TBeat

A newsletter produced by the Heartland National TB Center

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WHO Treatment Guidelines for Drug-Resistant Tuberculosis, 2016 Update

WHO Treatment Guidelines for Drug-Resistant Tuberculosis, 2016 Update. Geneva: World Health Organization; 2016.

Available from https://www.ncbi.nlm.nih.gov/books/NBK390455/

SUMMARY

The *WHO treatment guidelines for drug-resistant tuberculosis (2016 update)* contains policy recommendations on priority areas in the treatment of drug-resistant tuberculosis. The revision is in accordance with the WHO requirements for the formulation of evidence-informed policy.

The main novelties of the 2016 WHO guidelines are:

- a shorted MDR-TB treatment regimen is recommended under specific conditions;
- medicines used in the design of conventional MDR-TB treatment regimens are now classified to reflect updates in the evidence on their effectiveness and safety
- Specific recommendations are made on the treatment of children with rifampicin-resistant or MDR-TB based on a first ever individual patient data meta-analysis;
- Recommendations of the role of surgery in MDR-TB case management are included.

Complete Book located at https://www.ncbi.nlm.nih.gov/books/NBK390455/pdf/Bookshelf_NBK390455.pdf

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Baseline Predictors of Treatment Outcomes in Children with Multidrug-Resistant Tuberculosis: A Retrospective Cohort Study.

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Abstract

Background

Globally, >30,000 children fall sick with multidrug-resistant (MDR) tuberculosis every year. Without robust pediatric data, clinical management follows international guidelines that are based on studies in adults and expert opinion. We aimed to identify baseline predictors of death, treatment failure, and loss to follow-up among children with MDR tuberculosis disease treated with regimens tailored to their drug susceptibility test (DST) result or to the DST result of a source case.

Methods

This retrospective cohort study included all children ≤15 years old with confirmed and probable MDR tuberculosis disease who began tailored regimens in Lima, Peru, between 2005 and 2009. Using logistic regression, we examined associations between baseline patient and treatment characteristics and (1) death or treatment failure and (2) loss to follow-up.

Results

Two hundred eleven of 232 (90.9%) children had known treatment outcomes, of whom 163 (77.2%) achieved cure or probable cure, 29 (13.7%) were lost to follow-up, 10 (4.7%) experienced treatment failure, and 9 (4.3%) died. Independent baseline predictors of death or treatment failure were the presence of severe disease (adjusted odds ratio [aOR], 4.96; 95% confidence interval [CI], 1.61-15.26) and z score ≤-1 (aOR, 3.39; 95% CI, 1.20-9.54). We did not identify any independent predictors of loss to follow-up.

Conclusions

High cure rates can be achieved in children with MDR tuberculosis using tailored regimens containing second-line drugs. However, children faced significantly higher risk of death or treatment failure if they had severe disease or were underweight. These findings highlight the need for early interventions that can improve treatment outcomes for children with MDR tuberculosis.

Full article can be located at: http://cid.oxfordjournals.org/content/63/8/1063.full.pdf+html

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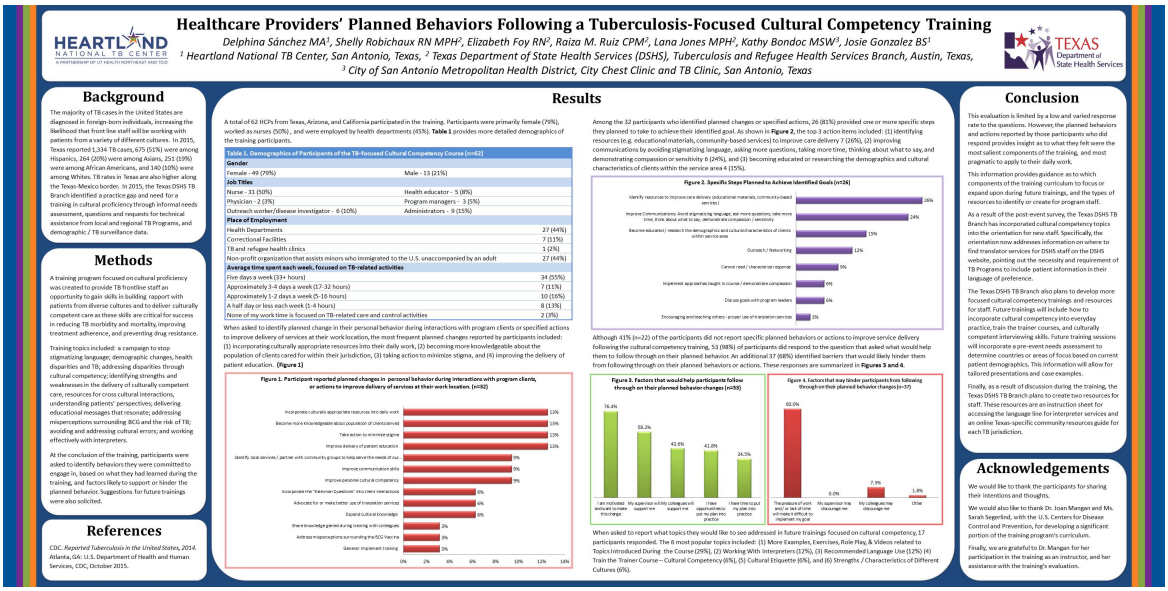
Abstract Presentation

HNTC, the Texas Department of State Health Services, the Tuberculosis and Refugee Health Services Branch, the City of San Antonio Metropolitan Health District and the San Antonio City Chest Clinic were pleased to present the abstract below at the 2016 TB Education and Training Network (TB-ETN) Conference hosted September 19 - 22, 2016 by the Centers for Disease Control and Prevention in Atlanta, Georgia. For an 11 x 17 printable poster, please contact Alysia Wayne (Alysia.wayne@uthct.edu).



Healthcare Providers' Planned Behaviors Following a Tuberculosis-Focused Cultural Competency Training

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Background

The majority of TB cases in the United States are diagnosed in foreign-born individuals, increasing the likelihood that front-line staff will be working with patients from a variety of different cultures. In 2015, Texas reported 1,334 TB cases, 675 (51%) were among Hispanics, 264 (20%) were among Asians, 251 (19%) were among African Americans, and 140 (10%) were among Whites. TB rates in Texas are also higher along the Texas-Mexico border. In 2015, the Texas DSHS TB Branch identified a practice gap and need for a training in cultural proficiency through informal needs assessment, questions and requests for technical assistance from local and regional TB Programs, and demographic / TB surveillance data.

Methods

A training program focused on cultural proficiency was created to provide TB frontline staff an opportunity to gain skills in building rapport with patients from diverse cultures and to deliver culturally competent care as these skills are critical for success in reducing TB morbidity and mortality, improving treatment adherence, and preventing drug resistance.

Training topics included: a campaign to stop stigmatizing language; demographic changes, health disparities and TB; addressing disparities through cultural competency; identifying strengths and weaknesses in the delivery of culturally competent care, resources for cross cultural interactions, understanding patients' perspectives; delivering educational messages that resonate; addressing misperceptions surrounding BCG and the risk of TB; avoiding and addressing cultural errors; and working effectively with interpreters.

At the conclusion of the training, participants were asked to identify behaviors they were committed to engage in, based on what they had learned during the training, and factors likely to support or hinder the planned behavior. Suggestions for future trainings were also solicited.

References

CDC. *Reported Tuberculosis in the United States, 2014.* Atlanta, GA: U.S. Department of Health and Human Services, CDC, October 2015.

Results

A total of 62 HCPs from Texas, Arizona, and California participated in the training. Participants were primarily female (79%), worked as nurses (50%) , and were employed by health departments (45%). **Table 1** provides more detailed demographics of the training participants.

Table 1. Demographics of Participants of the TB-focused Cultural Competency Course (n=62)

Gender	
Female - 49 (79%)	Male - 13 (21%)
Job Titles	
Nurse - 31 (50%)	Health educator - 5 (8%)
Physician - 2 (3%)	Program managers - 3 (5%)
Outreach worker/disease investigator - 6 (10%)	Administrators - 9 (15%)
Place of Employment	
Health Departments	27 (44%)
Correctional Facilities	7 (11%)
TB and refugee health clinics	1 (2%)
Non-profit organization that assists minors who immigrated to the U.S. unaccompanied by an adult	27 (44%)
Average time spent each week, focused on TB-related activities	
Five days a week (33+ hours)	34 (55%)
Approximately 3-4 days a week (17-32 hours)	7 (11%)
Approximately 1-2 days a week (5-16 hours)	10 (16%)
A half day or less each week (1-4 hours)	8 (13%)
None of my work time is focused on TB-related care and control activities	2 (3%)

When asked to identify planned change in their personal behavior during interactions with program clients or specified actions to improve delivery of services at their work location, the most frequent planned changes reported by participants included: (1) incorporating culturally appropriate resources into their daily work, (2) becoming more knowledgeable about the population of clients cared for within their jurisdiction, (3) taking action to minimize stigma, and (4) improving the delivery of patient education. **(Figure 1)**

Figure 1. Participant reported planned changes in personal behavior during interactions with program clients, or actions to improve delivery of services at their work location. (n=52)

Among the 32 participants who identified planned changes or specified actions, 26 (81%) provided one or more specific steps they planned to take to achieve their identified goal. As shown in **Figure 2**, the top 3 action items included: (1) identifying resources (e.g. educational materials, community-based services) to improve care delivery 7 (26%), (2) improving communications by avoiding stigmatizing language, asking more questions, taking more time, thinking about what to say, and demonstrating compassion or sensitivity 6 (24%), and (3) becoming educated or researching the demographics and cultural characteristics of clients within the service area 4 (15%).

Figure 2. Specific Steps Planned to Achieve Identified Goals (n=26)

Although 41% (n=22) of the participants did not report specific planned behaviors or actions to improve service delivery following the cultural competency training, 53 (98%) of participants did respond to the question that asked what would help them to follow through on their planned behavior. An additional 17 (68%) identified barriers that would likely hinder them from following through on their planned behaviors or actions. These responses are summarized in **Figures 3 and 4.**

Figure 3. Factors that would help participants follow through on their planned behavior changes (n=33)

Figure 4. Factors that may hinder participants from following through on their planned behavior changes (n=37)

When asked to report what topics they would like to see addressed in future trainings focused on cultural competency, 17 participants responded. The 6 most popular topics included: (1) More Examples, Exercises, Role Play, & Videos related to Topics Introduced During the Course (29%), (2) Working With Interpreters (12%), (3) Recommended Language Use (12%) (4) Train the Trainer Course – Cultural Competency (6%), (5) Cultural Etiquette (6%), and (6) Strengths / Characteristics of Different Cultures (6%).

Conclusion

This evaluation is limited by a low and varied response rate to the questions. However, the planned behaviors and actions reported by those participants who did respond provides insight as to what they felt were the most salient components of the training, and most pragmatic to apply to their daily work.

This information provides guidance as to which components of the training curriculum to focus or expand upon during future trainings, and the types of resources to identify or create for program staff.

As a result of the post-event survey, the Texas DSHS TB Branch has incorporated cultural competency topics into the orientation for new staff. Specifically, the orientation now addresses information on where to find translator services for DSHS staff on the DSHS website, pointing out the necessity and requirement of TB Programs to include patient information in their language of preference.

The Texas DSHS TB Branch also plans to develop more focused cultural competency trainings and resources for staff. Future trainings will include how to incorporate cultural competency into everyday practice, train the trainer courses, and culturally competent interviewing skills. Future training sessions will incorporate a pre-event needs assessment to determine countries or areas of focus based on current patient demographics. This information will allow for tailored presentations and case examples.

Finally, as a result of discussion during the training, the Texas DSHS TB Branch plans to create two resources for staff. These resources are an instruction sheet for accessing the language line for interpreter services and an online Texas-specific community resources guide for each TB jurisdiction.

Acknowledgements

We would like to thank the participants for sharing their intentions and thoughts.

We would also like to thank Dr. Joan Mangan and Ms. Sarah Segerlind, with the U.S. Centers for Disease Control and Prevention, for developing a significant portion of the training program's curriculum.

Finally, we are grateful to Dr. Mangan for her participation in the training as an instructor, and her assistance with the training's evaluation.

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Resources

TB Education and Training Network

http://www.cdc.gov/tb/education/Tbetn/default.htm

National TB Controllers Association

http://www.tbcontrollers.org

Find TB Resources

www.findtbresources.org

Tuberculosis Epidemiologic Studies Consortium (TBESC)

http://www.cdc.gov/tb/topic/research/TBESC/default.htm

Regional Training and Medical Consultation Centers' TB Training and Education Products

https://sntc.medicine.ufl.edu/rtmccproducts.aspx

Program Collaboration and Service Integration (PCSI)

http://www.cdc.gov/nchhstp/programintegration/Default.htm

Centers for Disease Control and Prevention, Division of Tuberculosis Elimination

http://cdc.gov/tb/

****If your organization has any additional links for TB resources you would like published, please send them to Alysia.Wayne@uthct.edu****

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Trainings

2017 HNTC Training Calendar

Date(s)	Course	Location
March 7 - 9	TB Nurse Case Management	San Antonio, TX
March 24	Community United to End TB	San Antonio, TX
April 6 - 8	Central College Health Association	Kansas City, KS
May 3 - 4	Tuberculosis 101	Little Rock, AR
May 9 - 12	TB Intensive	San Antonio, TX
June 7, 14, 21, 28	Introduction to Contact Investigation	Online
July 6, 13, 20, 27	Introduction to TB Nurse Case Management	Online
September 13 - 15	TB Nurse Case Management	San Antonio, TX
October 5, 12, 19, 26	Introduction to Contact Investigation	Online
October 24 - 27	TB Intensive	San Antonio, TX

The calendar will be updated in every newsletter as well as on the website to show trainings that have been confirmed

Please visit our website: **http://www.heartlandntbc.org/training/calendar.php** to find detailed information concerning registration and participation.

Proposed topics are subject to change; check website for the latest updates.

Products from the Heartland National TB Center are available for download at

http://www.heartlandntbc.org/products/

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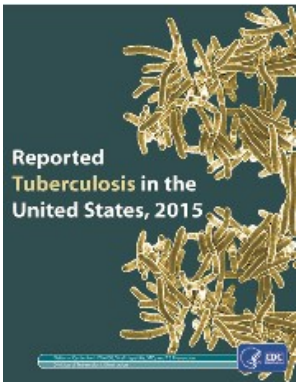
TBit: Recently Published



Reported Tuberculosis in the United States, 2015

Produced by the Centers for Disease Control and Prevention, Division of Tuberculosis Elimination, US Department of Health and Human Services, Atlanta, Georgia

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Tuberculosis (TB) is one of the world's deadliest diseases:

A total of 9,557 TB cases (a rate of 3.0 cases per 100,000) were reported in the United States in 2015. The overall number of TB cases in the United States increased over the previous year in 2015 after having declined yearly during 1993-2014. Despite a slight increase in case count, the TB incidence rate per 100,000 persons has remained relatively stable at approximately 3.0 since 2013.

Online version of ***Reported TB in the US, 2015***
Centers for Disease Control and Prevention, Division of Tuberculosis Elimination website

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The MISSION of the Heartland National TB Center is to build capacity with our partners. We will share expertise in the treatment and prevention of tuberculosis by: developing and implementing cutting-edge trainings, delivering expert medical consultation, providing technical assistance, and designing innovative educational and consultative products.

The VISION of Heartland National TB Center is to provide *excellence*, *expertise*, *innovation* in training, medical consultation, and product development to reduce the impact of tuberculosis in our region.