TB Quiz

• Tuberculosis (TB) is caused by a virus?

TRUE  FALSE
TB Quiz

• Tuberculosis (TB) is caused by a virus?

FALSE
TB Quiz

Tuberculosis

• Caused by infection with a bacteria
  • *Mycobacterium tuberculosis*
TB Quiz

• TB can be transmitted from person to person through touching or sharing plates/cups?

TRUE  FALSE
TB Quiz

• TB can be transmitted from person to person through touching or sharing plates/cups?

FALSE
TB Quiz

• TB can be transmitted through singing?

TRUE    FALSE
TB Quiz

• TB can be transmitted through singing?

TRUE
Tuberculosis

- Spread like the common cold
- Respiratory droplets in the air
- Coughing, sneezing, talking, singing...

“We are all connected by the air we breathe.”
Thomas Frieden, CDC
TB Quiz

- A fifth (20%) of the world’s population is infected with tuberculosis?

TRUE  FALSE
TB Quiz

• A fifth (20%) of the world’s population is infected with tuberculosis?

FALSE
Tuberculosis

1/3 of the world’s population infected with TB

2 billion people
• Bacteria live dormantly in the lung - **latent TB infection**

• Only 5-10% actually develop active TB disease during their lifetime
  • Increased risk with HIV, malnutrition, immunocompromise
• Everyone who is infected with tuberculosis will eventually fall sick and die without treatment?

TRUE  FALSE
• Everyone who is infected with tuberculosis will eventually fall sick and die without treatment?

FALSE
• People living with HIV are 5 times more likely to fall ill from TB than someone who is HIV negative?

TRUE    FALSE
• People living with HIV are 5 times more likely to fall ill from TB than someone who is HIV negative?

FALSE
People living with HIV are up to 50 times more likely to get TB disease than someone who is HIV negative.
• Tuberculosis is preventable and curable?

TRUE  FALSE
• Tuberculosis is preventable and curable?

TRUE
TB is curable!

- TB is treatable and curable, including in people living with HIV
  - (96% TB curable with 1st line drugs)
- Mortality rate much higher in people living with HIV

TB is preventable!

- Infection control
- Isoniazid preventive therapy
- Intensive case finding
**Where are we now - 2015 (GTB report 2016)**

**Target**: Reach and place 90% of all people on treatment for TB, DR-TB and preventive therapy (PT)

<table>
<thead>
<tr>
<th><strong>TB</strong></th>
<th><strong>DR-TB</strong></th>
<th><strong>PT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• 10.4 million people need TB treatment</td>
<td>• 580,000 people need DR-TB treatment</td>
<td>Child contacts:</td>
</tr>
<tr>
<td>• 6.1 million (59%) notified on treatment</td>
<td>• 132,000 diagnosed</td>
<td>• Estimated 1.2 million children in need of PT.</td>
</tr>
<tr>
<td>• 4.3 million people missing</td>
<td>• 125,000 (21%) on treatment</td>
<td>• Only 87,000 (7%) started on PT</td>
</tr>
<tr>
<td></td>
<td>• 455,000 missing</td>
<td>• Only 88 out of 189 countries (47%) reported data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PLHIV:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 0.9 million newly enrolled in HIV care started PT (50% in SA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Data is incomplete and only from 57 countries</td>
</tr>
</tbody>
</table>
TB in Prisons

• Risk of active TB disease in prison on average 23 times higher than general population
• Latent TB infection is 26 times higher than for people in the general population
• In a study of 75 countries reporting HIV prevalence in prisons, 20 countries had HIV prevalence that exceeded 10%.
• The number of prisoners with TB is estimated to be 4500/100,000 – WHO considers 250/100,000 to be an epidemic
• In some prisons, rates of TB have been found to be 1000 times greater than in the general population
• High rates of MDR-TB 50% of all TB cases in prison demonstrating drug resistance in some countries.
  • A systematic review five out of six studies conducted in Russian prisons, MDR-TB was identified in over 40% of cases; 52.3% of prisoners with TB had MDR-TB in Azerbaijan, and 19.5% in Thailand
• High rates of HIV, poor ventilation, sanitation and nutrition facilitate rapid spread of TB among prisoners.
Multi-drug Resistant (MDR) TB in Prisons

• High levels of MDR-TB reported from some prisons - up to 24% of TB cases

• Factors that encourage the spread of TB in prisons also promote the spread of MDR forms.

• Prisoners may self-treat because of barriers to access to medical care with supplies of anti-TB drugs available through visitors or internal markets.
  • However such supplies are usually erratic and unregulated and promote further development of MDR-TB.
Factors that fuel TB epidemics in prisons

**Figure 1. Factors that fuel TB epidemics in prisons**

- Overcrowding
- Long stays in prison
- Reincarceration
- Prison culture/factors specific to prisoners
- HIV, Hepatitis, drug and/or alcohol use
- Inadequate policies
- Under-resourced criminal justice systems
- Lack of health care in prisons or poor prison health services
- Frequent transfers within the prison system
- Treatment delays and interruptions
- Family visit
- Transfer to another prison or release
- Prison staff
- Judiciary system

*Adopted from Biadglegne, Rodloff, and Sack (1) and further supplemented.*
People who use drugs

• 250 million people who use drugs in the world.
  • 29 million have drug use disorders and 12 million inject drugs.
  • Among those injecting, 1.6 million have HIV and 6 million infected with Hepatitis C.

• Casual cannabis smokers consuming on their own or with others in well-ventilated or open space are probably face minimal risk of TB. But those engaged in injecting of any drugs or sharing equipment and inhaling and exhaling directly into each other’s mouths are faced with elevated TB risks.

• Despite the known TB mortality risks experienced by PWUD infected with HIV, no TB data for PWUD or even among those injecting.
Modeling done for Global Plan shows that achieving 90% coverage as soon as possible but not later than 2025 will set the world on course to meet the End TB Strategy milestones for 2020 and 2025.

Source: Global Plan to End TB: The Paradigm Shift
Key & Vulnerable Populations

• Focus on **patient centered, rights based approach to TB**
• Key populations
  • Defined key populations and technical briefs to address specific programming needs
  • Developing a framework and tool to estimate KP, their size and burden of TB
# Key & Vulnerable Populations

<table>
<thead>
<tr>
<th>People who have INCREASED EXPOSURE to TB due to where they live or work</th>
<th>Prisoners, sex workers, miners, hospital visitors, health care workers and community health workers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PEOPLE WHO:</strong></td>
<td>✶ live in urban slums</td>
</tr>
<tr>
<td>✶ live in poorly ventilated or dusty conditions</td>
<td>✶ are contacts of TB patients, including children</td>
</tr>
<tr>
<td>✶ work in environments that are overcrowded</td>
<td>✶ work in hospitals or are health care professionals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>People who have LIMITED ACCESS TO QUALITY TB SERVICES</th>
<th>Migrant workers, women in settings with gender disparity, children, refugees or internally displaced people, illegal miners, and undocumented migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PEOPLE WHO:</strong></td>
<td>✶ are from tribal populations or indigenous groups</td>
</tr>
<tr>
<td>✶ are homeless</td>
<td>✶ live in hard-to-reach areas</td>
</tr>
<tr>
<td>✶ live in homes for the elderly</td>
<td>✶ have mental or physical disabilities</td>
</tr>
<tr>
<td>✶ face legal barriers to access care</td>
<td>✶ are lesbian, gay, bisexual or transgender</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>People at INCREASED RISK of TB because of biological or behavioural factors that compromise immune function</th>
<th>PEOPLE WHO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✶ live with HIV</td>
<td>✶ have diabetes or silicosis</td>
</tr>
<tr>
<td>✶ undergo immunosuppressive therapy</td>
<td>✶ are undernourished</td>
</tr>
<tr>
<td>✶ use tobacco</td>
<td>✶ suffer from alcohol–use disorders</td>
</tr>
<tr>
<td>✶ inject drugs</td>
<td>✶ have tuberculosis</td>
</tr>
<tr>
<td>Organizations of Prisoners and Former Prisoners with TB</td>
<td>Governments</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Document the impacts of incarceration on the lives of prisoners with TB; access policy makers to tell prisoner stories;</td>
<td>Reduce the economic and public health burden of TB on society; consider criminal justice reform and alternatives to incarceration for nonviolent offenders;</td>
</tr>
<tr>
<td>Advocate for access to health services for all prisoners and for better interventions connecting prison health systems to health services in the community;</td>
<td>Ensure that health facilities are fully functional and well-staffed in all prisons; develop cost-effective models for prison health service delivery by rotating staff and using other creative approaches; facilitate collaboration between prison and health authorities with the involvement of civil society;</td>
</tr>
<tr>
<td>Document violations of prisoner rights and hold governments accountable to international obligations; work with human rights groups and legal collectives to bring cases against prison systems in cases of neglect;</td>
<td>Adhere to international obligations on prisoner health;</td>
</tr>
<tr>
<td></td>
<td>Support health research among prisoners to improve the understanding of how to increase the effectiveness of interventions.</td>
</tr>
<tr>
<td></td>
<td>Encourage multi-sector collaboration to conduct research on health conditions in prisons and produce data that can be shared across sectors.</td>
</tr>
</tbody>
</table>
Human rights and gender equality protections are also outlined in the seven core UN international human rights treaties. All member states have ratified at least one of these treaties and 80% of UN member states ratified four or more, declaring their commitment to protecting the rights of their citizens.

<table>
<thead>
<tr>
<th>Treaty</th>
<th>Monitoring Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Covenant on Civil and Political Rights (ICCPR)</td>
<td>Human Rights Committee</td>
</tr>
<tr>
<td>International Covenant on Economic, Social and Cultural Rights (ICESCR)</td>
<td>Committee on Economic, Social and Cultural Rights</td>
</tr>
<tr>
<td>International Convention on the Elimination of All Forms of Racial Discrimination (CERD)</td>
<td>Committee on the Elimination of Racial Discrimination</td>
</tr>
<tr>
<td>Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)</td>
<td>Committee on the Elimination of Discrimination against Women</td>
</tr>
<tr>
<td>Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT)</td>
<td>Committee against Torture</td>
</tr>
<tr>
<td>Convention on the Rights of the Child (CRC)</td>
<td>Committee on the Rights of the Child</td>
</tr>
<tr>
<td>International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (MWC)</td>
<td>Committee on Migrant Workers</td>
</tr>
</tbody>
</table>
For people with TB this might mean:

• **RESPECT:** That people with TB are not involuntarily hospitalized by the state, including public health providers.

• **PROTECT:** That people with TB are not discriminated against in the private healthcare sector.

• **FULFILL:** That TB medications and diagnostics are available and accessible to all people with TB.
Human Rights

- Developed a legal environment assessment tool with UNDP
  - Pilot being conducted in Kenya
  - Roll out in USAID priority countries in 2017
- Conducted judicial workshops
- Developed the Nairobi Strategy on TB and Human Rights
Data?

• Data available for the 48 countries identified by WHO in 2016 as TB High Burden Countries. Have NO data on TB prevalence available for prisoners.

• Four sources data:
  • World Prison Brief - This covers over 200 countries and territories - basic data on population size, percent male, female, and foreign born and prison occupancy capacity.
  • UNODC information on drug use in prison and drug use prevalence by drug class in 50 countries.
  • UNAIDS’s AidsInfo information on HIV prevalence among prisoners and detainees in over 50 countries.
  • European CDC’s TB Monitoring and Surveillance Reports track TB cases and notification rates among prisoners and the proportion of prisoners among all TB cases in over 20 countries.
  • An article published in a special edition of Lancet in July 2016 provided information on the prevalence of TB and HIV-TB co-infection in 25 countries.

• Data available for the 48 countries identified by WHO in 2016 as TB High Burden Countries. Only has population size of prisoners and detainees, TB data are scare and often not up-to-date (last two columns of data from European CDC and Lancet). This is exacerbated because TB among prisoners is not a reporting requirement in UNODC’s and WHO’s annual reporting requirement for countries.
Standards of care

• PLHIV – preventive therapy
• Screen for TB on entry to prison, exit and during imprisonment
  • Screen prison workers too!
• Diagnosis and treatment immediate
  • GeneXpert diagnostic
• Isolation
• Drug resistant TB
  • Psychosocial support
  • Nutrition
  • Address adverse side effects - audiometry
• Philippines: cough monitors
<table>
<thead>
<tr>
<th>TB Risks</th>
<th>TB Risk Drivers</th>
<th>TB Case Finding and Treatment Service Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environment (Over-crowded, poor ventilation)</strong></td>
<td>Biology (Reduced immunity)</td>
<td>Behavior (Prone to transmission)</td>
</tr>
<tr>
<td><strong>Most prison and detention facilities are way over capacity.</strong></td>
<td>Many prisoners and detainees are HIV key populations (people who use drugs, sex workers) with many already infected with HIV before incarceration.</td>
<td>Drugs, but not equipment, are widely available in prisons and detention centers (injecting and non-injecting) and sex without protection is common.</td>
</tr>
<tr>
<td><strong>Many held in supposedly short-term detention centers for years without any access to health services.</strong></td>
<td>• Male prison culture insensitive to female inmates limiting access to women’s health services (ex-sex workers in particular).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Societal stigma against ex-prisoners making post-prison re-integration into society difficult (getting employed or accepted by family), increasing risk of drug use and sex work and TB treatment disruption.</td>
<td></td>
</tr>
</tbody>
</table>
Strategic Litigation

- Advocating for prison reform and improving conditions in prisons
- Ensuring continuity of treatment inside and outside the prison
- Adequate access to medical care with supplies of anti-TB drugs available
- Including and empowering prisoners
- Ensuring trained prison staff
Strategic Litigation

• A court victory of a former prisoner over prison authorities in South Africa has brought to light the terrifying conditions that facilitated his acquisition of TB while incarcerated

• Russia’s decrepit prison conditions and inhumane treatment of prisoners, which includes rampant TB infection, have been exposed by several positive decisions made by the European Court for Human Rights

• While not always representing a direct gain for the person affected by TB, these cases help to put pressure on governments and prison systems to take action.
# TB and Ethics

<table>
<thead>
<tr>
<th>Guiding Values</th>
<th>Decision-Making Values</th>
<th>Private Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>Duty to Care</td>
<td>Respect &amp; Dignity</td>
</tr>
<tr>
<td>Common Good</td>
<td>Effectiveness</td>
<td>Autonomy</td>
</tr>
<tr>
<td>Solidarity</td>
<td>Proportionality</td>
<td>Privacy &amp; Confidentiality</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>Participation &amp; Community Engagement</td>
<td></td>
</tr>
<tr>
<td>Harm Principle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust and Transparency</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TB and Ethics

• Do governments have an ethical obligation to provide universal access to TB care? Yes

• Do governments have an ethical obligation to provide access to essential medicines and TB care? Yes

• Does this obligation mean that TB care should be provided for free? Yes

• Does the obligation to provide free care include diagnosis and other services? Yes
Ethical principles governing TB prevention, screening, diagnosis, and care for prisoners

- Inadequate health care is not part of prisoners’ punishment.
- Prisoners should have access to the same levels of prevention, screening, diagnostics and care as in their communities and they should be treated according to the same ethical principles that apply to the general population.
- Healthcare providers and governments have a duty to care in a manner that satisfies the requirements of respect, dignity, and equity.
- Patients’ autonomy, consent, privacy and confidentiality should be respected and protected.
Gender

- Developed the TB/HIV Gender Assessment Tool with UNAIDS
  - Conducted in Lesotho, Niger, Namibia
  - In progress: Cote d’Ivoire, DRC

Available in English, French, Russian & Spanish
A Human Rights-based Approach to Tuberculosis: The Nairobi Strategy

Primary Objective: To develop and implement a human rights-based approach to TB at the global, regional, national and local levels

Sub-Objective 1
Implement a human rights-based approach to TB through diverse advocacy strategies

Stream 1: Support networks of affected communities of people with TB, TB survivors and civil society at global, regional, national and local levels.
- Develop and sustain networks of people affected by TB
- Design and conduct legal trainings for affected communities and civil society
- Empower people with TB, TB survivors and civil society to make use of judicial and quasi-judicial mechanisms to safeguard their rights
- Develop, publish and disseminate materials for community and civil society action

Stream 2: Enhance judiciary and legal communities’ awareness on implementation of a human rights-based approach to TB.
- Organize and conduct judicial workshops
- Develop, publish and disseminate a judicial bench guide on TB, human rights and the law
- Develop and support a network of lawyers
- Encourage judicial officers to issue amicus curiae briefs on TB and human rights
- Develop and support a network of legal, medical and public health experts
- Create and support a closed online community of legal, medical and public health experts

Stream 3: Expand legislators’ and policymakers’ capacity to incorporate human rights-based approaches to TB in laws and policies
- Organize and conduct workshops for law and policy makers
- Draft and promote model legislation that implements a human rights-based to TB
- Develop, publish and disseminate a handbook on TB and human rights for legislators and policymakers

Stream 4: Engage and advise international organizations and experts on the implementation of human rights-based approaches to TB in global policies and programs
- Engage and advise international organizations and experts on the need to incorporate a human rights-based
Nairobi strategy

Objective: To develop and implement a human rights-based approach to TB at the global, regional, national and local levels

The key components of the Nairobi Strategy are to:

• Support networks of affected communities of people with TB, TB survivors and civil society at global, regional and national levels.

• Enhance judiciary and legal communities’ awareness on implementation of a human rights-based approach to TB;

• Expand legislators’ and policymakers’ capacity to incorporate human rights based approaches to TB into laws and policies;

• Engage and advise international organizations and experts on the implementation of human rights based approach to TB into global policies and programs;

• Sensitize health care workers in public and private sectors on the need to incorporate a human rights-based approach to TB in their work;

• Formulate and clarify the conceptual, legal and normative content of a human rights-based approach to TB; and

• Conduct qualitative and quantitative research to generate evidence based for the effectiveness of a human rights-based approach to TB.
Nairobi Strategy

Sub-Objective 1: Implement a human rights-based approach to TB through diverse advocacy strategies

Stream 1.1: Support networks of affected communities of people with TB, TB survivors and civil society at global, regional and national levels.

• Develop and support existing networks of people affected by TB
• Design and conduct legal trainings for affected communities and civil society
• Empower people with TB, TB survivors and civil society to make use of judicial and quasi-judicial mechanisms to safeguard their rights
• Develop, publish and disseminate materials for community and civil society action
TB Case Compendium
<table>
<thead>
<tr>
<th>Case Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matter of the Penitentiary Complex of Curado</td>
<td>1</td>
</tr>
<tr>
<td>Paddock v. Correctional Medical Practitioner</td>
<td>3</td>
</tr>
<tr>
<td>Case T-271/14</td>
<td>4</td>
</tr>
<tr>
<td>Zhang Shaoquan v. Liaoning Lingyuan No.5 Prison, et al.</td>
<td>4</td>
</tr>
<tr>
<td>Case T-035/13</td>
<td>5</td>
</tr>
<tr>
<td>Reshetnyak v. Russia</td>
<td>6</td>
</tr>
<tr>
<td>Ridore v. Holder</td>
<td>8</td>
</tr>
<tr>
<td>Vasyukov v. Russia</td>
<td>9</td>
</tr>
<tr>
<td>Khataev v. Russia</td>
<td>10</td>
</tr>
<tr>
<td>Redd v. Wright</td>
<td>11</td>
</tr>
<tr>
<td>BGE 134 IV 156</td>
<td>12</td>
</tr>
<tr>
<td>Yakovenko v. Ukraine</td>
<td>13</td>
</tr>
<tr>
<td>Gorodnichy v. Russia</td>
<td>14</td>
</tr>
<tr>
<td>RESp 802.435/PE, Reporting Justice Luiz Fux</td>
<td>15</td>
</tr>
<tr>
<td>Francois v. Gonzales</td>
<td>16</td>
</tr>
<tr>
<td>Clark v. Taylor</td>
<td>17</td>
</tr>
<tr>
<td>Loftin v. Dalessandri</td>
<td>18</td>
</tr>
<tr>
<td>Jolly v. Coughlin</td>
<td>19</td>
</tr>
<tr>
<td>Williams v. Greifinger</td>
<td>20</td>
</tr>
<tr>
<td>Hill v. Marshall</td>
<td>22</td>
</tr>
<tr>
<td>DeGidio v. Pung</td>
<td>23</td>
</tr>
</tbody>
</table>
Thank You!

Email: colleend@stoptb.org

Email: amaleche@kelinkenya.org