

**Outcomes and challenges of
treating HIV-DR TB co-infected
patients in an urban slum setting in
Mumbai, India**



MSF in INDIA

**2011
8 Projects:**

OCA
PHC +
Kashmir (MH)
Chhattisgarh (MCHC)
Manipur (HIV-MDR)

OCBA
Kala azar +
Malnutrition
(Bihar)

OCB
MUMBAI (HIV/DRTB)
AP-CG (MC)
Nagaland (Hospital)



Context

- **HIV prevalence in India: 0.4% → 2.5 million PLHA**
 - varies in different states, higher in SW, MSM, IDU
- **TB : 3.5 million tuberculosis patients – 20% of the global burden**
- **MDR-TB**
 - India : 25% of the global burden
 - Mumbai: no data (between 3-24% new & 20-40% retreated cases)
- **India/Mumbai HIV/MDR-TB co-infection: ????**

Under-sourced public and unregulated private sectors

--> the perfect storm...

Project presentation

MSF HIV-clinic in Mumbai since May 2006

**Targeting "neglected and rejected" patients:
from TGs and migrants to alternative 1st line ART, HIV2, 2nd
and now 3rd line ART, HepB & C co-infection, co-morbidities**

**Started treating HIV-infected patients with DR-TB since May
2007**

Strong Operational Research & Documentation component

**MSF-Mumbai one step ahead the national AIDS and TB
programs, pioneering, innovative and gradually more visible**

Registered for HIV/DR-TB treatment: **102**

Ever started on treatment: **87**

(reasons for not starting; death, LFU, denial, not eligible)

Median age : **35y**

Poor, slum dwellers: **72%**

Previous exposure to 2nd line TB drugs: **48%**

Resistant to quinolones: **32% (!)**

Median CD4: **135**

Patients already on 2nd line ART: **14%**

Treatment outcomes (up to May 2012)

55 patients with final outcomes

23 (42%) were successfully treated

20 (36%) died

10 (18%) lost-to-follow-up

2 (4%) failed treatment

32 patients currently alive in-treatment

Program Outcomes: adverse events & overall mortality

71%, **63%** and **40%** of patients experienced mild, moderate or severe side effects respectively

40% required modification of the regimen

Overall, **32%** of the patients died, including those not initiated on treatment

Why “small” numbers?

The global HIV/DR-TB cohort on treatment is small → MSF-Mumbai cohort is one of the oldest and largest in Asia and the world

Operational limitation link to legal aspects - MSF Trust in 2011.

Operational Research

- 1. Study to measure MDR-TB among HIV patients
- 2. Prospective cohort study for outcomes
- 3. Several retrospective studies
- plan to increase the size (+100 to + 150 patients)
- get integrated to the national AIDS & TB programs (co-investigators)
- increase the magnitude of our medical advocacy

Achievements on OR and way forward

- Complete integration of OR with the project (part of project objectives, influence activities with findings, develop network)
- High visibility in Mumbai and Delhi AIDS and TB authorities
- High regional visibility at 10th ICAAP in Korea, August 2011
- Publications
 - 2 DR-TB focus (outcomes, side effects)
 - 3 HIV focus (HIV2, LFU, HBV/HIV co-infection)
- 2012 conferences
 - MSF scientific day
 - AIDS Washington
 - UNION conference in Kuala Lumpur
- 4 OR projects at advanced stage (including qualitative) HIV and DRTB focus

Challenges and way forward

- Very complicated resistance profile -“XX and Totally” DR-TB
- Poor referral system -> high pre and early treatment mortality? (bureaucracy)
- Additional co-morbidities (diabetes, alcohol abuse, renal failure etc)
- Hospitalization of patients
- Pediatric co-infection (4 children and 3 adolescents co-infected; may be the largest group of patients ever documented)
- Patient support;
 - lack of standardized guidelines for HIV / DRTB,
 - high incidence of mental health issues and psy side effects
 - difficulties with confidentiality / home visits ...

Challenges and way forward

- Infection control at hospitals and households (slum) and contact tracing
- Coverage of huge area with difficult communication means
- Drugs and diagnostics, availability, quality, prices
⇒ Role of India in DRTB drugs supply worldwide and MSF interest
- OR stuck in long bureaucratic procedures for long



Discussions – Relevance of the project and its approach

- Innovative approach
 - MSF clinic as referral or transit place
 - Third line, cervical cancer, HepC ...
 - HIV/DRTB focus, pediatric
- High potential for impact at national and international level through quality OR (close link with advocacy)
- Involvement in drug related issues with possible international impact
- Capacity building potential
 - MSF general experience (guidelines / protocols ...)
 - MSF expats training place
 - Activists, public / private partners
- MSF voice for TB/HIV in the region (very few left ...)
- Contributing to MSF internal debates, adding diversity to the African-dominated agenda.

=> Is focusing on HIV co-infection a correct approach to the magnitude of DR-TB in Mumbai / India?

=> MSF involvement into sources of DRTB in Mumbai / India -> drug and private practitioners regulations, failure of public system in India???