#### **Presentation Title**

#### Nombulelo Magula



#### SEPTEMBER 8-11, 2019 | BARBICAN CENTRE

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# Why are we still losing people from HIV

1. What are people dying of?

#### SPECIAL REPORT

#### Health and Health Care in South Africa — 20 Years after Mandela

Bongani M. Mayosi, M.B., Ch.B., D.Phil., and Solomon R. Benatar, M.B., Ch.B., D.Sc. (Med.)

Years of Life Lost in						Years of Life Lost in	
Thousands (% of total)	1990 Rank	Disorder		2010 Rank	) G Disorder	Thousands (% of total)	Percent Change
1413 (12.2%)	1	Diarrheal diseases	/	1	HIV/AIDS	11,201 (47%)	4923
1083 (9.3%)	2	Lower respiratory infections		2	Diarrheal diseases	1,138 (4.9%)	-19
692 (6.0%)	3	Interpersonal violence		3	Interpersonal violence	1,018 (4.4%)	47
668 (5.8%)	4	Tuberculosis	/	4	Lower respiratory infections	873 (3.7%)	-24
524 (4.5%)	5	Preterm birth difficulties		5	Tuberculosis	760 (3.7%)	14
467 (4.0%)	6	Stroke		6	Stroke	543 (2.3%)	16
367 (3.2%)	7	Ischemic heart disease		7	Preterm birth difficulties	500 (2.1%)	-5
349 (3.0%)	8	Neonatal encephalopathy	· · · · /	8	Diabetes	489 (2.1%)	98
297 (2.6%)	9	Mechanical forces		9	Mechanical forces	393 (1.7%)	32
271 (2.1%)	10	Congenital anomalies		10	Ischemic heart disease	383 (1.6%)	4
247 (1.9%)	11	Diabetes	X	11	Neonatal encephalopathy	341 (1.5%)	-2
223 (1.9%)	12	HIV/AIDS		12	Road injury	237 (1.0%)	77
216 (1.9%)	13	Measles		13	Hypertensive heart disease	213 (0.9%)	90
203 (1.8%)	14	Protein-energy malnutrition		14	Drug-use disorders	212 (0.9%)	2079
199 (1.7%)	15	Syphilis	-:///	15	Chronic kidney disease	211 (0.9%)	138
	21	Road injury		17	Congenital anomalies		
	25	Hypertensive heart disease	1.1:1:	31	Syphilis	]	
	30	Chronic kidney disease	1	39	Measles	1	
	67	Drug-use disorders		47	Protein-energy malnutrition	New England Jourr	al of Medicine

	2015	Тор	ten leading underlying	2016
1	Tuberculosis	7,2%	6,5%	Tuberculosis
2	Diabetes mellitus	5,4%	5,5%	Diabetes mellitus
3	Cerebrovascular diseases	5,0%	5,1%	Other forms of heart disease
4	Other forms of heart disease	4,8%	5,1%	Cerebrovascular diseases
5	HIV disease	4,8%	4,8%	HIV disease
6	Influenza and pneumonia	4,5%	4,4%	Hypertensive diseases
7	Hypertensive diseases	4,2%	4,3%	Influenza and pneumonia
8	Other viral diseases	3,5%	3,6%	Other viral diseases
9	Chronic lower respiratory diseases	2,8%	2,8%	Ischaemic heart diseases
10	Ischaemic heart diseases	2,7%	2,8%	Chronic lower respiratory diseases
<b>S</b> S	TATS SA			THE SOUTH AFRICA I KNOW, THE HOME I UNDERSTAND



#### Extra-Pulmonary Tuberculosis



Extrapulmonary tuberculosis in the setting of HIV hyperendemicity at a tertiary hospital in Durban, South Africa

S Gounden \*\* 🕑, R Perumal<sup>b</sup> and NP Magula 🔟



#### **Retrospective chart review: TB diagnosis n=188**

Study period	EPTB	EPTB + HIV	ART naïve	CD4 cell count	Race (Black)	Unemployed
Jan-Mar	n = 80	71/80	34/71	68	76/80	57/80
2016		(88%)	(47%)	(IQR 32-165)	(96%)	(71%)

Extra-Pulmonary TB (1 or more of the following, with or without Pulmonary TB): Lymph node, Pleura, Bone, Abdomen, Milliary pattern on Chest Xray, Pericardium, Meninges, Blood or Bone Marrow





#### **Pulmonary Tuberculosis**



A retrospective review of compliance with the National Tuberculosis Management Guidelines:

Gene *Xpert MTB/Rif* Algorithm in a Primary Health Care Center in eThekwini Municipality, KwaZulu-Natal,

#### South Africa











#### **Causes of morbidity and mortality: SSA**





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Cause of death or the most frequent diagnoses among HIV infected patients in Sub-Saharan Africa from 2008 to 2018

Identification



## **Causes of morbidity and mortality: SSA**

- Opportunistic infections, opportunistic malignancies, and non-AIDS related
- 1. Tuberculosis commonest cause of hospitalization and death
- 2. Cryptococcal meningitis
- 3. Pneumonia
- 4. Anaemia
- 5. Cerebral toxoplasmosis
- 6. Chronic diarrhea
- 7. Sepsis
- 8. ARV toxicities
- 9. Opportunistic malignancies...





#### 90 - 90 - 90

## needs to carefully identify a target to specifically reduce morbidity and mortality due to AIDS (viral suppression alone may not suffice)



### 3.

## What did we do differently in the past?



## **ART Initiation: 2004**

- Compulsory Readiness Program was incorporated into decision making on when to start ART
  - Social Worker and Adherence Nurse had to be satisfied after attendance of educational sessions that the patient had:
    - Basic knowledge of HIV transmission and prevention
    - Understanding of ART, side-effects and belief in treatment efficacy
    - Ability to comprehend, cope and comply with prescribed actions such as treatment adherence and safer sexual practices
    - Received a recommendation to disclose HIV status to at least one friend or family member or to join a support group, including bringing a treatment supporter to at least one of the counselling sessions



## Experiences of the first 100 patients at Teaching Hospital in Durban

Education/Action	
HIV/AIDS, positive living	<b>~</b>
Opportunistic infections, treatment of HIV/AIDS, ART side-effects, importance of treatment adherence	
Treatment supporter/disclosure to family or friend/ join support group	Magula et al. PhD thesis data



## Experiences of the first 100 patients at Teaching Hospital in Durban





## 3. Yet...

# We aim to treat as quickly as possible



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## What are the realities?

#### Are we doing 90 90 90 right?

- Do individuals in the community and the community at large get it?
- Is the fear of losing HIV funding not driving the fast pace strategy living us spinning clockwise and unticlockwise

#### What are the prevailing issues?

- People are still having people issues like
  - Food security
  - Employment
  - Fear of finding out
  - Fear of discrimination
  - High risk behaviour



## Imagine, if we took our time... 1.

# Taking the 90 90 90 story to the community in ways they will understand

#### 2.

## Taking individuals and walking the journey with them



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## **SuperScientists**

Clinician HIV/ARV Heart Disease Physician Scientist Durban, KZN UKZN College of Health Sciences IAPAC KOL





TB/HIV Scientist Physician Scientist USA AHRI

HIV Scientist Virologist Kenya AHRI (Africa Health Research Initiative )





TB Scientist Immunologist LP, South Africa AHRI







Against Complacency and risky behavior

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## SuperScientists + Champions





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## **Political Will and Commitment**



- KwaZulu-Natal Health MEC Project: Doctors and other healthcare workers mobilized to visit communities in rural areas, townships to give free healthcare services e.g.
  - HIV testing and treatment
  - TB screening
  - Pap smears
  - Cancer screening (breast, prostate)
- Communities are mobilized by Mayors, Counsellors, Traditional and other political leaders



## Acknowledgements

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