



Case confirmation of pediatric multidrug-resistant tuberculosis in children in Kyiv City, Ukraine



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Background and Aims

- Ukraine has the largest multidrug-resistant (MDR) tuberculosis (TB) burden in the European Region
- Poor treatment outcomes and weak infection control practices lead to significant exposure of children
- Tuberculosis laboratory confirmation in children is still insufficient and TB in children is underdiagnosed
- In 2016, a total of 17,371 adults were diagnosed with smear-positive tuberculosis in Ukraine and 799 total pediatric cases were reported
- This study aimed to analyze the ways of MDR-TB cases confirmation in the city of Kyiv, Ukraine

Methods

- Retrospective review of medical records of newly diagnosed pediatric TB cases registered at the Kyiv City Pediatric Tuberculosis Hospital from January 2013 to December 2017 were analyzed

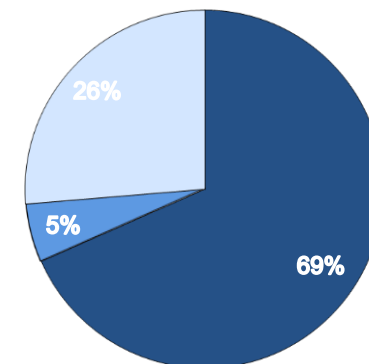
Study Population

- A total of 197 patients were newly diagnosed with TB in the period. 103 patients were diagnosed with pulmonary TB and 94 extrapulmonary TB.
- No deaths were reports among all 197 patients.
- 19 patients were diagnosed treated for MDR TB
 - 7 patients were under 5 years old
 - 2 patients were HIV-positive
 - Extensively-DR TB was diagnosed by DST in 2 patients

Outcomes of MDR Patients

- 16 patients have successfully completed treatment
- 3 patients were still continuing treatment by December 2017

Diagnostic Methods Used for MDR-TB



- Household Contact with MDR-TB Source Case Only (N = 13)
- Laboratory Confirmation Only (N=1)
- Both Laboratory Confirmation And Known Household Contact With Source Case (N=5)

Conclusions

- The absence of deaths among this cohort could be indicative of safe treatment regimens, including MDR regimens.
- MDR-TB confirmation is essential in terms of high MDR-TB and XDR-TB prevalence in Ukraine
- The risk of contracting MDR-TB in children likely extends beyond having a household, smear-positive TB source case and they are likely missed cases of pediatric MDR-TB