Overview of recent research papers in childhood tuberculosis

Child and Adolescent Tuberculosis Working Group
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James Seddon
Professor of Global Child Health, Imperial College London
Consultant in Paediatric Infectious Diseases, St. Mary’s Hospital
Associate Professor, Stellenbosch University
Analysis of Drug-Resistant **Tuberculosis** in **Children** in Shenyang, China, 2017-2021.


OBJECTIVE: Drug-resistant **tuberculosis** (DR-TB) in **children** seriously threatens TB control. Information on the epidemiology and characteristics of DR-TB in **children** in China is limited. Among 376 patients who were positive for both methods, using the MGIT 9...


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My biases

• 1095 studies identified on PubMed
• On review of title selected 145 that I thought looked interesting
• No narrative reviews or case reports
• Only given 15 minutes this year!!
• Review of abstracts brought down to 22
• PLEASE forgive me if I have not included your paper!!
• PLEASE forgive me if I do a terrible job of summarising your work in <1 minute!
Standards and Models of Care
Clinical standards for drug-susceptible TB in children and adolescents

Tuberculosis care models for children and adolescents: a scoping review
Courtney M Yuen, Daria Szkwarko, Melanie M Dubois, Shumail Shahbaz, Katharine A Yuengling, Michael E Urbanowski, Paul A Bain, Annemieke Brands, Tiziana Masini, Sabine Verkuijl, Kerri Viney, Yael Hirsch-Moverman & Hamidah Hussain
Diagnostics
Two Clinical Prediction Tools to Inform Rapid Tuberculosis Treatment Decision-making in Children

Meredith B. Brooks,1,2 Hamidah Hussain,3 Sara Siddiqui,2,4 Junaid F. Ahmed,4 Maria Jaswal,3 Farhana Amanullah,4 Mercedes Becerra,2,7 and Amyn A. Malik2,5,6

Development of treatment-decision algorithms for children evaluated for pulmonary tuberculosis: an individual participant data meta-analysis

Oral Swab Specimens Tested With Xpert MTB/RIF Ultra Assay for Diagnosis of Pulmonary Tuberculosis in Children: A Diagnostic Accuracy Study

Monocyte, Lymphocyte and Neutrophil Ratios – Easy-to-Use Biomarkers for the Diagnosis of Pediatric Tuberculosis

Mirjam Kissling, BM, * Nora Fritschi, MD, *† Philipp Baumann, MD, ‡§ Michael Buettcher, MD, ¶ Jan Bonhoeffer, MD, † Vivek Nambhrai, MBChB, PhD, Dphil, **†‡‡§§ and Nicole Ritz, MD, PhD, *†‡‡§§ for the ProPAED and CITRUS study team
Effect of systematic tuberculosis detection on mortality in young children with severe pneumonia in countries with high incidence of tuberculosis: a stepped-wedge cluster-randomised trial


Diagnostic accuracy of a three-gene Mycobacterium tuberculosis host response cartridge using fingerstick blood for childhood tuberculosis: a multicentre prospective study in low-income and middle-income countries

RESEARCH ARTICLE

Optimising computer aided detection to identify intra-thoracic tuberculosis on chest x-ray in South African children

Megan Palmer tríéd, James A. Seddon 1,2, Marieke M. van der Zalm 1, Anneke C. Hesseling 1, Pierre Goussard 3, H. Simon Schaaf 1, Julie Morrison 3, Bram van Ginneken 4, Jaime Melendez 3,5, Elisabetta Walters 1,6, Keelin Murphy 4

Number Needed to Screen for Tuberculosis Disease Among Children: A Systematic Review

Katherine O. Robsky, PhD, MPH 9 Lelia H. Chaisson, PhD 9 Fahd Naufal, MD 9 Pamela Delgadillo-Barrosó, MD, MPH 8 Hector S. Alvarez-Manzo, MD, MSc 9 Jonathan E. Golub, PhD, MPH 11,12,13 Adrienne E. Shapiro, MD, PhD 9 Nicole Salazar-Austin, MD, ScM 7
Post-TB
Post-tuberculosis sequelae in children and adolescents: a systematic review

Vanessa Igbokwe, Lisa C Ruby, Ayten Sultanli, Sabine Bélard

Reduced lung function and health-related quality of life after treatment for pulmonary tuberculosis in Gambian children: a cross-sectional comparative study

Esin Nkeuwe, 1 Schadrac Agbla, 3 Azeezat Sallahdeen, 1 Olumuyiwa Owolabi, 1 Abdou K Sillah, 1 Monica Genekah, 1 Abdoulie Tunkara, 1 Sheriff Kande, 1 Maryama Jawara, 1 Lamin Saidy, 5 Andrew Bush, 6,7 Toyin Togun 1, 3,2,8 Beate Kampmann 1, 2,9

The Long-Term Impact of Early-Life Tuberculosis Disease on Child Health
A Prospective Birth Cohort Study

© Leonardo Martinez 1, Diane M. Gray 2,3, Maresa Botha 2,3, Michael Nei 2,3, Shaakira Chaya 2,3, Carvern Jacobs 2,3, Lesley Workman 2,3, Mark P. Nicol 3,4,5, and Heather J. Zar 2,3
Pharmacokinetics
Twice-daily dosing of dolutegravir in infants on rifampicin treatment: a pharmacokinetic substudy of the EMPIRICAL trial

Pregnancy
Effect of pregnancy versus postpartum maternal isoniazid preventive therapy on infant growth in HIV-exposed uninfected infants: a post-hoc analysis of the TB APPRISE trial

Ashenaif S. Cherkos, a,a Sylvia M. LaCourse, b,c,d Daniel A. Enquobahrie, h, Barbra A. Richardson, d,e Sarah Bradford, f Grace Montepiedra, g,h Blandina T. Mmbaga, i Tapiwa Mbengeranwa, j Gaerolwe Masheto, k Patrick Jean-Philippe, l Nahida Chakhtoura, m Gerhard Theron, n Adriana Weinberg, s Haseena Cassim, n Mpho S. Ruesi, k Elsie Jean, q Deo Wawire, t Teacer Nematadzira, s Lynda Stranix-Chibanda, t Anneke C. Hesselink, u Linda Auripul, v Amita Gupta, w,y and Grace John-Stewart, b,c,d,e,f for the IMPAACT P1078 TB APPRISE Study Team
Treatment
Treatment outcomes and risk factors of death in childhood tuberculous meningitis in Kandahar, Afghanistan: a prospective observational cohort study

Bilal Ahmad Rahimi, Najeebullah Niazi, Ahmad Farshad Rahimi, Muhammad Ishaque Faizee,
Mohammad Sidiq Khan, and Walter R. Taylor

Drug-Resistant Tuberculosis Treatment Outcomes among Children and Adolescents in Karachi, Pakistan

Amyn A. Malik, Uzma Khan, Palwasha Khan, Aliya Anwar, Naseem Salahuddin, Saira Khowaja,
Aamir J. Khan, Salman Khan, Hamidah Hussain and Farhana Amanullah
Mortality
Mortality and Cause of Death in Children With Presumptive Disseminated Tuberculosis

Maryline Bonnet, MD, PhD, Anne-Christine Nordholm, MD, Bob Ssekyanzi, MD, Onesmus Byamukama, MD, Patrick Onkiriza, MSc, PhD, Tobias Tusabe, MMED, Dan Nyehangane, MSc, Ivan Mugisha Taremwa, MSc, Esther Turyashemererwa, BSc, Eric Wobudeya, MD, MSc, Juliet Mwangi-Amupaire, MEED, Ben J Marais, MBChB, MMed, PhD, Dorah Namigga, MEED
ACF and TPT
Systematic review with network meta-analysis on the treatments for latent tuberculosis infection in children and adolescents


PLOS MEDICINE

Cost-effectiveness analysis of interventions to improve diagnosis and preventive therapy for paediatric tuberculosis in 9 sub-Saharan African countries: A modelling study

Nyasahdzaise Mafirakureva, Sushant Mukherjee, Mikhail de Souza, Cassandra Kelly-Cirino, Mario J. P. Songane, Jennifer Cohn, Jean-François Lemaire, Martina Casenghi, Peter J. Dodd

1 Sheffield Centre for Health and Related Research, University of Sheffield, Sheffield, United Kingdom
2 Elizabeth Glaser Pediatric AIDS Foundation (EGPAAF), Washington, DC, United States of America
3 Division of Infectious Diseases, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, United States of America

* pj.dodd@sheffield.ac.uk
Vaccines
Non-restrictive open vial policy combined with the home visit vaccinations for improving BCG coverage in a high-incidence outreach region: A model-based cost-effectiveness analysis for Indonesia

Afifah Machlaurin1,2, Jos Luttjeboer3, Didik Setiawan4, Tjipke Sytse van der Werf†, Maarten J. Postma1,3,7,8,9

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Conclusions

• Number of publications increasing, many of high quality
• Lots of papers on ultrasound, stool, post-TB
• Lots of papers coming from big projects – TB-Speed, CAP-TB, Benefit-Kids, RaPaed etc.
• But also lots of other studies
• Good geographical variation