



Patients and TB: Improving treatment outcomes through a patient centred approach and access to new treatments

**5th TB Symposium – Eastern Europe and Central Asia
Ministry of Labour, Health and Social Affairs of Georgia
and Médecins Sans Frontières**

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Ambulatory TB Care Day 1 in Karakalpakstan/Uzbekistan

MSF in Karakalpakstan

- 1998 – implementation of DOT program in KK.
- 2003 – implementation of DOT+ program in Nukus City and Chimbay.
- 2010 – “Comprehensive TB care for all”.
- 2011 – 3-d of February issue of prikaz#39 on ACD 1 treatment for DS and DR TB patients.

DS and DR cohorts

Through end of December 2015

- **Drug Sensitive TB**

- 5,238 patients enrolled on treatment
- 11.8% patients without outcome or currently on treatment
- 75.5% of patients with an outcome, had a successful outcome

- **Drug Resistant TB**

- 4,538 patients enrolled on treatment
- 15.9% patients without outcome or currently on treatment
- 59.4% of patients with an outcome, had a successful outcome

Average costs of hospital bed in Nukus City, 2013

- DS TB patients in Nukus City the cost was 30,169 sums per day and 1,206,756 sums per case treated.
- The average length of stay:
- 40 days for patients with DS TB.
- 100 days for patients with DR TB.

Why ambulatory treatment?

- High risk of drug resistance growth during hospital treatment was found among MDR-TB patients (18/87 in 2007 in TB2 IPD).
- High MDR-TB nosocomial spread rates including high MDR-TB incidence among medical staff (10 times higher).
- Increased inpatient numbers. Limited number of beds.
- Prolonged period of time from diagnosis until start of treatment (up to 6.3 weeks on average until 2011 and >2.4 weeks (in 2012)).

Reasons to Start ACD1

- Allow treatment to start quicker and without hospitalization.
- Relieve the bottleneck prolonging untreated infection in the population.
- To help mitigate the spread of MDR-TB.
- To optimize resources.

Critical Issues for Success of ACD1

- Close monitoring of side effects.
- Creating good community support systems.
- Educate patients and their families to maintain good infection control standards.
- Enabling better adherence.
- Training of many medics.
- Transportation issues for patients and medics.

Design/methods

- Compared treatment outcomes of 1039 DS-TB patients who received IPD or ACD1 from 1.01.2010 to 31.12.2012
- Interim treatment outcomes of 1377 MDR-TB patients who started IPD or ACD1 from 1.01.2010 to 31.09.2012
 - Failure,
 - LTFU,
 - Death,
 - 6th month culture conversion.

Discussion

Successful treatment outcome in DS-TB patient: ACD1 was similar (84%) compared to (81%) IPD treatment.

Non-adherence level was slightly worse with ACD1 (11.5%) compared to patients starting in IPD (10%).

Deaths and treatment failure significantly higher among IPD patients vs ambulatory patients (2.3% vs 1.2% and 6.2% vs 3.4%, respectively)

MDR-TB patient treatment outcomes

- Nil significant difference in death between IPD and ambulatory patients (7.7% vs 5.3%)
- LTFU more frequent among ambulatory patients (28.8% against 22.6%).
- 6th month culture conversion rate higher on ACD1 (91.7% against 83.9%).
- Successful outcome is the same for ACD1 (60.8%) and IPD (59.6%)
- Adherence:
 - ↓ in both groups for first 3 months of Rx, then stabilize
 - Rates higher in patients who started treatment in IPD (82% against 85%); the difference persisting throughout 12 months of Rx

CONCLUSIONS

- In DS-TB, ACD1 and IPD successful treatment outcomes were similar
- Successful treatment outcomes of MDR-TB patients were similar with ACD1 vs IPD initiation.
- Determinants of non-adherence among MDR-TB patients require further investigation.

Hospital transmission is likely reduced with ACD1 but was not measured here.

Cost effectiveness analysis is planned.

Thank you for your attention!!!

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