

GLI meeting
Annecy, April 2012

Proposed revised TB case and treatment outcome definitions

Why?

- **New Molecular Tests (WRD)** now recommended for rapid diagnosis of TB in high HIV and high MDR settings
- WRD will be used *for diagnosis* in place of conventional bacteriology in high HIV and high MDR-TB settings
- WRD do not readily fit with existing case definitions and treatment outcomes and with existing paper-based reporting forms

The revision process

- Expert consultation meeting, May 2011
- STAG meeting, June 2011
- Meeting with WHO medical officers, July 2011
- DOTS-expansion meeting, November 2011
- EURO meeting, December 2011
- Broad consultation with NTPs and many partners by email, Dec 2011 – February 2012
- Consultation with USAID, April 2012
 - **Overwhelming requests to minimize changes**

Current TB case definitions

- Definite
 - Culture-positive
 - Sputum smear-positive
- Case
 - Definite or others put on treatment
- Retreatments
 - Relapse
 - After failure
 - After default

Updated TB case definitions

- Definite
 - Culture-positive
 - Sputum-positive
 - **WHO-Approved Rapid Diagnostic (WRD) positive**
- Case
 - Definite or others put on treatment
- Retreatments
 - Relapse
 - After failure
 - After default

Rifampicin-resistant (RR) and MDR case definitions

RR-TB

Patient with a phenotypic drug susceptibility test or line probe assay **or WRD** showing resistance to Rifampicin (Isoniazid susceptible, resistant or unknown)

MDR-TB

Mycobacterium tuberculosis complex isolates with in vitro resistance against isoniazid and rifampicin, with or without resistance to additional first-line anti-TB drugs

Proposed revised treatment outcomes, not confirmed RR/MDR-TB

Cured

- **DEFINITE CASES**, smear or culture-negative on the last month of treatment and on at least one previous occasion

Completed

Failed

Default

Died

Not evaluated

- **Patient for whom no treatment outcome is assigned**
- Include former **transfer-out**

Implications of proposed changes in treatment outcomes (not confirmed RR or MDR-TB)

- **Cases put on RR or MDR regimen not included in the cohort** but analyzed as part of RR and MDR treatment outcomes
- **Cure** defined for all definite cases (not only sputum smear-positive)
- Transfer-out category collapsed with **not-evaluated**

Current definition for MDR cure

MDR patient completed tx according to protocol, > 5 consecutive negative cultures from samples at least 30 days apart in final 12 months of tx OR only one culture positive AND no clinical deterioration AND followed with > 3 negative cultures > 30 days apart

Proposed updated definitions, RR and MDR-TB cure and completed

Cured

Treatment completed as recommended by the national policy without evidence of failure AND three or more consecutive cultures taken at least 30 days apart are negative after the intensive phase

Completed

Treatment completed as recommended by the national policy without evidence of failure BUT no record that three or more consecutive cultures taken at least 30 days apart are negative after the intensive phase

Proposed updated definitions, RR and MDR-TB treatment failure

Treatment terminated or need for permanent regimen change of ≥ 2 anti-TB drugs because of

- lack of conversion in the continuation phase, *or*
- bacteriological reversion* in the continuation phase after conversion** to negative, *or*
- evidence of additional acquired resistance, *or*
- adverse drug reactions

*reversion = two positive cultures taken at least 30 days apart

**conversion = two negative cultures taken at least 30 days apart

Proposed updated RR and MDR-TB – default, transferred out, not evaluated

Defaulted – do not reword

Transferred out – include with not evaluated

Not evaluated – suggest "MDR patient for
whom no treatment outcome is assigned"

Changes and their implications (1)

- Minor changes for cases not confirmed RR or MDR-TB
- **No change in disaggregations** by age, sex, retreatment, extra-pulmonary, etc...
- Non definite cases not disaggregated by age, as before (incomplete childhood TB reporting)
- Proposal allows to monitor
 - Total case detection and reporting
 - Proportion of definite cases (lab confirmed)

Changes and their implications (2)

- New RR diagnostics will result in confirmed RR cases with late or no MDR confirmation
- RR treatment almost similar to MDR treatment -> RR and MDR with common outcome definitions
- Some simplifications for RR/MDR outcome definitions
- Need for pilot testing

Next steps

- Report to STAG
- Update WHO-recommended registers and forms
- Pilot-test the updated definitions in selected countries

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