

Voices and Images

Tuberculosis Photovoice in a Binational Setting

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Abstract

Every minute, four people die from tuberculosis and 15 more become infected worldwide, despite available inexpensive treatment. Due to geographical, social, and economic characteristics, the El Paso-Ciudad Juárez Border area shows elevated tuberculosis (TB) incidence. ‘Photovoice’ is a Participatory Action Research (PAR) strategy that provides cameras to disenfranchised populations affected by a particular health problem (e.g. TB). In the current paper, we present findings from the first ever border binational Photovoice project aimed at ‘spreading the word, not the disease’ by increasing TB awareness, cross-border

collaboration, and treatment adherence. Evidence of the program’s effectiveness include public commitments from 25 local and national (U.S. and Mexican) decision- and policy-makers to address TB in the border area, development of a “Call to Action” to eliminate TB, and presentation of an exhibit displaying participants’ photographs and stories to over 3,600 people on more than 25 occasions in the first year of the project. The case study provides an example of the utilization of photography as a communication tool, and how it can empower those affected by a health problem.

“Stop the stigma, discrimination and negligence”



Brenda, a TB Photovoice participant: “We need to put an end to stigma, discrimination, negligence and indifference. We have the science, the medication and everything it takes to STOP TB. What is keeping us from doing this?”

Introduction

In 2004, an estimated two million people died from the consequences of tuberculosis (TB), an infectious disease caused by the *Mycobacterium tuberculosis*. These deaths occurred despite cost-effective treatments (U.S. \$10.00 per patient) for TB that have been available for more than 50 years.¹ Worldwide, there are two billion people infected with tuberculosis, the equivalent of one third of the world's population. Each year, there are more than eight million new cases worldwide, approximately 300,000 of which are resistant to major TB drugs.^{2,3} Up to half of all patients with TB do not complete treatment,⁴ making compliance a major contributing factor to prolonged infectiousness, multi-drug resistance (MDR), re-infection, disability, and death.⁵ In 2004, the TB rate in foreign-born persons living in the U.S. was 8.7 times that of native U.S. citizens.⁶ Although the number of TB cases in the U.S. decreased 3.8% in 2004, the number of MDR-TB cases in the U.S. increased by 13.3%.⁷ If left untreated, each person with active TB will infect an average of 10-15 people in a year.⁸ Failure to treat persons with active TB results in high costs at individual, community and societal levels.

There is a substantial body of evidence describing successful TB prevention and control practices.¹ One of the most important lessons learned from these studies is that the most effective strategies are those led by individuals from the community and are appropriate for the specific community needs, experiences and processes.^{9,10,11} Through their experiences with TB, individuals from communities affected by the

disease have unique expertise regarding their communities' needs in terms of TB control and prevention. However, the 'voices' of these individuals have traditionally not been heard and are not well-documented. Kelly¹² argues that individuals affected by a health problem are often not in the position to influence policy change and that enhancement of individual agency is crucial in efforts to address this 'power gap.' An innovative way to document and communicate one's experiences with a health problem is through the use of photography in a process called photo-interviewing.¹³

Photography can be used to reveal the everyday social and political realities that influence life. Since cameras are easy to use, people who do not read or write, and those who are socially isolated or stigmatized with a health condition like TB, are enabled to have a voice. These individuals can provide expertise and insight into their own communities that professionals, outsiders, and researchers cannot access. Although limitations surrounding privacy, sampling, and validity have been raised by Becker¹⁴ and Wang,¹⁵ photo-interviewing in its various forms can be a particularly powerful tool for the researcher and for the participant involved. Schwartz¹⁶ found that "interviewees respond to photographs without hesitation, and that by providing informants with a task similar to viewing a family album, the strangeness of the interview situation is averted."

While utilized to a limited extent, photo-interviewing and photo elicitation research has been documented across a range of dis-

ciplines and topic areas such as in the treatment of eating disorders,¹⁷ working with children and school students,¹⁸⁻²⁰ providing a tool for nursing, medical and gerontological research (see Riley and Manias²¹ for a review), enhancing informant involvement, and eliciting information about consumer behavior in the field of marketing.²²

In the field of health communication, a form of photo-interviewing has been referred to by researchers as ‘Photovoice’ or ‘picture stories.’ In this technique, photographs are used to encourage individuals to talk about their everyday health and work realities.²³ Cameras are not given to researchers or professional photographers but rather to children, the elderly, or other vulnerable groups in order to document their lives from their unique perspectives. The grounding of the images in real experience makes the photographs more valuable than a set of images created by outsiders. Photovoice is meant to be a tool of empowerment enabling those with little money, power, or status to communicate to decision- and policy-makers (hereafter to be called ‘decision makers’). The technique is based on the understanding that if policies and decisions affecting the community are derived from the integration of local knowledge, skills, and resources within affected populations, the policies will be more effective.²⁴ Wang and Burris²⁵ and Wang, Burris and Xiang²⁶ first employed this technique with rural women in China to inform and influence improvements in women’s health. The concept of Photovoice is based on the theoretical literature in education for critical consciousness, feminist theory, and nontraditional approaches to documentary photography.²⁵ In addition to TB, Photovoice has also recently been applied to other health

problems such as HIV/AIDS²⁷ and experience of chronic pain.²⁸

The current project was initiated by the Amaya-Lacson Foundation in 2005. The Amaya-Lacson TB Photovoice Project was founded by Romel Lacson in honor of his wife and unborn daughter, who died from the consequences of TB meningitis in 2004. The mission of the foundation is “to empower TB-affected communities through the use of the Photovoice method to contribute to a world free of suffering due to TB.” The TB Photovoice project was initiated in four sites: El Paso, Texas and Ciudad Juárez, Mexico; Rio de Janeiro, Brazil; Chiang Mai, Thailand; and Florence, South Carolina. The founder of the Amaya-Lacson TB Photovoice project selected the different sites based on a number of factors such as TB prevalence, geographic location and responsiveness of TB case workers to the Photovoice method (for details see references ^{29,30}). All sites functioned *independently* from one another and the findings of the first site that completed the project (the only binational site: El Paso/ Ciudad Juárez) are described in the current case study. The TB Photovoice project utilized photographic interviewing to give a ‘voice’ to individuals affected by TB. The Photovoice project, “Border Voices and Images” or “Voces e Imagenes Fronterizas”, empowered individuals affected by TB by letting them describe their experience with the disease and to reach out to decision makers. The objectives, methods, evaluation, findings, lessons learned, and limitations of the El Paso/Ciudad Juárez project are discussed. Additionally, implementation, next steps, and dissemination strategies for applying the Photovoice method to other public health issues are included.

Aims and Objectives

The overarching goal of the TB Photovoice project was to increase awareness of the global burden of TB and assist in the eradication of TB meningitis. Program objectives included the following: empowering persons affected by tuberculosis to present their stories, securing public commitments from decision makers that will contribute to TB awareness and eradication, securing funding for existing TB prevention and control programs, and disseminating participant messages about TB.

The behavioral objective was to mobilize persons affected by TB to address decision makers, using a person-centered approach. The steps involved in this behavior-change

intervention included: 1) Providing participants affected by TB with cameras and instructions to record, reflect, articulate and present their perspectives on TB and their community; 2) Utilize participant images to create an exhibit; 3) Display the exhibit to community members, professionals, leaders and decision makers; and 4) Secure public commitments to TB eradication efforts.

Additional aims included: developing a support system by and for TB patients and former patients at the local level and improving adherence to TB treatment. Lastly, researchers wanted to educate and aid local organizations in developing related projects to combat TB and HIV/AIDS using the Photovoice technique.

Methods

Participatory Action Research (PAR)

Photovoice is a Participatory Action Research (PAR) strategy. While traditional research methods like literature reviews, surveys, and statistical studies provide valuable information, these methodologies are limited because they are passive regarding target audience participation. Participatory Action Research is characterized by

involvement of community individuals in all steps of the project. PAR also creates learning opportunities for both researchers and people from the community using a process that allows for critical reflection and is aimed at achieving a balance between research goals, social action, and evaluation.³¹

Key Concepts of Photovoice

Consistent with the value of Participatory Action Research,³² Photovoice integrates the community/individual approach to docu-

mentary photography and the production of knowledge and social action. Photovoice has three main goals:³³ 1) To enable people to

record and reflect their personal and community strengths and concerns; 2) To promote critical dialogue and knowledge about personal and community issues through group discussions of photographs; and 3) To reach decision makers.

The current project is using five key concepts by Wang et al that summarize the ways various Photovoice groups apply the technique.³³ The first concept is that *images can teach* and provide an opportunity for learning that may provide insight and influence individuals' health and well-being. Second, *pictures can influence policy*. Images can influence the way we look at the world and the way we see ourselves; therefore images can influence decision makers

as well as the broader society of which they are a part. The third concept is that *community individuals ought to participate* in creating and defining the images that shape public health policy. The discussion of those images by the people who produce them gives meaning to the interpretation of their images. The fourth concept is to *involve decision makers from the beginning* to serve as an audience for community perspectives. Including people who can affect change is central to the process and its success. Finally, Photovoice emphasizes both *individual and community social action*. The strategy aims to mobilize and empower participants, with the purpose of reaching those in power to affect social change within the community.

TB Photovoice: The Amaya-Lacson Protocol

The Amaya-Lacson TB Photovoice protocol followed the principles and key concepts of Photovoice and applied them to tuberculosis. The protocol was developed and received Institutional Review Board (IRB) approval from the University of South Carolina in 2005. The U.S.-Mexico Border Health Association (USMBHA) completed Spanish language translations for all materials. The

USMBHA was awarded a grant in the fall of 2005 to implement TB Photovoice in El Paso, Texas/ Ciudad Juárez, Mexico. Following IRB approval, a needs assessment was conducted and sites were selected for TB Photovoice. Facilitators and staff were trained and a guidance committee was established following site selection.

Site Selection and Needs Assessment

The site for the TB Photovoice Project, El Paso/Juarez, was chosen by the Amaya-Lacson project director based on several factors including community assets and needs related to TB, HIV/AIDS prevalence, MDR-TB caseload, treatment adherence, and use of current available TB methods.^{29,30} In addition, the site was chosen because the

late Claudia Lacson, wife of project founder Romel Lacson, had trained community health workers in the area prior to her development of TB.

The needs assessment found that in the U.S., individuals of Hispanic (primarily Mexican) descent represented the larg-

est percentage of all new TB cases (29%).⁸ Furthermore, TB morbidity and mortality were found to be higher along the United States-Mexico border region.³⁴ Factors that contribute to an elevated incidence of TB and lower adherence in the region include: Mexico's higher TB rate; lower socioeconomic status; limited access to health care services; high mobility and migration to the United States; lack of TB education; language barriers; and, lack of coordinated care across health jurisdictions and departments on both sides of the border.³⁵

Situated at the midpoint of the 2,000-mile border is the dynamic, growing, binational El Paso/Ciudad Juárez metropolitan community of about 2.5 million residents. This

area is characterized by specific socioeconomic and environmental characteristics that complicate the ability to address public health problems such as TB. Ciudad Juárez is the fifth largest city in Mexico and is one of the most densely populated and highly industrialized cities in Mexico.³⁶ In El Paso, Texas, almost half of Hispanics reported not having health insurance.³⁷ The unemployment rates are twice the state and national average and per capita income is two times lower than the national average,³⁷ further complicating TB detection and treatment. These factors all led to the decision of the project planners to implement the project in El Paso/Ciudad Juárez. In addition, the community leadership in this area showed strong interest in the Photovoice Project.

Training the Trainers

To prepare for implementation of the TB Photovoice Project, the project director and consultant conducted a three-day train-the-trainers workshop on the Photovoice methodology in April of 2006. The trainees were a group of health care professionals and researchers from the El Paso/Ciudad Juárez region who would function as facilitators and staff for the TB Photovoice project. The training covered the project's methodology

(including how to carefully frame questions and instructions), goals, and objectives, and brought up issues of ethics and power. During the training, the group devised the initial themes for taking pictures (border, family, environment, and migration). Upon completion of the training, the USMBHA finalized the curriculum, translated it into Spanish, and initiated the recruitment of community participants.

The Guidance Committee

The establishment of a guidance committee is an essential step in the Photovoice process. The committee consisted of 12 representatives from health care settings and departments, academic institutions, private sector organizations, the media, and human services entities from the El Paso/Ciudad Juárez Border area. Throughout the project, the committee served as an ad hoc advisory

board, developing the public and political will to put the participants' ideas into practice. The guidance committee also acted as 'gatekeepers' for the project, providing access to influential individuals and organizations, and assisted in planning a border binational forum on World TB day where participants could present their voices and images to decision makers.

Participant Recruitment

In Ciudad Juárez, recruitment was coordinated through the Jurisdicción Sanitaria No. 2 (Health Jurisdiction) TB Program, by Project JUNTOS, a binational TB case management program with more than 11 years of experience in binational work, and by Programa Compañeros, a non-governmental organization with more than 25 years of experience in HIV/AIDS management. These last two organizations sent representatives to the original Photovoice training and were active members of the guidance committee. The TB Photovoice Project coordinator met with the directors of the organizations and asked them to assist with the recruitment process.

In El Paso, nurses and outreach workers from City-County Health and Environmental Health District (now the El Paso Department of Health Services) recruited participants using a bilingual project recruitment form developed by the USMBHA. Recruitment took place following a formal presentation of the Photovoice technique to the El Paso Department of Health Services' staff. Inclusion criteria for participant selection required that individuals be either in treatment for TB or finished with treatment. Participants did not need to have experience taking photos. Wang³² recommends seven to ten people for participant groups, so recruiters aimed for this number.

Without any other specific instructions or additional criteria regarding selection, the organization's staff in Juárez invited 10 individuals to the orientation session, 9 of whom attended. Two additional participants were nurses from the TB program. In El Paso, the project coordinator recruited one participant and the organization recruited

seven participants, six of whom attended the orientation session. It should be noted that the organization staff may have identified individuals who they thought would be interested in participation and that there may be differences between those who were invited and those who were not. The consequences and limitations of this selection process are discussed later in this paper. The case load at the time of project initiation was approximately 44 adults and one child in treatment for active TB in El Paso and a case load of more than 150 individuals in treatment in Ciudad Juárez. Participant recruitment took place during a four-week period between July and August 2006. Prior to this project, Photovoice was an unfamiliar process for health professionals, guidance committee members, and project participants.

The recruitment process targeted a diverse sample of the people affected by TB in the El Paso/Ciudad Juárez region. Participants were receiving or had completed TB treatment and included men, women, and children; and single, married, and widowed individuals; with various levels of education attainment and income, living in the El Paso/Ciudad Juárez area. The project coordinator, a bilingual and binational health and human service professional with binational experience in social work and public health, telephoned each of the project participants and personally invited them to attend an orientation session. The session provided necessary background information on the project and assessed attendee interest in participating in the study. Of the 18 participants recruited, 16 completed the TB Photovoice project.

“My Duty and Responsibility”



Eight-year old TB Photovoice participant before taking his medication: “Taking medications is not easy. They taste bad and they make my stomach upset. After I take them, I don’t like anyone to talk to me. It takes a while before I feel better. I know it is my duty and responsibility, but how much longer must I take them?”

Participant Characteristics

In El Paso, 86% of the participants were of Hispanic or Mexican origin and their ages ranged from 20 to 52 years. In El Paso, the majority of participants were employed, but only two had health insurance coverage. Participants were given a modest incentive (\$15) for attending each session and were reimbursed for photograph development.

In the Ciudad Juárez group, all participants were Mexican, and only 3 were native of Ciudad Juárez; 56% were female, and ages of participants ranged from 8 to 58 years. One minor was accompanied by his mother at all sessions. The majority of the participants in Ciudad Juárez had less than six

years of formal education, and one participant had never received any formal education. Participants had low socioeconomic status (e.g. one was living with relatives and two were living in an HIV/AIDS shelter and receiving substance abuse treatment). Three of the Ciudad Juárez participants had multi-drug resistant-TB, three had TB/HIV co-infection, two participants were co-infected with Hepatitis C and three had diabetes and TB. Participant selection criteria were inclusive; participants were included based on individual experience with TB and those with comorbid health problems were not excluded.

Photovoice Training Procedures

Once participants were recruited, the Ama-ya-Lacson protocol included 5 steps (adapted from Wang³²): 1) conduct participant orientation and ethics training; 2) have participant take photos; 3) convene meetings to discuss the photos; 4) repeat steps 2-3 several times; and 5) develop an exhibit that can be presented subsequently to policy makers.

The participant orientation training was conducted over a two-and-a-half hour period, and was followed by five more sessions. During the first two sessions, participants were presented with project goals, provided with 35mm disposable cameras, and introduced to the power and ethics of taking photographs—given that pictures can be powerful representations of individuals and their lives and that placing them on public display should not be taken lightly. The importance of obtaining consent of individuals in all photographs was communicated. Participants were asked to carry their cameras with them for a period of five weeks and to shoot one roll per week. Tuberculosis emerged as the initial theme, as this was what brought participants together. For the first two weeks, the following four framing questions provided a focus to the participants' photos:

- Who are the people that make up your community?
- What are the natural and human-made features of your community?
- What (societal) systems make up your community? Examples of “societal systems” included: health care system or services, family system, political system, education system, and legal system.
- How does tuberculosis affect your life?

Each participant was instructed to select two or three photos they would like to share with the group. Each group had an observer who helped to digitally record these discussions once participants gave authorization. The recordings were transcribed. Questions were used to probe for deeper understanding during the individuals' sharing of photos and to stimulate dialogue among the groups in response to images and stories. Sharing and discussion of photos followed for four weeks. After the initial weeks, the focus of the discussion shifted from relating the community issues identified in the first two weeks to how these issues are related to the TB experience of the participants.

Process of Participatory Analysis

The participants engaged in a three-stage process of participatory analysis facilitated by the project coordinator and based on Wang and Burris:²³ 1) selecting or choosing the photographs that most accurately

reflected their concerns and perspectives on tuberculosis and their communities for discussion; 2) contextualizing or telling stories about what the photographs meant to them; and 3) identifying the issues and

themes that emerged. In the first stage, participants selected an average of two to three photos from each roll of film taken. The second stage occurred during the group discussions.

Participants shared their reflections with the group and defined the meaning of their images using the 'SHOWeD' technique.³⁸ The acronym SHOWeD stands for: What do you **S**ee here? What's really **H**appening here? How does this relate to **O**ur lives? **W**hy does this problem or this strength exist? What can we **D**o about this?²⁴ The SHOWeD technique is a problem-posing and critical-thinking dialogue instrument to facilitate discussion from a personal level to social analysis and action. The SHOWeD questions were originally written in English and translated into Spanish by the U.S.-Mexico Border Health Association with permission from the author.³⁹

Using the SHOWeD forms, participants wrote their answers. For non-literate participants, a volunteer or the coordinator helped the participant write his or her response. The goal of this technique was to

identify problems or assets, critically discuss the roots of the situation, and develop strategies for changing the situation. An essential part of each session consisted of opportunities for the group to provide comments on the presented photos. The third stage was framed by the understanding that an image may represent diverse meanings for a specific participant. When participants identified the themes, the facilitators emphasized that one image could represent more than one theme. Participants focused on themes encountered personally, socially, and medically around their TB diagnosis, health care, and access to services.

Photos and accompanying stories selected for discussion by the participants were posted on the wall for groups to view. After two sessions of discussing pictures related to community issues and two weeks of relating community issues to TB, participants voted on which photographs and stories captured the most essential themes. During the final two sessions, themes were grouped into categories until the participants felt that the stories and photographs adequately covered all essential themes.

Emerging Themes

Participants grouped photographs and accompanying stories into four categories. The first category was called *Participants' Personal History with TB*. Examples of photographs and stories associated with this category include: late diagnosis or misdiagnosis; lack of available information once the diagnosis is made; limited services and lack of support; isolation and loneliness; adherence to treatment; side effects; and length of treatment. *Social Norms and Values* emerged as a second theme for photographs

and stories. Examples of this theme included stigma and discrimination associated with TB, poverty, positive and negative experiences with health care professionals, and unfulfilled promises by decision makers. The third category was *Emotional Aspects of the Disease* such as depression, guilt about infecting other family members and friends, coping mechanisms and family support. The final category was *Social Aspects and Ideas for Advocacy and Change*.

Once the photos and stories were grouped into categories, themes emerged. Themes identified by the participants included: allocation of adequate financial and human resources for education and treatment on both sides of the border, development of support services, clinically trained and culturally competent providers, and addressing other needs of patients beyond TB like poverty, hunger and housing.

These themes served as the basis for a ‘Call to Action’ that was presented to decision makers during World TB Day. They also formed the basis of a Global “Call to Action” presented November 2007 at the 38th International Conference on Tuberculosis and Lung Diseases in Cape Town, South Africa (Appendix A). Tables 1 and 2 summarize the themes, grouped by location.

Table 1. El Paso Group Themes

Stigma, discrimination
Depression, anger, isolation
Think TB and talk about it. Education to the general public, in schools and in workplace
Turning TB into a positive experience
Less rhetoric, more action
Support groups
Quality health and medical services to avoid medical negligence

Table 2. Ciudad Juárez Group Themes

Improvement to the health care system (personnel and services)
Poverty, disparities
Relationship between TB-HIV/AIDS
Stigma, discrimination
Faith, family support
Sadness, anger

All participants agreed that the selection of photographs and stories for public presentation (several images of the exhibit are included in the current paper (See Appendix C) would be done in a binational and bilin-

gual manner and that the project findings would not be separated between El Paso and Ciudad Juárez. Brenda, a participant from El Paso, summarized the rationale for this decision when she said, “Tuberculosis

does not recognize borders; it does not need papers [passport] to cross. It can affect [us] on either side of the border. We don't need more walls or borders; instead, we need to work jointly across countries to build programs and services.”

The translation of the stories to English or Spanish was completed by the U.S.-Mexico Border Health Association (USMBHA) and then reviewed and approved by the group participants and the guidance committee. The final product was a series of 41 photographs and stories selected by the participants from the two groups—21 images from Ciudad Juárez and 20 from El Paso—representing their ‘Voices and Images.’

The participants determined the number of images; they felt these images adequately reflected their issues and themes. The gallery included an additional 13 framed posters which served as an introduction to the exhibit and described tuberculosis signs and symptoms, the differences between latent and active TB, the TB Photovoice project goals and objectives, general characteristics of the participants, and displayed the “Call to Action to eradicate TB (Appendix A).” The exhibit was bilingual and each photograph and story included the name of the participant, if permission was provided.

Evaluation

The project coordinator and U.S.-Mexico Border Health Association director conducted ongoing process evaluation during the project and received local feedback from the guidance committee about project implementation. The project coordinator held regular conference calls with the project director and participated in two global site conference calls to discuss progress and challenges with peers from Brazil and Thailand. The guidance committee met on a quarterly basis to review project progress and offered suggestions on venues in which to present the ‘Voices and Images’ of the participants to decision makers. The project coordinator maintained ongoing communication with the funding agency (Amaya-Lacson TB Photovoice Project) to report on progress.

The TB Photovoice project was assessed in

terms of its success in meeting the objectives set forth during the planning process. The overarching goal of the TB Photovoice project was to increase awareness of the global burden of TB and assist in the eradication of TB. Program objectives to attain this goal included development by the project participants of an exposition of a series of images and accompanying images, and communication and dissemination of the messages developed by participants through presentation of the exposition to decision makers. In addition to increasing awareness, an important aim of the presentation of the exposition included requesting and securing public commitments from decision makers to do whatever they could to assist in eradication of TB, such as securing funding for existing TB programs, hosting the exposition and assisting in communicating messages developed by participants.

Another measure of success was the assessment of quantity of media coverage for TB related stories. Also, the extent to which participants' messages were used for com-

munication and dissemination efforts indicates whether the participants succeeded in spreading their 'voices'.

“Torture vs. Gift of Life”



Rachel [Photovoice Participant]: “I used to think of taking my medication as torture.”



“Now, I look at it differently. [E.] helped me understand that medication is a gift of life I'm giving to myself. There is health in that little pill.”

Further, a measure of the project's success included the participant retention rate, and the extent to which participants were mobilized and empowered to express their 'voice' and share their experiences with TB. In addition, it was evaluated whether the aim of developing a support system by and for TB patients was attained and whether the

project influenced participants' adherence to TB treatment. A final assessment included the extent to which the present case study assisted in educating and aiding local organizations to develop related projects fighting TB or HIV/AIDS using the Photovoice technique.

Findings

The project presents several important findings in terms of the stated aims. First, an exposition was developed and presented on

over 25 occasions, reaching an estimated 3,600 attendees. It appears that the approach of requesting public commitments

or *'compromisos'* (see Appendix B) stimulated thought and action as to what each individual and organization could do to be part of preventing and eradicating tuberculosis. Decision makers for several events were recruited by the guidance committee and the USMBHA with input from Amaya-Lacson TB Photovoice project to serve as an influential audience for the participants. At the largest event, a forum at World TB day, TB Photovoice participants presented their concerns and perspectives to several influential decision makers, including a member of Congress.

The project staff captured several important public commitments on video (with permission) including: the County and State reversed TB program funding cuts; TB program funds for binational case management were secured; participation of persons affected by TB in border binational TB trainings for health and human service personnel was supported; the city of El Paso developed an El Paso TB Photovoice proclamation; and most decision makers agreed to host project exposition or presentations in public venues.

Newspaper coverage regarding TB doubled in the border area in 2007 as compared to 2006. Further, TB Photovoice messages like *'spread the word, not the disease'* were developed in both languages with participant input to reflect the importance of literacy tools that promote prevention, awareness, control, and elimination of TB. Messages developed by participants like *'Spread the word, not the disease'* and *'Don't let tuberculosis steal your life away — TB is treatable and curable'* helped craft the project's communication messages and educational materials. More specifically, 5,000 copies of bilingual posters with the phrase *'Think*

TB! Act Now' have been distributed. Further, 10,000 (Spanish) and 3,000 (English) copies have been distributed of a flyer in the shape of lungs, originally developed by the Mexico National TB program in 2007 and reviewed and improved by Border TB Photovoice project participants. Also, five public service announcements were developed and distributed to radio and TV stations. Finally, the themes identified by participants in El Paso/Ciudad Juárez served as a basis for developing the international *'Call to Action'* to eliminate TB (See Appendix A). This call to action was presented to global leaders and advocates during the 38th International Union Conference in Cape Town, South Africa.

In addition to personal benefits to the participants, a local community-based organization in Ciudad Juárez (programa *Compañeros*) and two non-governmental organizations in Tijuana and Mexico City, secured resources and funding to utilize the Photovoice method for TB and HIV/AIDS projects. Additionally, international funding was secured in support of expanding TB Photovoice implementation at two additional sites and Photovoice training was provided to four additional sites in Mexico with significant TB prevalence.

The TB Photovoice project provided the first-ever occasion for people affected by TB in the El Paso/ Ciudad Juárez region to meet and exchange ideas, methods and resources for improving the quality of life of those affected by TB. TB Photovoice participants had a 100% adherence to treatment. Adherence was measured by staff of the TB program Directly Observed Therapy (DOT), and was based on treatment completion scheme (6-9 month regimen for TB treatment and 12-18 month regimen for MDR-TB

cases). HIV adherence was measured by participants' self-reports, as well as HIV/AIDS program case managers' reports. In addition, Photovoice participants were instrumental in establishing the first-ever support group for individuals with TB in Ciudad Juárez, and TB treatment for persons newly diagnosed with TB and MDR-TB was secured through funding by the Texas Department of Health Services JUNTOS project.

Although no formal outcome evaluation was conducted, Photovoice may have contributed

to healthy changes among participants such as increases in positive attitudes, possibly reflecting positive changes in self-esteem and self-efficacy. This is illustrated by the change in the perspective of one participant who first saw her medication as torture. However, through the sessions with the other participants, she realized that actually the medication would enable her to become healthy again, and the 'torture' became a 'gift of life.'

Discussion

The current case study described the process and findings of the binational TB Photovoice project 'Border Voices and Images.' Photovoice aimed to enable individuals to participate in representing and enhancing their community through taking photographs, telling accompanying stories and presenting their perspectives to those in power to establish change.

Assessment of whether the current project achieved its overarching goal of increasing awareness of the global burden of TB and assisting in the eradication of TB should be evaluated within the context of a Participatory Action Research (PAR) strategy. This strategy emphasizes community involvement; mutual learning; and achieving a balance between attaining research goals, social action, and evaluation.³⁰ The intention of the Photovoice methodology is not to measure quantitative behavioral outcomes, but to empower individuals affected by a

health problem who normally do not have the opportunity to reach decision makers and influence policy. By providing this access, the PAR strategy enables these individuals to become advocates for social action, rather than passive subjects. The authors believe that valuable changes have occurred in awareness, empowerment, and social action by TB Photovoice participants in the El Paso/Ciudad Juárez area. As a result of their efforts, information was disseminated to raise awareness of TB (See Appendix A) and valuable public commitments were procured from decision makers (See Appendix B).

Our findings provide support for the premise that tuberculosis continues to be a stigmatized health issue. Both in El Paso and Ciudad Juárez, participants reported feeling stigmatized during several stages of TB detection and treatment. Furthermore, community, social, and border conditions

create a unique context for individuals living with TB in this region. Participants have identified the need to conduct ongoing, bilingual TB prevention and education in El Paso and Ciudad Juárez, with various populations including: people at risk for TB and HIV, persons affected by diabetes, and migrant and mobile communities. Additionally, Photovoice participants agreed that once an individual is properly diagnosed; timely, patient-centered services are needed on both sides of the border. Participants reported that a critical factor in their interest was the opportunity to share feelings, stories, and perspectives; and to receive support from peers without judgment.

We believe that the project findings offer important contributions to aid in understanding the impact of tuberculosis on participants and provide resources for policy change and improved health service delivery in a challenging and dynamic region. The findings of the Border TB Photovoice project provide a glimpse into the perceptions of TB patients on their community. In addition, the project demonstrates that such perspectives can be used to empower these patients to ‘bridge the gap’ between those affected by a disease and those in power to change policy related to the disease.

Lessons Learned/Limitations

While the authors feel this project was successful in meeting many objectives, a number of obstacles and limitations merit discussion. Firstly, these findings are most applicable in border binational settings, among low- and middle-income communities that carry the greatest burden of TB. Therefore, generalization of results may be limited. Evaluation of the TB Photovoice in the other three sites (Chiang Mai, Thailand; Rio de Janeiro, Brazil and South Carolina, U.S.) will provide information regarding impact and effectiveness of Photovoice as applied to TB across cultures.

Secondly, Photovoice research is time-intensive for participants. One could assume, therefore, that individuals who are willing to commit to several hours a week for a total of six weeks to explore their community, take photographs, write personal reflections, and participate in weekly group meetings may differ in certain respects from other persons affected by tuberculosis.

Eighteen participants were initially recruited by project nurses and staff. They may have selected individuals who they thought would want to participate, which could have potentially introduced selection bias. Sixteen of the eighteen individuals who attended the orientation and training sessions decided to participate in the Photovoice project. We do not know if the two individuals who did not participate differ from the other sixteen in their levels of skill, comfort, or confidence with the responsibilities of participation (i.e., taking photographs, writing, and speaking in groups). Furthermore, the sample is small and therefore limits our ability to do statistical analyses.

Thirdly, an important lesson learned relates to the potential implication of photographs. Both participants and researchers should be aware of the impact of their photographs and take measures to minimize the risk of privacy violations.³⁸ For example, one photograph showed the face of a child par-

ticipant preparing to take his medication. The participants thus decided that it was in the child's best interest not to use the photograph due to stigma associated with his condition and fear of his exclusion from school and community. Participants discussed solutions and opted for the boy's mother to take a new photograph that did not expose his face. It is strongly recommended that project coordinators seek out a guidance committee to review materials before public exposure, especially when dealing with stigmatized conditions (e.g., HIV/AIDS, TB, etc.).

Fourthly, we encountered barriers to participation including lack of transportation, lack of childcare, and scheduling conflicts. In the future, we recommend intensified recruitment so that groups at each site include the same number of participants.

A final lesson learned is that it may be challenging to establish measurable out-

comes in projects implementing Photovoice. In essence, the technique is not intended to employ rigorous quantitative evaluation as measures of success. Rather, it is aimed at empowering and mobilizing marginalized communities, providing them an opportunity to present their perspectives to decision-makers and enabling them to influence policy change. For future projects, however, we would consider conducting a brief pre- and post-test to assess basic knowledge about TB, self-esteem and self-efficacy. These could be used to measure impacts on a more formal scale. Also, the transcribed sessions could be analyzed using software to code certain phrases and obtain an objective count on emerging themes. These quantitative measures should also be complemented with ethnographically rich accounts of these illness narratives that privilege both the individual/local as well as the historical political economies that provide a broader socio-cultural context.

Next Steps

With public commitments successfully procured from decision makers, the next step is to determine whether they have been fulfilled. Future work could extrapolate the current findings to other health issues in the border area. Some documentation exists for the feasibility of TB Photovoice technique in HIV/AIDS prevention and control.²⁸ An important asset of the Photovoice methodology is the ability to develop culture- or community-specific communication messages. The information elicited by photographic interviewing techniques of the individuals personally affected by TB provides valuable information on how to address problems in their community, create health education campaigns, and promote

social change. The project also documents increased cross-border collaboration — a necessity for addressing health problems such as TB — which may aid in the development of similar projects in the future.

Finally, a number of public commitments have been fulfilled, and additional funding has been obtained from USAID through the USMBHA Alliance for Social Action in TB-HIV/AIDS. The funding agency plans to disseminate the TB Photovoice project findings, integrate them into training topics, train binational Health Council members on the TB Photovoice method, and provide technical assistance to organizations.

Conclusions

Communication and marketing strategies to encourage healthier preventive behaviors among people at risk can play a major role in the battle against TB. The experiences of the TB Photovoice project provide evidence for the effectiveness of communication strategies that literally put ‘a human face and voice to a health problem.’ This strategy not

only increased awareness, but also obtained public commitments from decision makers. Public health problems in a border setting provide specific challenges, as “[we] cannot keep TB on one side of the border; it travels at will and does not carry a passport.”⁴¹ Photovoice can be a valuable tool to “spread the word, not the disease.”

“Freedom”



Rachel, a TB Photovoice participant: “Burning this mask was very important to me. I wore it for several months and it was very painful. My peers didn’t know what my face and smile looked like. When I burned the mask, it was like getting rid of the stigma (associated with Tuberculosis). I felt free.”

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Appendix

Appendix A: Call to Action to Eliminate TB

CALL TO ACTION

Reversing the Epidemic by Including Individuals Living with and Affected by Tuberculosis in Efforts to Eliminate TB

We, the Tuberculosis (TB) Photovoice participants at the 38th UNION WORLD CONFERENCE ON LUNG HEALTH in Cape Town, South Africa note the toll that tuberculosis places on individuals, communities, and society. Believing that together we can eliminate TB, we call on all global leaders, governments, policy and decision makers, advocates, and communities at large to support and champion this call to action. This Call for Action consists of three different and complementary aspects requiring your commitment to action.

First, the elimination of tuberculosis requires increase visibility of persons affected by TB, their stories, lives, worries, concerns, vulnerabilities, and aspirations. This requires increasing visibility of the social, economic, and cultural determinants of TB in the context of poverty and disparities, and the human face of TB, beyond the micro bacteria and the medical treatment. We believe that TB in and of itself does not kill the person. Rather, long-term disability and death is caused by the lack of access to timely and quality DOTS treatments, lack of humane support services, stigma, discrimination, and negligence. TB is preventable, treatable, and curable.

Second, the elimination of tuberculosis requires inclusion, parity, and the participation of persons affected by TB across all levels of endeavors. The active participation of

Tuberculosis is one of the deadliest diseases. It has likely killed more people than any other disease in history.

- Every minute, roughly four people die of TB and 15 others newly develop the disease worldwide.
- TB accounts for one in four preventable adult deaths.
- Half of all TB cases are not detected in the Western Pacific Region.
- Untreated, a TB patient can infect 10 to 15 others, simply by coughing.
- A full course of TB treatment costs as little as US\$ 15.
- TB is the main cause of death among people with HIV/AIDS.
- More people die of TB in 1 day in the Western Pacific Region than all global deaths reported from SARS.
- Without increased TB control, an estimated one billion more people will be newly infected, 200 million people will get sick and 35 million people will die by 2020.

patients in their treatment and care decisions is essential for the elimination of tuberculosis. Patients require patient-centered care focused on the person, not just the disease, thus requiring the involvement of the patient's support network. Treatment for TB should not end with the 6, 9, 12, or 18+ months to complete medication. A commitment should be made to assist patients to re-establish their life beyond completion of treatment for TB.

Third, the elimination of tuberculosis requires sustainable and permanent lines of funding through efficient distribution mechanisms. Community-based organizations and non-Governmental Organizations need support to provide individual, group, and community interventions that strengthen the support systems of persons affected by TB. Efforts must be funded that enhance the ability of individuals to advocate for their autonomous needs, as demonstrated by innovative projects like the TB Photovoice Project. Representation of individuals and communities affected by TB must participate in funded information, education, and advocacy campaigns.

Funding efforts are needed to support health promotion and protection initiatives that focus on leadership; advocacy; communication; and social mobilization of health personnel, workers, and communities affected by TB. Funding efforts must commit to protect globally poor and vulnerable populations from TB, TB/HIV, MDR, and XDR-TB. Global funding must guarantee universal access to vaccines; timely and accurate diagnosis and universal DOT+ as the cornerstones of the fight to eliminate TB.

Recognizing the task ahead and the technical, operational, and financial resources that this will entail, we call upon governments, policy and decision makers, leaders, practitioners, advocates, and communities at large to support and champion this Call to Action. We are asking you to champion efforts to include individuals affected by TB be visible and equal-partners in the fight to eliminate tuberculosis. Elimination will only be possible with your commitment to advocate for sustainable and permanent funding.

PARTICIPANTS

TB Photovoice (TBPV) Project

- *TBPV Thailand: Denchai Narai (Coordinator: Kaewta Sangsuk)*
 - *TBPV U.S.-Mexico Border: Rachel Orduño (Coordinator: Eva M. Moya)*
 - *TBPV Brazil: Rita de Cassia (Coordinator: Carlos Basilia)*
 - *TBPV South Carolina: Oday Williams and Richard Nichols*
- (Coordinators: Joe Kinney, Margaret Patterson, Pam Collins, and Dr. Ana Lopez Defede)*

Global TB Experts and Decision Makers

- *Hon. Nozizwe Madlala-Routledge, Member of Parliament, South Africa*
- *Dr. Mario Raviglione, World Health Organization, Director of Stop TB Department*
- *Glenn Thomas, World Health Organization, Stop TB Department, Communications Officer*
- *Dr. Thelma E. Tupasi, President, Tropical Disease Foundation based in the Philippines, Former Chair, MDR-TB Working Group, STOP TB Partnership*
- *Paul Sommersfeld, Stop TB Partnership Advocacy and Communications Workgroup, Chair*

- *Kenneth G. Castro, MD, Centers for Disease Control and Prevention, Director Division of TB Elimination and Representative from Treatment Action Group*
- *Evaline Kibuchi, The Action Project (Advocacy to Control TB Internationally) Kenya*
- *Arq. Darío Abarca, Director Huella, Ecuador*
- *Romel S. Lacson, Amaya-Lacson TBPV Project Director*

Moderator

Dr. Ana Lopez-DeFede, University of South Carolina/Institute for Families in Society

*This **Call to Action to Eliminate TB** was created by the Photovoice participants from the four different world projects and presented to international tuberculosis experts and decision makers during the “Tuberculosis Through the Eyes and Voices of Patients around the World” panel discussion in the community of Khayelitsha, Cape Town, South Africa on November 11, 2007.*

Appendix B: Public Commitments by Policy/Decision Makers as of March 14, 2007

Texas Department of State Health Services [Region 9/10], on behalf of Texas Commissioner of Health

Dealing with Tuberculosis is an ongoing battle that has neither stopped nor become easier for patients. The Texas Commissioner has seen firsthand the challenges and rewards of working in the Infectious disease arena, especially relating to tuberculosis. Quoting the Commissioner, “we as a community have a commitment with our sister cities in Mexico.” The ties between Mexico and the U.S. should not stop at the border. Better public health is a key element for people living on both sides of the border. His commitment is to ensure that tuberculosis continues to receive the attention that it deserves; that patients (on both sides of the border) receive appropriate medical attention; and that the emotional and mental health needs of this community are addressed.

Representative for Hon. Congressmen Reyes, Sixteenth District Texas

Tuberculosis is a “horrible disease” that must be stopped. According to Hon. Congressman Reyes tuberculosis is not a disease of the past. He provided extensive background on his experiences with the disease. The border region is one of the largest affected communities and residents of those areas usually cannot obtain the proper healthcare necessary. He feels committed to this cause, especially to the people who live in the border community. He will continue doing what he can to ensure that the people of the border community are not ignored in this matter.

Representative for Hon. State Representative Chavez

Hon. Chavez has been a long time advocate of tuberculosis education, control and treatment. She has introduced legislation that would provide healthcare coverage for workers and increase coverage of Medicaid and Medicare recipients. The representative is well aware that Texas is among the states with the highest TB rates, with Hispanics in the border area experiencing

an especially high rate of infection. She also recognizes the impact this has on our community. Hon. Chavez supports border and bi-national collaboration and cooperation by health care professionals and public health agencies between the United States and Mexico. Her commitment is to help reduce TB rates and raise public and policy awareness.

Tuberculosis Program Coordinator, USAID Mexico

USAID is committed to supporting Mexico's effort to strengthen capacity of National and State TB programs and expand public awareness on Tuberculosis. USAID – Mexico awarded \$US 20 million to Mexico in support of that mission. USAID believes in a vision that unites Mexico and the United States to ensure adequate, accessible and available health care services when it comes to tuberculosis. Finding common ground to increase collaboration in the tuberculosis community is core to accomplishing this task. She reiterated the importance of collaborating across sectors and embracing the active participation of persons affected by TB to promote advocacy and social mobilization. USAID will continue to work diligently to identify resources and support to ensure that Mexico gets the proper resources to win the battle against tuberculosis.

El Paso City Manager

Her commitment is to help identify appropriate resources and funding for El Paso City County Health and Environmental District TB Program. Investments in TB will ensure good health in El Paso and the surrounding areas. Empowerment of persons affected by tuberculosis is very important. Her commitment includes the presentation of the Border Voices and Images throughout the city. She will inform El Paso's mayor of this conference and secure his support as well.

Medical Coordination of State of Chihuahua's Health System

Jurisdicción No. 2 and the State of Chihuahua Health Services are committed to continue their efforts in advocacy; support; and bolstering of TB education, prevention, control, and treatment for patients in the state of Chihuahua. They also recognize the importance of collaborating with border TB partners to ensure adequate and timely management of bi-national TB patients, collaboration with the Texas Department of State Health Services to support Project JUNTOS. Furthermore, the state of Chihuahua Health System reaffirms their commitment to promoting the voices and images of the project participants; securing quality TB services; and plan to pronounce the two CERESOs in Juárez as Bandera Blanca sites. A total of 30 inmates have been trained as TB Promotores to inform, educate and promote early diagnosis among inmate populations to ensure a TB-free prison.

Infectious Disease Investigation and Control Branch Manager, Texas Department of State Health Services

The branch manager will continue to advocate and support TB projects with resources. He reiterated the importance of collaboration, communication and cooperation in the Texas-Mexico border region, and highlighted the three border bi-national TB projects. TB is a global issue; therefore it should be viewed as a global struggle. TB treatment should not be stopped on the border, because "TB anywhere is TB everywhere."

El Paso City Health and Environmental Health District

The director is committed to fighting TB and providing the best health services to El Pasoans. TB Program staff have served and delivered medicine to over 3,300 people by driving 59,000 miles. The program director hopes to increase these numbers. He holds great respect for—and feels a commitment to—the nurses and health services staff who work with TB patients, given the demanding nature of their work. Border health issues have always been important and he will continue to support the Tuberculosis cause.

Pan American Health Organization (PAHO), U.S.-Mexico Border Field Office

Staff of the U.S.-Mexico Field Office presented a global overview of the impact and burden of TB; and reiterated PAHO's commitment to TB elimination on the U.S.-Mexico Border region, and throughout the Americas. PAHO Field office staff have been an active member of the Photovoice advisory committee and will continue with their commitment to supporting USMBHA in disseminating project findings, voices and images of the participants, engaging the media in the dissemination of news and stories, and making accessible scientific and health promotion resources for health and human services workers.

U.S. Public Health Services, Division of Immigration Health Services

The Division of Immigration Health Services continues their commitment to ensure that TB treatment is initiated or continued as appropriate when patients are in the custody of U.S. Immigration and Customs Enforcement. The Division manager commits herself to facilitating continuity of TB therapy for patients following release from Immigration and Customs Enforcement.

College of Health Sciences, University of Texas at El Paso

The College of Health Sciences has ongoing research projects and studies to further the science in the areas of infectious diseases, specifically Tuberculosis, and nutrition interventions. The College of Health Science promises to play a key role in promoting and raising awareness through lectures and other presentations in classes, professional, and community meetings to inform the public about the importance of tuberculosis prevention, education and control. TB research will continue to be conducted in the College in order to advance our understanding of the scientific and health promotion principles related to the disease. The College of Health Sciences agrees to host a Voices and Images exhibition in partnership with the School of Nursing on May 11, 2007.

Health Care Council, El Paso Greater Chamber of Commerce

The Chair called on the public health department, the County, and academic institutions to organize a commission to launch a Tuberculosis impact study or concept paper on the economic impact of TB (revenue lost through sick days, doctors visits, decreased worker productivity, etc.). This paper would be written with the goal of raising awareness of the importance and benefits of tuberculosis prevention, early diagnosis, and adequate treatment; and would be directed to the Greater Chamber of Commerce and local employers. He would like to see the Greater Chamber of Commerce Health Council take a lead role in informing the chamber membership about the importance of TB as both a public health and economic issue. He also feels

that the Chamber should promote adequate resources for our County and advocate to increase health insurance coverage for all employees. He reiterated the importance of employers' support for TB patients and for administration of TB treatment at the worksite.

Paso del Norte Health Foundation

The prevention premise of tuberculosis should be given more importance and should become a priority for our community. Knowledge, behaviors and attitudes research is of most importance. Public awareness on TB should be made available in both languages to the community. People must come to know what TB is and how to properly care for it decrease its occurrence. The Foundation director is committed in promoting the importance of prevention and to help make others more aware of the disease, the human dimension, and the local and regional progress being made to eliminate TB.

School of Nursing University of Texas at El Paso

A faculty member representing the School Dean spoke about the ways in which the nursing profession has had a core role in the case management of tuberculosis throughout the world. She stressed the importance of ongoing training programs and educational opportunities for faculty, nursing students, and health personnel. She also reiterated the need to empower TB patients and work with their support systems. She restated the School's commitment to continue raising awareness and increasing knowledge on the importance of TB as a public health issue and the nursing profession.

UT Houston Public Health El Paso Regional Campus

The regional Dean's commitment is to promote the use of Photovoice as a community participatory research method and disseminate project findings. The Dean also commits to assist in the preparation of articles, other publications, or tools to bring about greater awareness; appreciation; and support for TB education and elimination in the border region.

U.S. Consulate Office in Ciudad Juárez, Mexico

The U.S. Consulate office is one of the first contacts for those seeking to apply for entrance and visit to the United States. As the first line of defense in examining individuals through their medical panel of physicians, they commit to continue performing medical examinations, adequate screening, and referral of suspected TB cases for proper treatment. Their commitment is to strengthen border and bi-national collaboration in TB and to promote community awareness with their service population.

Mexico's General Consul in El Paso, Texas

The rights of Mexican immigrants and their families must be guaranteed. The Mexican Consulate is committed to ensuring that Mexican patients who have been deported continue to receive TB treatment in Mexico. Access to adequate and timely health services on either side of the border is of most importance. This commitment extends beyond the border boundaries. The Consul's commitment is to continue promoting the importance of TB and other health issues through the "Ventanilla de Salud" among their Consulate population.

El Paso County Medical Society

The El Paso Medical Society has a long tradition of commitment to the best health care benefit for our border cities. We actively work and support the City County Health District and their ongoing effort for infectious disease control. We will continue to work with and support our local leaders, health care educators, and providers to foster international support against the tuberculosis health threat.

United States-Mexico Border Health Commission, Chihuahua's Outreach Office

The Border Region is economically weak and faces great needs and challenges. The Commission provides a handful of ideas, strategies and successful projects to address these needs. The region has great potential to improve the health and quality of life in both countries.

The USMBHC, in its bilateral program "Healthy Border," working to promote health and prevent disease in the Border Region, is committed in the fight against tuberculosis, by:

- Providing an opportunity for the exchange of ideas and points of view, of health professionals and the people committed in the area;
- Promoting communitarian participation, as well as the involvement of all the social actors, acting as a driving force towards the changes needed in the Border Region;
- Acting as a health policy promoter, increasing the resources allocated to health programs in the Border Region;
- Creating responsibility among individuals, regarding their own health;
- Improving programs of sanitary education and training, as well a control and prevention of disease such as tuberculosis;
- Improving the training, location and development of health care personnel;
- Improving the public health infrastructure;
- Promoting the use of the bi-national card for the prevention of tuberculosis; and
- Guaranteeing its continuity through political and administrative changes.

U.S. Section, U.S.-Mexico Border Health Commission, U.S. Department of Health and Human Services Office of Global Health Affairs

The Commission has made tuberculosis in the border region one of the Healthy Border 2010 health priorities. Additionally, the Commission recently presented a white paper on tuberculosis on the U.S-Mexico Border Region. The Commission is working on the identification of resources and supports the reactivation of "Ten against Tuberculosis." The Commission has recently completed the Healthy Border 2010 midcourse review. While progress is being made, it is not progressing at a rate to meet the Healthy Border 2010 TB goals.

Chihuahua's Tuberculosis State Program

During a Voices and Images exhibition, attendees were invited to reflect on the human dimensions of TB and the participants' remarks on the importance of social and familial support. A call to action was made to the private sectors on both sides of the border, to partner with the public health sector. Such a partnership would be beneficial to both parties; helping to offset the TB program costs for the public health sector, and increasing workforce health and production capacity for the private sector. The integration of clinical, medical, social, and mental health services in TB case management is imperative. The state program director reiterated her commitment to supporting the Voices and Images Project, the USMBHA and the participation of persons affected by TB in program planning, communication strategies and in direct case management services. She states "If we are to make a real difference in the way we treat TB we need to care for the individual and not only the disease." She is working with the USMBHA to take the Photovoice method to Guachochi, Chihuahua in April 2007. Chihuahua would like to the use of TB Photovoice across the state.

El Paso Region 19 Head Start Program

The Head Start Program has committed to: provide information learned in the Voices and Images forum to the 32 Health Services/Head Start Centers' staff and to the families of the 4,000+ children who attend those centers, located in El Paso and Hudspeth Counties; present information to the over 40 agencies in partnership with Head Start, through the Health Services Advisory Committee; and work with the Human Resources and Health Service Areas within the Head Start administration to require TB screenings of all employees as opposed to only new employees.

Project JUNTOS, Department of State Health Services Region 9/10

The project manager echoed the importance of State Commissioner's remarks that patients should be treated with respect, and quality health care should be provided to all. Among his commitments are to: strengthen the early detection contact investigation and laboratory services for TB patients; improve patient care and services; aim for 100 percent adherence; extend project services to the Valley of Juárez and to Villa Ahumada, Chihuahua (if resources are leveraged); work diligently in safeguarding TB program resources and improving budgetary resources; and leverage additional resources and funds to support local project initiatives, staff, and services.

Programa Compañeros, A.C.

The program director commits to continue supporting, disseminating, and promoting the Voices and Images stories in Juárez and across the country. As a member of the advisory committee for Voices and Images, the program had the opportunity to help in identifying participants, organizing meetings, and observing the process of empowerment (giving voice and images to the TB and HIV stories). She stressed the importance of focusing on children and youth and using every possible educational opportunity to address HIV and TB risk and disease prevention. She also emphasized the importance of quality, dignified, and caring services for those affected, which includes us all. More importance should be placed in providing for these children, since a healthy childhood increases the chance of healthy adulthood.

El Paso City-Health and Environmental District Board of Directors

The Chair of the City County Health District reiterated the Boards' support to ensuring adequate funding and support for the county TB program. She also recognized the importance of acknowledging the health personnel who make the TB program a success, and commended the persons affected by TB for their courage, voice and stories. She pledged a commitment to continue the Board's support of the TB program and stated her hope that partnerships increase between the District and the health and human service organizations, to better address the various needs of TB patients and their families.