

# A WAR ON CONSUMPTION



## Effective management of TB

## The role of rehabilitation?

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No conflict of interest

# Tuberculosis – the problem

**1 of top 10** causes of death worldwide

## Tuberculosis – the problem

**10 million** people fell ill with TB in 2017

**1.6 million** died from TB in 2017

## Tuberculosis – the problem

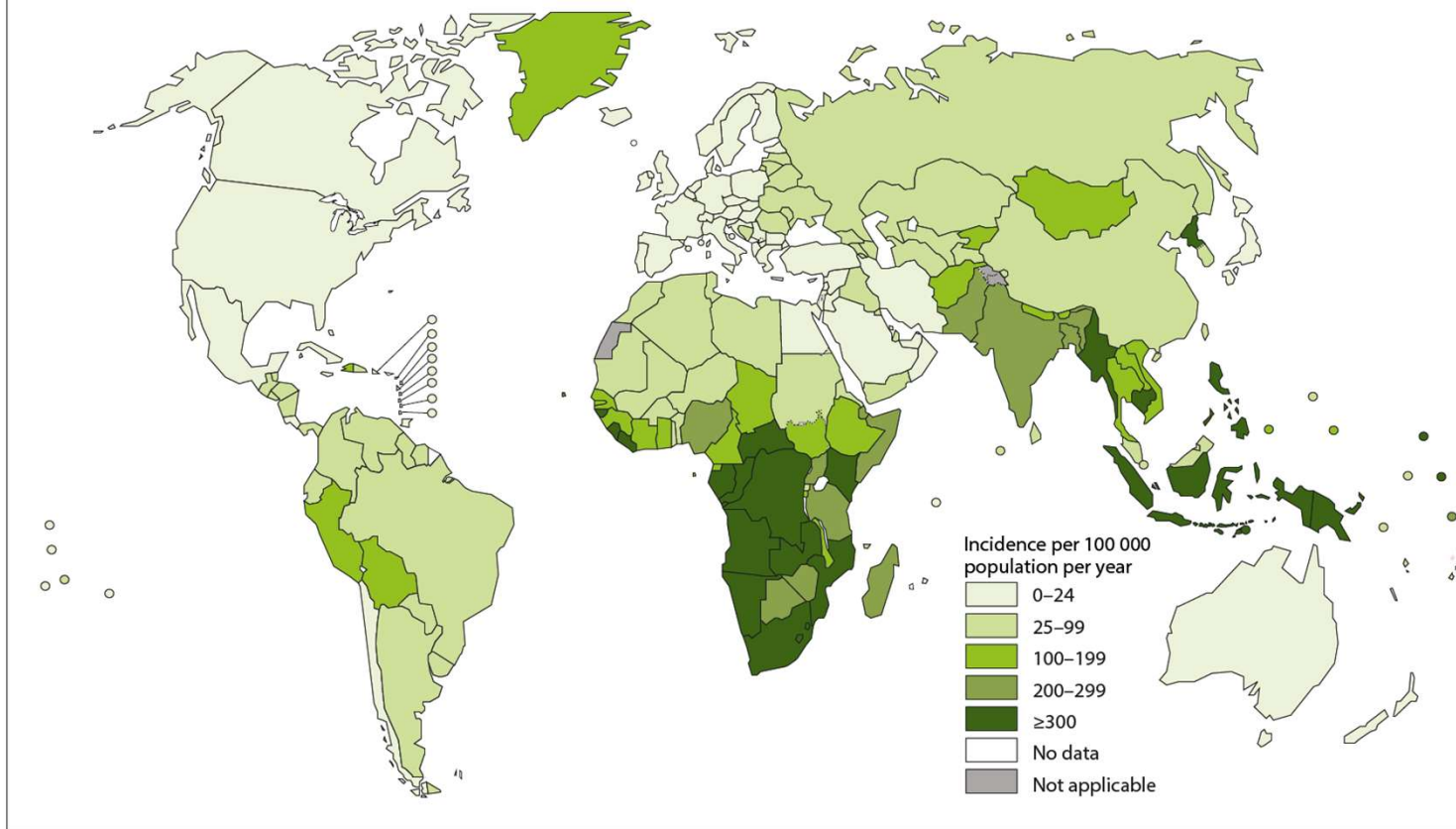
**Over 95%** of TB deaths occur in **low- and middle-income countries**

## Tuberculosis – the problem

**66%** of the new cases arose from **8 countries**

India, China, Indonesia, the Philippines, Pakistan,  
**Nigeria**, Bangladesh, and **South Africa**

## Estimated TB incidence rates, 2017



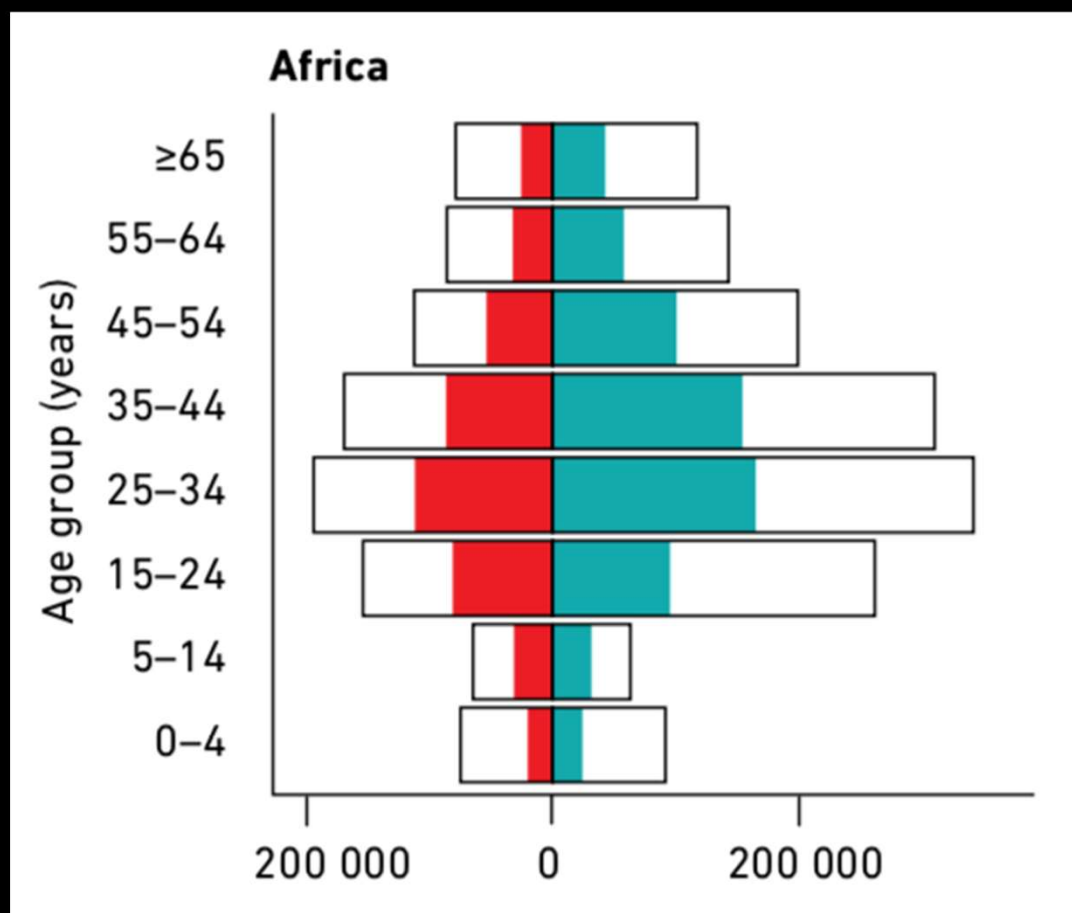
The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers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

Data Source: *Global Tuberculosis Report 2018*. WHO, 2018.

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# Tuberculosis – population profile



# Risk Factors

Smoking

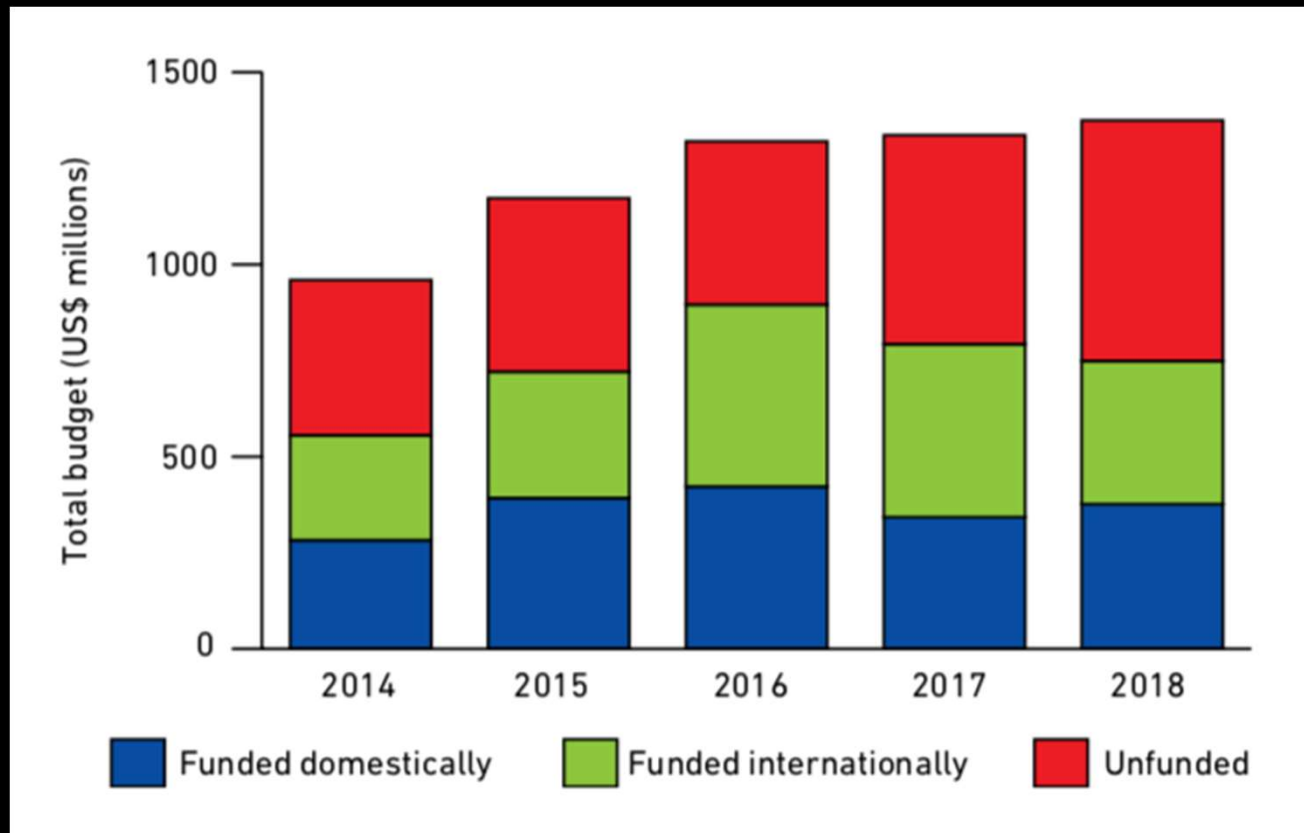
HIV co-infection

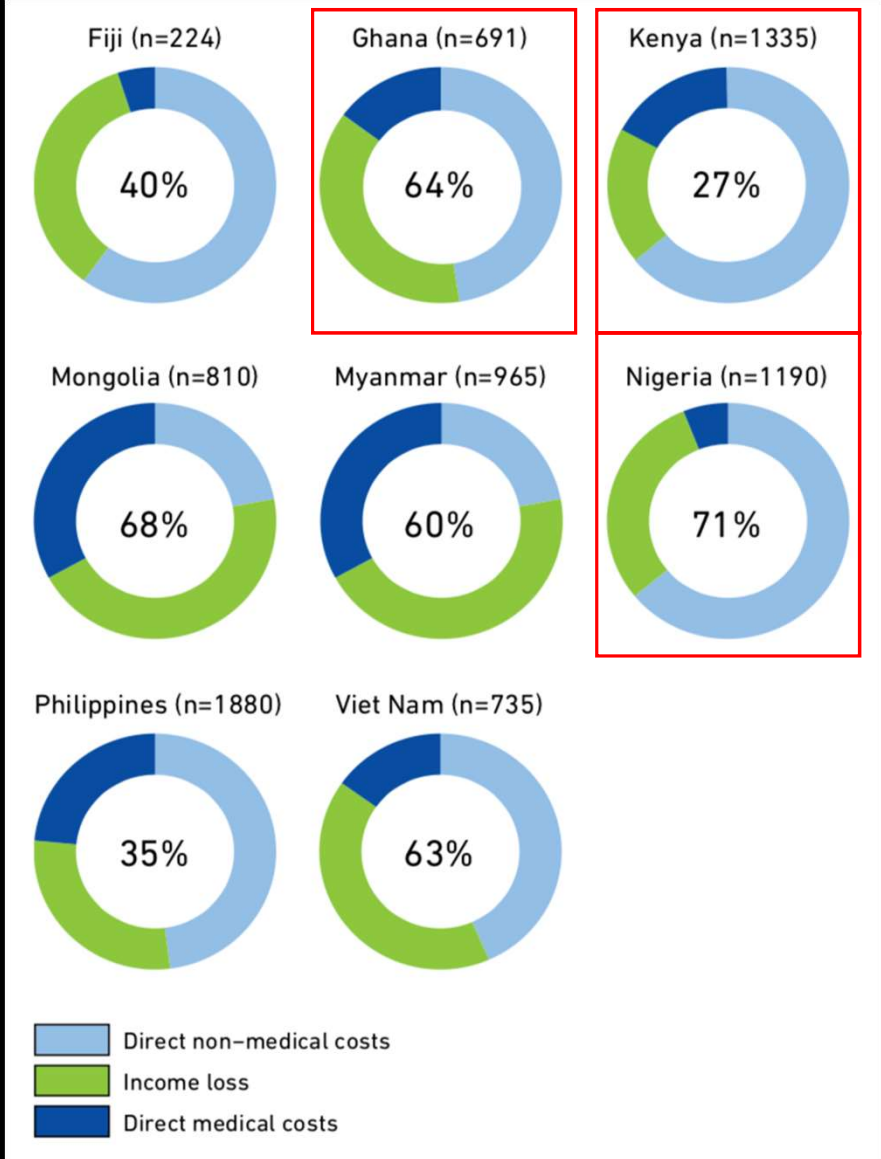
Diabetes Mellitus

Alcohol

Malnutrition

# Tuberculosis - the cost





# Tuberculosis – the progress

**54 million** lives saved

# Tuberculosis – the progress

**82%** treatment success rate of new cases

Meet Mr Adams

**31 years old**

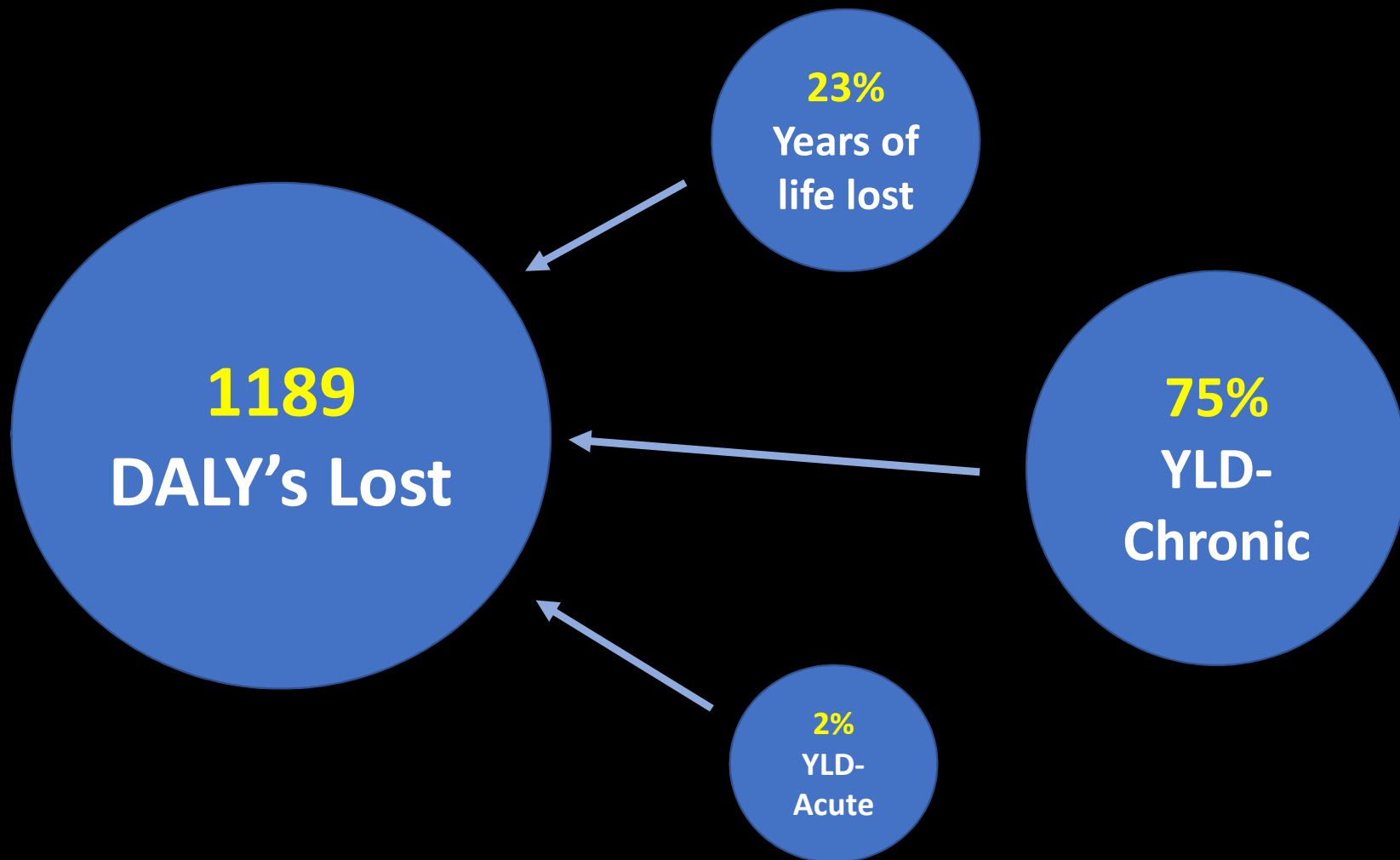
Mrs Smith

**40 Years old**

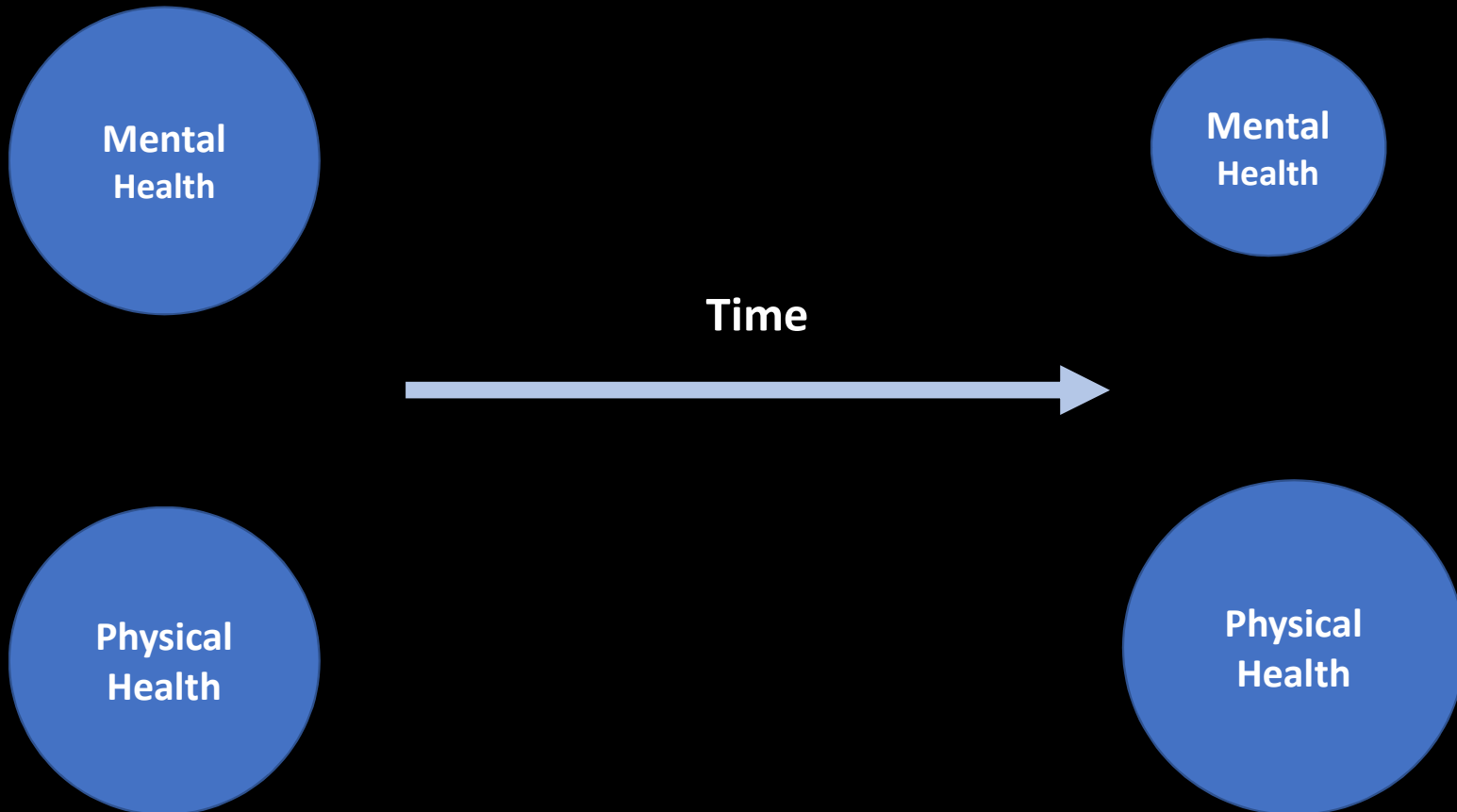
```
graph LR; A((End of Active TB)) --> B((Beginning of New Chronic disease));
```

**End** of  
Active TB

**Beginning** of  
**New Chronic**  
disease



# Quality of life





**Impaired pulmonary function**

**Airflow obstruction**

**Number of TB episodes**

**Delay between detection and  
Rx**

**Exposure to smoking and air  
pollution**

**Impaired pulmonary function**

**Lung parenchyma**

**Pleura**

**Vascular**

**Impaired pulmonary function**

**Non-CF Bronchiectasis**

**Restrictive lung disease**

**Surgery (aspergilloma)**

**3 times** more likely to develop COPD

**6 times** more likely in South Africa

## **Wasting**

35% loss of fat and 19% loss lean body mass

**Beyond the lungs**

**Anabolic block**

**HIV Co-infection**



# Pulmonary Rehabilitation

Comprehensive

Individualised

Improve functional capacity

Self management

# A pre–post intervention study of pulmonary rehabilitation for adults with post-tuberculosis lung disease in Uganda

Baseline to 6 weeks

Baseline to 12 weeks

HRQoL -0.95 (-1.18, -0.72)

-1.09 (-1.34, -0.83)

Sit - Stand(s) -2.55 (-3.69, -1.41)

-3.42 (-4.46, -2.37)

ISWT (m) 90.00 (56.50, 123.50)

89.66 (49.32, 129.99)

“ **Real** medicine to my health”

Participant

<https://youtu.be/xhmsPflziuk>



Is there a role for rehabilitation?



Thank you!

