TB Behavioral and Social Science Webpage CDC-Sponsored Project Description List

Project Title: Enhanced Surveillance to Identify Missed Opportunities for Prevention of Tuberculosis in the Foreign-Born

Principal Investigator(s): Amy L. Davidow, PhD¹; Randall Reves, MD²; Dolly Katz, PhD³

Project Dates: April 2005 - June 2007

Project Overview: In the past decade, tuberculosis (TB) in North America has increasingly become a disease of persons born outside the U.S. and Canada. In 2002, for the first time, TB cases among foreign born persons accounted for the majority (51%) of cases in the United States, whereas in Canada, they have accounted for the majority of cases since 1990. To better understand and reduce the incidence of TB in the foreign born, the goal of the U.S. and Canada is to increase the yield from three basic TB control activities: detecting and treating persons with active TB to prevent further transmission; conducting contact investigations to identify and treat contacts with latent TB infection (LTBI) or active TB disease; and, conducting targeted testing and treatment for LTBI to prevent future TB cases among high-risk populations. These activities have to be tailored to the special circumstances of the foreign born, which may involve factors such as visa status, drug resistance, social and economic hardships, linguistic barriers, and cultural beliefs that deter diagnosis and interfere with adherence to therapy and cooperation with contact investigations. Current national surveillance data for the U.S. and Canada demonstrate the trend towards increasing TB morbidity among the foreign born. These data lack the level of detail needed to identify the proportion of TB cases that could have been prevented by improvements in each of the three basic TB control activities. This cross-sectional, epidemiologic study of TB in the foreign born in the United States and Canada has been developed to identify interventions that can improve each of the three basic TB control activities and inform public health efforts to eliminate TB among foreign born persons in the U.S. and Canada.

Objectives: The objectives of this study are to: 1) describe the epidemiology of TB in foreign born persons in the United States and Canada; 2) identify missed opportunities to prevent development and transmission of TB in foreign born persons, and; 3) make recommendations for program changes at the national, state/provincial, and local levels.

Target Audience: Local and state TB controllers; TB case managers; primary care physicians; emergency room physicians; pharmacists; physician assistants; nurse practitioners; institutions that could screen persons for LTBI; members and participants of the Advisory Council for the Elimination of Tuberculosis; members and participants of the Federal Tuberculosis Task Force; members and participants of the National TB Controllers Association; national and local community groups that represent foreign born persons

Methods: This study will conduct face-to-face interviews with a random sample of approximately 1,500 foreign born persons, diagnosed with active TB disease, between 2005-2006, and residing within any of the Tuberculosis Epidemiologic Studies Consortium (TBESC) site jurisdictions. Epidemiologic data will be collected to describe the steps leading to diagnosis (through screening for disease or due to symptomatic disease), factors associated with disease onset, diagnosis and initiation of treatment based upon timing (since arrival into the U.S. or Canada), immigration status, country of origin, migration (within the U.S. or Canada), access/barriers to care (including insurance coverage and cultural barriers), and treatment outcomes. It is hypothesized that this information will shed light on missed opportunities for prevention. Additional information will be collected from health department records, national surveillance databases, and record linkages with CDC's Division of Global Migration and Quarantine. Data obtained from case interviews will provide unique epidemiologic information collected consistently from site to site. Data entry will be done using a secure, web-based data entry system that serves several studies developed by TBESC.

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Publications: Katz D, Albalak R, Wing J, Combs J. Setting the Agenda: A new model for collaborative tuberculosis epidemiologic research. Tuberculosis: In press

Relative Content:

Tools and Instruments>Preventing Tuberculosis in the Foreign-Born: Adult Participant Interview Form Tools and Instruments>Preventing Tuberculosis in the Foreign-Born: Pediatric Participant Interview Form

University of Medicine and Dentistry, New Jersey, Newark, New Jersey
 Denver Public Health and Hospitals Authority, Denver, Colorado
 Division of Tuberculosis Elimination, Centers for Disease Control and Prevention, Atlanta, Georgia

Project Title: Evaluation of Access to and Acceptance of HIV Counseling and Testing Among Patients with TB in Rwanda

Principal Investigator(s): Eric Pevzner, PhD, MPH, and Alyssa Finlay, MD1

Project Dates: September-October 2005

Project Overview: In October 2005, the Rwanda Ministry of Health adopted a new policy that included routinely providing HIV counseling and testing for all patients with TB, and providing HIV care for coinfected patients. Prior to policy implementation, we conducted an evaluation of access to and acceptance of HIV testing among patients with TB. The evaluation was conducted with the participation of 22 geographically representative sites (i.e., hospitals and health centers).

Objectives: The objectives of this project were to 1) identify and examine barriers to HIV testing among patients and health care workers; 2) determine the baseline percentage of patients with TB who were offered, accepted, and received HIV testing prior to implementation of the new TB/HIV policy; 3) document the percentage of patients with TB disease and HIV infection; 4) document the HIV-related services for patients with TB disease and HIV infection; 5) evaluate the treatment outcomes of patients with TB disease and HIV infection; and 6) examine the level of coordination between TB and HIV programs.

Target Audience: Rwanda Ministry of Health and other TB/HIV partners

Methods: Multiple methods were utilized for this project, including focus group discussions with patients with TB and with health care workers at TB clinics; face-to-face structured interviews about access to and acceptance of HIV testing among patients with TB; review and abstraction of data from TB registers and patient treatment cards; and structured interviews with staff at the TB clinic, HIV Voluntary Counseling and Testing (VCT) clinic, and antiretroviral (ARV) clinic at each site.

Results: Patient interviews - Of the 207 patients interviewed, 158 (76%) reported being offered an HIV test, and 157 (99%) of these patients reported getting tested. Among 134 patients who disclosed their status, 66 (49%) reported being HIV infected. Our review of the TB registries and treatment cards identified 490 patients registered during 10/1/04-12/31/04, with 258 (53%) having a documented HIV test result. Of these patients, 113 (44%) had a positive HIV test result. Of the 40 TB clinic staff interviewed, 11 (28%) reported offering HIV testing to 100% of patients with TB, and six reported offering testing to less than 50% of patients. Review of TB registers and patient treatment cards - Among the 490 patients registered at the sampled health facilities, 258 (53%) had an HIV test result documented either in the TB register or on the treatment card; 113 (44%) were HIV infected. Among 113 patients with TB disease and HIV infection, program data indicated that only 3 (3%) received cotrimoxazole preventive therapy and only 14 (12%) received antiretroviral therapy. Analysis of treatment outcomes revealed that 28/113 (25%) patients with TB disease and HIV infection died, compared to 7/145 (5%) non HIV-infected patients with TB (RR= 6.0, 95% CI 2.5-14.5).

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Publications: Currently being drafted

Relative Content:

Tools and Instruments>There are no tools associated with this project

¹ Division of Tuberculosis Elimination, Centers for Disease Control and Prevention

Project Title: Study of Factors Associated with Acceptance of, Adherence to, and Toxicity from Treatment for Latent Tuberculosis Infection: Phase 3 - Prospective Cohort Study of Acceptance and Adherence

Principal Investigator(s): Robin Shrestha-Kuwahara, MPH¹, Robert Horsburgh, MD², Stefan Goldberg, MD¹

Project Dates: 2005-2009

Project Overview: As one of the TB Epidemiologic Studies Consortium (TBESC) research studies, this project aims to understand the scope of treatment of latent tuberculosis infection (LTBI) in the United States and Canada and to elucidate factors associated with acceptance and completion of treatment. Phase 3 of the study is a prospective cohort study of approximately 2,400 adult patients 18 years and older who have been offered treatment for LTBI in the United States and Canada. Twelve TBESC sites and associated local clinics are participating in Phase 3. Taking an ecological approach, this study addresses a wide range of factors, including knowledge, attitudes, and beliefs, as well as toxicity, tolerability, social and economic factors, and issues associated with clinic structures and the health care delivery system. The interviews will be administered at the time treatment is offered and, for those who initiate, again at the time participants drop out of or complete treatment. A randomized sample of this cohort will receive brief, periodic follow-up interviews at designated intervals. Enrollment will continue over a 12-month period.

Objectives: The primary objectives of the study are to identify potentially modifiable factors associated with acceptance or nonacceptance of LTBI treatment, and to identify potentially modifiable factors related to completion or noncompletion of treatment.

Target Audience: Persons offered treatment for LTBI in the United States and Canada

Methods: Phase 3 will collect information through the following methods and sources: 1) an initial interview administered to persons offered treatment for LTBI to assess the factors affecting patients' decision and ability to initiate and complete treatment and to identify potentially modifiable factors related to acceptance and completion of treatment; 2) an exit interview administered at the time of treatment cessation or completion; 3) follow-up interviews at periodic intervals for persons randomized to this arm; 4) chart abstractions; and 5) a clinic survey to describe the local context and LTBI treatment protocols.

Results: Project is in progress

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Publications: N/A Relative Content:

Tools and Instruments > LTBI Interview Guide: Initial Patient Interview Tools and Instruments > LTBI Interview Guide: Follow-up Patient Interview

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Project Title: Addressing Tuberculosis (TB) among African Americans in the Southeast: Identifying and Overcoming Barriers to Treatment Adherence for Latent Tuberculosis Infection (LTBI) and TB Disease

Principal Investigator(s): Rachel Royce, PhD, MPH ¹; Nickolas DeLuca, PhD²

Project Dates: October 2003 - March 2008

Project Overview: The Centers for Disease Control and Prevention's Division of Tuberculosis Elimination and RTI International are conducting a study, as a part of the Tuberculosis Epidemiologic Studies Consortium, to address the excess burden of tuberculosis (TB) among African Americans in the southeast. In the southeastern states in the United States (US), where African Americans have historically faced great social and economic disadvantages, the TB rate among African Americans is more than eight times the rate among whites. This difference is referred to as TB disparity. This multi-phase research project was developed to understand the individual, institutional, and community-level barriers and facilitators to TB control in African Americans in the southeastern region of the US. During the first phase of this study, qualitative and qualitative research methods were used to gain information about the knowledge, attitudes, and beliefs of TB patients, at-risk individuals, and the community leaders and providers who serve them. Data from the first phase will be used to develop and implement the intervention phase that aims to help reduce the disparity of TB among African Americans in the southeastern US.

Objectives: The objectives of the study are to: 1) identify and understand the socio-cultural, racial, and healthcare system barriers for African-American TB patients and those who may be at-risk for TB; 2) investigate TB knowledge, attitudes, beliefs, and practices held by health care providers and community leaders in the African-American community; and 3) develop interventions in several sites that will address the identified barriers to reduce and eliminate TB disparities within the African-American community.

Target Audience: African-American TB patients; at-risk community members; providers serving African-American populations at risk for TB; community leaders; community-based organizations; faith-based organizations; health departments

Methods: During the first phase of the project, qualitative and quantitative research methods are being used to guide the development of the intervention. Literature reviews, census tract evaluations, and surveillance data were used to develop the surveying instruments for the individual interviews and the focus group discussion guides. Individual interviews and focus group discussions were conducted with African-American TB patients, persons at high-risk for TB, health care providers and community leaders. During the second phase of the project, data from the first phase of the research will be used to develop and implement an intervention that aims to reduce the disparity of TB among African Americans in the southeastern United States.

Results: Focus group participants suggested that the TB control staff's persistence and flexibility helped them adhere to treatment for LTBI, as did the participation of sex- and race-matched community outreach workers. Many participants cited fear of community and family stigma as treatment barriers and identified a need for additional information about the importance of LTBI treatment. To address patient concerns and misconceptions, ongoing individual counseling during treatment for LTBI was initiated. Furthermore, dissemination of TB-related educational messages was recommended to engage community leaders, churches, and civic organizations.

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Publications:

N/A

Relative Content:

Tools and Instruments> The following tools and instruments, developed in conjunction with this project, are currently not available on this site:

- Individual Interview Guide: Community Health Providers
- Individual Interview Guide: Health Department Staff
- Individual Interview Guide: Active Tuberculosis Patients
- Individual Interview Guide: Latent Tuberculosis Infection Patients
- Focus Group Discussion Guide: Persons At-Risk for Tuberculosis
- Focus Group Discussion Guide: Community Leaders

For additional information regarding project tools and instruments, please contact the Principal Investigator.

¹ Research Triangle Institute, Research Triangle Park, NC

² Centers for Disease Control and Prevention, Atlanta, GA

Project Title: Primary Care Management of Latent Tuberculosis Infection (LTBI) and Tuberculosis Disease Among Immigrant Populations: A Study of Barriers and Facilitators

Principal Investigator(s): Jenny Pang, MD, MPH¹; J. Carey Jackson, MD, MPH, MA²; Nickolas DeLuca, PhD, MA²;

Project Dates: October 2003 - September 2008

Project Overview: The Centers for Disease Control and Prevention (CDC), Seattle & King County Public Health Department, and the University of Washington have partnered to develop and conduct a study to understand the barriers and facilitators that influence primary care management of latent and active tuberculosis (TB) among immigrant populations. Epidemiologic data indicates that United States (US) populations with the highest incidence of acute TB disease are recent immigrants from Mexico, the Philippines, and Vietnam. Most newly arrived foreign-born individuals present for general medical care in "safety net" settings: community clinics, public clinics, and private practitioners caring for these communities. Effective TB control strategies require that primary care providers be adept at screening for and managing latent TB infection (LTBI) and include active TB disease in their differential diagnosis in certain clinical settings. This 3-year, multi-phase study was developed to elicit and clarify the knowledge, attitudes, and practices of primary care providers who see foreign-born patients at risk for LTBI and active tuberculosis (TB) disease. Ultimately, this project will develop and implement educational strategies for successfully addressing identified barriers and limitations.

Objectives: The objectives of this study are to: 1) conduct formative research to describe the factors influencing the efficient management of latent and active tuberculosis among primary care providers caring for immigrants from Mexico, the Philippines, and Vietnam; and, 2) design, implement, and assess the impact of an intervention to address the knowledge, attitudes, and practice factors amenable to an intervention

Target Audience: Non-public health providers with large foreign-born patient populations from high burden TB disease and LTBI incidence areas (e.g., Mexico, the Philippines, and Vietnam)

Methods: This study will be conducted in three phases. During the first phase (Phase I), qualitative interviews will be conducted, including a combination of focus groups and individual interviews with health care providers to elucidate aspects of primary care practice that impact TB screening and management. The next two phases (Phase II-III), the intervention phases, will be designed, executed and evaluated using the information and knowledge gained from Phase I.

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Publications:

N/A

Relative Content:

Tools and Instruments> Discussion Guide: Focus Group I: Topic Generation Tools and Instruments>Discussion Guide: Focus Group II: Model Evaluation

Tools and Instruments>Individual Interview Guide
Tools and Instruments>Demographic and Practice Characteristics Questionnaire

Seattle & King County Public Health Department, Seattle, Washington
 University of Washington, Seattle, Washington
 Division of Tuberculosis Elimination, Centers for Disease Control and Prevention, Atlanta, Georgia

Project Title: Culturally Appropriate TB Educational Materials for Leaders and Staff of Hispanic Service Organizations

Principal Investigator(s): Scott McCoy, MEd, and Steven Weis, MD²

Project Dates: September 2003 - September 2006

Background: According to the CDC Division of Tuberculosis Elimination's (DTBE) *Reported Tuberculosis in the United States*, 2004, foreign-born persons accounted for 54% of all tuberculosis (TB) cases in the United States in 2004. Case rates among persons of Hispanic origin were 27 per 100,000, compared to the rate of 3 per 100,000 for their U.S.-born counterparts. The purpose of this project is to develop culturally appropriate TB educational materials for leaders and staff of Hispanic service organizations (HSOs), for use by state and local TB programs to enhance their partnership efforts with HSOs. These materials, produced in both English and Spanish, will provide HSOs with information that addresses their specific cultural and educational needs about TB. The materials will also enable TB control programs to more effectively collaborate with HSOs in their efforts to eliminate TB.

Objectives: The information gathered from leaders and staff of HSOs and TB programs will be used to create material that will describe, but not be limited to, the following topics: 1) the TB burden in the Hispanic population; 2) latent TB infection; 3) active TB disease; 4) contact investigation; 5) specific issues for Hispanic foreign-born persons (both documented and undocumented immigrants) and Hispanic U.S.-born persons in regards to the treatment and testing of TB; 6) directly observed therapy (DOT); and 7) practical recommendations on how HSOs can help decrease TB among their high-risk clients.

Target Audience: Leaders and staff of Hispanic service organizations

Methods: A systematic health education planning process was utilized to develop culturally appropriate materials for leaders and staff of HSOs. The steps in this process are outlined below.

- 1. Planning and strategy development: The initial activity of this project included strategy formulation and development of a written project plan. Existing materials were identified using a variety of methods, including an environmental scan, literature review, and exploratory channel identification.
- Developing messages and materials: Based on findings from planning and strategy development, culturally sensitive TB educational materials were drafted in both English and Spanish. These materials were pretested with representatives from the target audience.
- Pretesting the materials: Materials and messages were revised based on the results of exploratory research conducted with the target audience. Field-testing addressed (and will continue to address) content, format, and design issues.
- 4. Assessing the effectiveness and making refinements: The materials will be finalized based on the results of field-testing conducted with the target audiences. TB controllers will also provide evaluations of the final product and further revisions will be made based on this feedback.

Results: Focus group discussion topics included formats for educational materials, content, and visuals for leaders and staff of HSOs. The format of the pretested HSO educational materials was based on the results of focus group sessions conducted with participants from these organizations. Field testing of materials ascertained the opinions, reactions, and beliefs of the target audience regarding acceptability, feasibility, usability, readability, and comprehension of the materials. These findings will also be used to prepare a marketing plan for the use and distribution of these materials.

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Publications: Educational materials forthcoming

Relative Content:

Tools and Instruments> Discussion Guide for Phase I Focus Groups (APHA): Perceptions of TB in the **Hispanic Community**

Tools and Instruments> Discussion Guide for Phase II Focus Groups: Reactions to TB Messages
Tools and Instruments> Discussion Guide for Phase III Focus Groups: Reactions to TB Brochures and Materials

¹ Division of Tuberculosis Elimination, Centers for Disease Control and Prevention ² University of North Texas Health Sciences Center (UNTHSC)

Project Title: Barriers Associated with TB Medication Adherence Among Chickasaw County Residents with Latent TB Infection

Principal Investigator(s): Alyssa G. Robillard, PhD, 1 Nickolas DeLuca, PhD, 2 and Wanda Walton, PhD 2

Project Dates: September 2002-present

Background: During June 1999-March 2002, a total of 16 tuberculosis (TB) cases were reported from Chickasaw County, Mississippi, corresponding to annual TB incidence rate increases of 20.5 to 27.6 cases per 100,000 population. In comparison, annual TB incidences for Mississippi during the same period decreased from 7.8 to 5.4 cases. Among the 16 TB patients, five had been diagnosed previously with latent TB infection (LTBI) as a result of TB contact investigations. The Mississippi State Department of Health (MSDH) attempted to treat all five patients, but all had either refused or stopped treatment. The patients subsequently progressed to active TB and became sources of infection for an additional 10 TB patients.

Objectives: The objectives of the study were to 1) examine cultural factors that impact patients' perception of TB; 2) understand how health-seeking behaviors and adherence to LTBI treatment are influenced by those perceptions; 3) identify barriers and obstacles to initiating and completing treatment for LTBI; and 4) determine how the identified barriers and obstacles could be overcome to increase the likelihood of initiation and completion of treatment for LTBI.

Target Audience: Patients nonadherent to treatment for LTBI, patients adherent to treatment for LTBI, and TB control staff

Methods: Three separate focus group discussions were conducted with TB-control staff, patients adherent to treatment for LTBI, and patients nonadherent to treatment for LTBI. The findings from the focus group discussions were analyzed using an ecological perspective.

Results: Focus group participants suggested that the TB control staff's persistence and flexibility helped them adhere to treatment for LTBI, as did the participation of sex- and race-matched community outreach workers. Many participants cited fear of community and family stigma as treatment barriers and identified a need for additional information about the importance of LTBI treatment. To address patient concerns and misconceptions, ongoing individual counseling during treatment for LTBI was initiated. Furthermore, dissemination of TB-related educational messages was recommended to engage community leaders, churches, and civic organizations.

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Publications:

Robillard A, DeLuca N, Walton W. Barriers associated with TB medication adherence among Chickasaw County residents with latent TB infection. January 2003 (Unpublished report)

Transmission of Mycobacterium tuberculosis associated with failed completion of treatment for latent tuberculosis infection - Chickasaw County, Mississippi, June 1999-March 2002: MMWR 2003; 52 (No.11).

Relative Content:

Tools and Instruments> Focus Group Discussion Guides > Chickasaw County Compliant to Treatment for LTBI Group

Tools and Instruments>Focus Group Discussion Guides > Chickasaw County Noncompliant to Treatment for LTBI Group

Tools and Instruments>Focus Group Discussion Guides > Chickasaw County Provider Group

Rollins School of Public Health, Emory University
 Division of Tuberculosis Elimination, Centers for Disease Control and Prevention

Project Title: Perceptions of Tuberculosis (TB) Among Foreign-born Persons: An Ethnographic Study

Principal Investigator(s): Robin Shrestha-Kuwahara, MPH and Heather Joseph, MPH

Project Dates: 2002-2004

Background: This project aimed to assess the TB-related attitudes and beliefs of foreign-born persons in the United States. Preliminary findings from in-depth interviews conducted among persons (with and without TB disease) from China, Laos, Mexico, Somalia, and Vietnam suggested that the majority of respondents were aware that TB is a lung disease associated with coughing and is "caught from the air." However, there were divergent perceptions about transmission, which were often related to English ability, literacy, and educational attainment. Ideas about TB etiology, transmission, and prevention were frequently multifaceted, combining elements from biomedical and traditional perspectives. Concern about TB stigma was universal, though in varying degrees across the groups. Anticipated stigma appeared greater than that actually experienced by those with active TB. Descriptions of treatment experiences revealed a range of difficulties, from confusion about necessity of medication to side effects. Those with latent TB infection more often communicated negative feelings about medication compared to those with active TB disease.

Objectives: To understand how tuberculosis is perceived by foreign-born persons in the United States, and to identify barriers and facilitators related to TB care-seeking behaviors among these persons.

Target Audience: Foreign-born populations in the United States

Methods: In four U.S. cities, locally hired bilingual/bicultural researchers conducted a total of 200 in-depth interviews with persons recruited either from a local health clinic or directly from local communities. Participants were born in China, Laos, Mexico, Somalia, or Vietnam. Attitudes and beliefs about TB, traditional healing, stigma, TB history, experiences with services, and informational needs were assessed. Additional staff interviews and clinic observations were conducted at each site.

Results: Across the groups, structural issues, such as lack of health insurance and transportation, frequently emerged as barriers to care. Respondents clearly wanted more TB information. A combination of education strategies was identified as being the most effective, owing to illiteracy and English ability. Understanding the range of cultural, organizational, and structural issues that emerged from this study will assist local health departments in developing effective, culturally appropriate strategies to better serve these diverse populations. Ethnographic guides for programs serving the communities studied are being developed and reviewed.

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Publications: Several manuscripts are currently being drafted that focus on specific groups included in this study.

Relative Content:

Tools and Instruments > Study Participant Interview Guide

¹ Division of Tuberculosis Elimination, Centers for Disease Control and Prevention

Project Title: Factors Influencing Health Care Workers' Adherence to Work Site Tuberculosis Screening and Treatment Policies

Principal Investigator(s): Heather Joseph, MPH and Robin Shrestha-Kuwahara, MPH¹

Project Dates: 2001-2003

Project Overview: Despite the known risk of tuberculosis (TB) to health care workers (HCWs), research suggests that many are not fully adherent to local TB infection control policies. Focus group discussions were conducted with both clinical and nonclinical staff to identify factors influencing HCWs' adherence to policies for routine tuberculin skin tests (TSTs) and treatment of latent TB infection (LTBI).

Objectives: To identify factors that influence HCWs' adherence to routine TST and LTBI treatment policies

Target Audience: Health care workers in U.S. public health departments and hospitals

Methods: Sixteen focus group discussions were conducted with clinical and nonclinical staff at 2 hospitals and 2 health departments. Participants were segmented by adherence to TST or LTBI treatment policies. Indepth, qualitative analysis was conducted to identify facilitators and barriers to adherence.

Results: Among all focus groups, common themes included the perception that the TST was mandatory, the belief that conducting TSTs at the work site facilitated adherence, and a general misunderstanding about TB epidemiology and pathogenesis. Adherent groups more commonly mentioned facilitators, such as the perception that periodic tuberculin skin testing was protective and the careful tracking and counseling services provided by employee health (EH). Barriers, such as the logistic difficulty in obtaining the TST, the perception that LTBI treatment was harmful, and a general distrust of EH, emerged consistently in nonadherent groups. This information may be used to develop more effective interventions for promoting HCW adherence to TB prevention policies. Informed efforts can be implemented in coordination with reevaluations of infection control and EH programs that may be prompted by the publication of the revised TB infection control guidelines issued by the Centers for Disease Control and Prevention in 2005.

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Publications:

Joseph H, Shrestha-Kuwahara R, Lambert L, Wilce M et al. Factors influencing health care workers' adherence to work site screening and treatment policies. *American Journal of Infection Control* Dec 2004; 32(8): 456-461.

Relative Content:

Tools and Instruments> There are no tools associated with this project.

¹ Division of Tuberculosis Elimination, Centers for Disease Control and Prevention

Project Title: Factors Associated with Identifying Tuberculosis Contacts

Principal Investigator(s): Robin Shrestha-Kuwahara, MPH¹

Project Dates: 1999; Published in December 2003

Background: Little is documented about why some tuberculosis (TB) patients identify few or even no contacts. Focus group discussions were conducted to examine factors associated with identifying TB contacts.

Objectives: To describe patient perceptions of the contact investigation interview and determine potential factors associated with identifying TB contacts

Target Audience: TB patients

Methods: A total of 13 focus group discussions were conducted, 10 with previously smear-positive pulmonary TB patients born in the United States or Mexico, and three with TB program staff to discuss attitudes toward and perceptions of the contact investigation interview. Patients were recruited into separate groups by country of birth and number of contacts identified.

Results: The data indicated that patients-even those who identified few contacts-overwhelmingly reported identifying contacts easily and willingly. Understanding the purpose of the contact investigation and seriousness of TB facilitated naming contacts, while miscommunication and misconceptions about TB hindered the process. Patients felt strongly about informing their contacts before the health department contacted them. Staff respondents reported that education and effective communication were critical during contact investigation interviewing. Data indicated that patients, including those identifying few contacts, reported wanting to name their contacts. However, misconceptions may affect their understanding of who their contacts are, and hence the quantity and quality of information about the contacts identified. These findings underscore the need for effective communication and education.

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Publications:

Shrestha-Kuwahara R, Wilce M, DeLuca N, Taylor Z. Factors associated with identifying tuberculosis contacts. *Int J Tuberc Lung Dis* 2003;7(12): S510-516.

Relative Content:

Tools and Instruments > Focus Group Discussion Guide: TB Patients Born in Mexico
Tools and Instruments > Focus Group Discussion Guide: TB Patients Who Identified Few Contacts
Tools and Instruments > Focus Group Discussion Guide: Health Department Staff Who Conduct Contact
Investigations

¹ Division of Tuberculosis Elimination, Centers for Disease Control and Prevention