-19/TB INTEGRATION

- COVID-19/TB testing kit to test for both diseases (Best practice from Gauteng Province) during active case finding campaign
- All DR-TB patients will be screened for COVID-19 at every visit
- COVID-19 testing to be offered at DR-TB treatment sites
- COVID-19 and DR-TB patient's separation at DR-TB treatment sites



WAY FORWARD



- We heard that: “MDR-TB is lethal to people living with HIV” in the past
- Now we are saying: “COVID-19 disease is lethal to TB, MDR-TB and HIV individuals”
- Integrating COVID-19 screening, testing and treatment activities into TB programme is the way to go...

Questions?



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ABSTRACT AND SESSION SUBMISSIONS: DEADLINE 11 MAY

The Union World Conference brings the latest science and research to the world's stage. This research plays a vital role as countries across the globe search for solutions to COVID-19 and struggle to ensure continuity of existing health systems.

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