

Private sector engagement in pediatric TB-experience from Karachi, Pakistan.

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Outline

- Child and adolescent TB: global situation
- Gaps in child and adolescent TB care
- Child TB in Pakistan, inventory study findings.
- Private sector engagement model- experience from Karachi, Pakistan
- UNHLM for TB targets-2023
- Child and adolescent TB roadmap- 2018
- Child and adolescent TB- PPM opportunities

Burden and mortality of TB in children and adolescents: huge and unrecognized



TB among all ages





1.6 million TB deaths in 2017

7.5 million

children (0-14) infected with TB each year

(Dodd et al, 2014 (12))

1 million



children (0-14 years) developed TB in 2017

52% <5 year olds



727 000 adolescents (10-19 year-olds) developed TB in 2012

(Snow et al, 2018 (13))

233 000

children (0-14) TB deaths in 2017



80% in children <5 years

96% of deaths in children who did not access TB treatment

39 000 (17%) deaths among children living

with HIV

(Dodd et al, 2017 (16))

Drug-resistant TB in children



An estimated
25 000
children <15 years
fell ill with MDR-TB
in 2014



of them were diagnosed and had access to treatment

(Dodd et al, 2016 Jenkins et al, 2014)



Drug-resistant TB is a major contributor to antimicrobial resistance

The case detection gap



2018

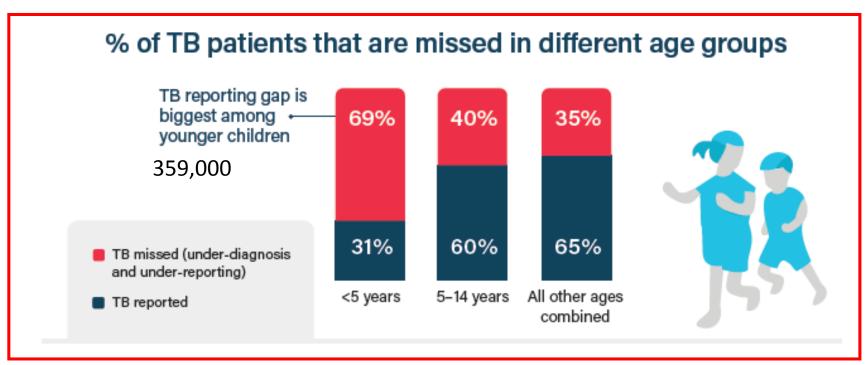
Notifications 2017:

0-4 years: 161,000

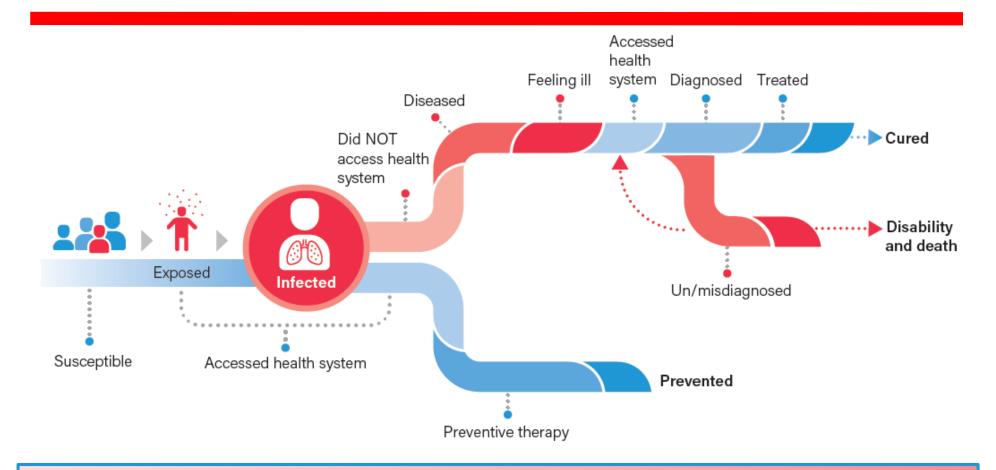
5-14 years: 289,000

Total 0-14 years: 450,000



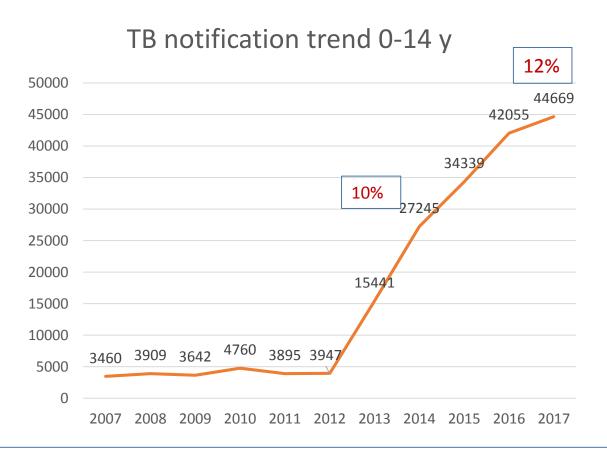


Gaps along the TB pathway



- Awareness of TB
- Demand for TB services
- Access to healthcare
- Suspicion of TB
- Diagnostic tools
- (Centralized) capacity and verticality
- Availability of drugs
- Availability of childfriendly formulations
- Data/reporting

Child and adolescent TB in Pakistan



- Children comprise 12.3% of total TB notifications and likely 20% of all TB deaths
- Adolescents 15-18 years comprise 13-15% of total TB notifications
- Pakistan UNHLM target for children with TB- 275,100 (2018-2022) 55,000 per year
- Minimal preventive therapy- NSP target was 30% of all eligible by 2018

Inventory studies on under-reporting of childhood TB







INDONESIA

Inventory study 2017:

21 320 cases; Underreporting: Overall 41%

0-14y: 54%

67% diagnosed but not reported, 33% not detected

PAKISTAN

Paediatric TB Inventory study 2016:

5 249 cases

0-14 y;

Under-reporting: 78%, vast majority non-NTP

VIETNAM

Inventory study 2016:

8 528 cases; Under-reporting: Overall 20%

0-14y: 35%



W Engaging the private sector to increase tuberculosis case detection: an impact evaluation study

Aamir J Khan, Saira Khowaja, Faisal S Khan, Fahad Qazi, Ismat Lotia, Ali Habib, Shama Mohammed, Uzma Khan, Farhana Amanullah, Hamidah Hussain, Mercedes C Becerra, Jacob Creswell, Salmaan Keshavjee

Summary

Lancet Infect Dis 2012; 12: 608-16 Background In many countries with a high burden of tuberculosis, most patients receive treatment in the private sector. We evaluated a multifaceted case-detection strategy in Karachi, Pakistan, targeting the private sector.

- In Asian megacities, 50–80% of symptomatic tuberculosis patients preferentially seek care in the private
- sector.
- Patients are often unaware of the free services available, perceive government services to be of poor quality, or are deterred by long waiting times and inconvenient hours.
- Although there has been some success in engaging private health providers in Asian cities, persuading these providers to identify, notify to NTPs, and treat tuberculosis cases has been challenging.

Multifaceted public private mix approach

- A year-long communications campaign advised people with 2 weeks or more of productive cough to seek care at one of 54 private family medical clinics or a private hospital that was also a NTP reporting center.
- Community laypeople- screeners
- Tool: using an interactive algorithm on mobile phones to assess patients and visitors in family-clinic waiting areas and the hospital's outpatient department.
- Screeners received cash incentives for case detection.
- Patients with suspected tuberculosis included self referrals and referrals (2010-2011)
- The primary outcome was the change (from 2010 to 2011) in TB notifications in the intervention area compared with that in an adjacent control area.

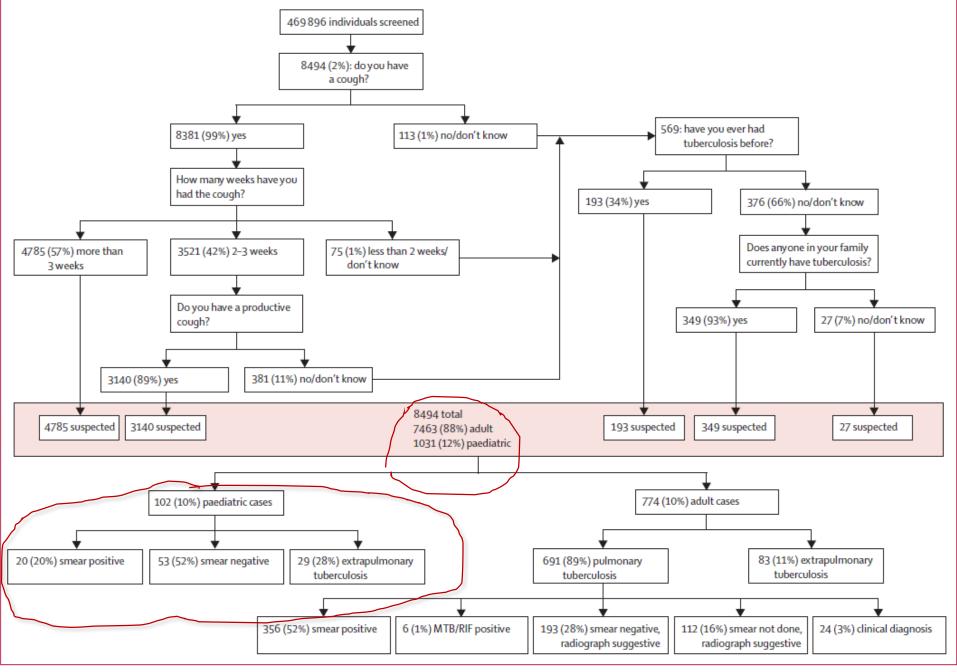


Figure 1: Screening profile of 8494 individuals suspected of having tuberculosis identified at family-clinic waiting rooms and Indus Hospital's outpatient department MTB/RIF=mycobacterium tuberculosis and resistance to rifampicin.

Outcomes

- In the intervention area overall, tuberculosis case notification to the NTP increased two times, (from 1569 to 3140 cases) (2010 to 2011)
- pulmonary tuberculosis notifications at Indus Hospital increased by 3.77 times for adults and 7.32 times for children.

What additional efforts did Private sector engagement require for child TB?

- GPs and pediatricians were generally reluctant to diagnose TB in children.
- As more child TB presumptives were found on screening, pediatrician and GP training in was organized.
 - Childhood TB- when to suspect, how to diagnose, how to manage or where and how to refer and National child TB guidance
- A clear written referral plan to a sentinel site (with transport facility) was provided to private providers for further diagnostics and evaluation of children suspected to have TB.
- Incentives to continue to follow the child with provision of free quality assured pediatric TB regimens, cell phone credit, invitations to future TB workshops and inclusion/tech assistance in related manuscripts were given.

Targets of UNGA HLM on TB - political declaration



- (i) 40 million people with TB to be reached with care during the period 2018 and 2023, including 3.5 million children and 1.5 million people with drug-resistant TB, including 115,000 children with DR-TB; and,
- (ii) At least 30 million people to be reached with TB prevention services during the period 2018-2023 including 4 million children under 5 years of age, 20 million other household contacts and 6 million people living with HIV (including children).

Private providers have an important role to play in reaching these targets



Private sector engagement in childhood TB: Roadmap (1)



- Fostering of partnerships between the public and private sectors.
- Bridging the policy-practice gap: Routine reporting of children with TB to NTP



Private sector engagement in childhood TB: Roadmap (2)



Implementing/expanding interventions for **prevention**:
Implement active contact screening, family-integrated TB treatment and preventive treatment through engagement with and support for community and primary health care providers (including private sector)



Scaling up case finding and treatment: Systematic implementation of *TB screening* for children and adolescents at private and public in- and outpatient settings; *Training* of all healthcare providers; availability of *child-friendly formulations* of TB medicines for all children with TB, and of preventive treatment regimens for children at risk

Private sector engagement in childhood TB: Roadmap (3)



Improving data collection, reporting and use:

- Implementation of *mandatory notification* policies
- Collaboration between NTPs and other health facilities, as well as other sectors including paediatric associations
- Comprehensive and age-disaggregated reporting of TB cases and TB treatment outcomes to monitor progress and focus interventions and resources



PPM in Childhood TB

PUBLIC-PRIVATE MIX FOR TB PREVENTION AND CARE A ROADMAP















PPM opportunities: Reaching the targets for diagnosis/treatment and prevention

Include children in TB case finding efforts in the private sector (paediatricians and GPs) Build on successful approaches in adults, e.g. provision of incentives or vouchers to invite contacts to be screened Provide preventive treatment through the private sector, including shorter LTBI regimen (3RH and 3HP) Engage National Pediatric associations and include private providers in training on child and adolescent TB Separate funding for child TB PPM activities Mandatory reporting to the NTP on diagnosis, treatment and prevention