



# Videography-Based TB & HIV Patient / Family / Community Education

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- > 95% of global TB-related deaths occur in low- and middle-income countries where education and public health information are often less accessible<sup>1</sup>
  - Many patients diagnosed with active TB or LTBI have minimal or no understanding what TB is, how it is acquired, transmitted or treated





1. World Health Organization. Tuberculosis, Key Facts. 2014.

- > 95% of global TB-related deaths occur in low- and middle-income countries where education and public health information are often less accessible<sup>1</sup>
  - Many patients diagnosed with active TB or LTBI have minimal or no understanding what TB is, how it is acquired, transmitted or treated
- Patients' general health beliefs are affected by their own experiences and fundamental understanding of health issues - often referred to as "health literacy"
  - When health literacy rates are low, patients become more prone towards non-adherence with medical evaluations and treatment recommendations<sup>2</sup>



- 1. World Health Organization. Tuberculosis, Key Facts. 2014.
- 2. Martin LR, et al. Ther Clin Risk Manag. 2005 Sep;1(3):189-99.

- For many pts & family members who have some awareness of TB:
  - There often remains an abundance of confusion, social misperceptions and negative social stigma<sup>1,2</sup>
- Osborne St

  95 WEST
  Corydon Ave

  42 NORTH
  Donald St

  42 SOUTH
  Pembina Hwy
  - Pt / family TB misinformation is often by circulated within local community and further creating:
    - A distrust of modernized health care
    - Compromised medication tolerability and
    - Reduced treatment compliance<sup>3,4</sup>
      - 1. BMC Public Health. [Research Support, Non-U.S. Gov't]. 2014;14:467.
      - Pulm Med. 2012;2012:352850.
      - 3. Trop Med Int Health. 1997 Aug;2(8):809-21.
      - 4. Public Health Rep.1992 Nov-Dec;107(6):626-36.



- Family / community misinformation of TB often lead to patient social isolation or ostracism
  - Pose barriers towards efficient public health contact investigations<sup>1</sup>

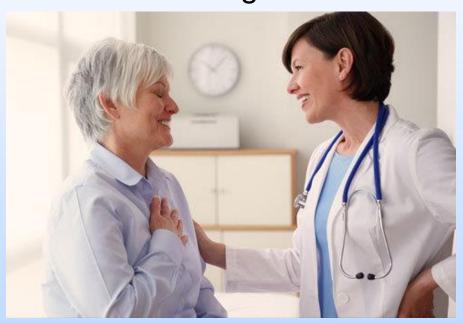


1. Trop Med Int Health. 1997 Aug;2(8):809-21.



# Problems with TB Education – Domestic / US Background

 Face-to-face discussions with patients and family members are vital towards achieving an adequate fundamental understanding of TB



 However, many patients <u>commonly continue</u> to have unresolved questions and confusion.



# Why do Patients Remain Confused after meeting with their health provider(s)?

- Patients may feel uncomfortable asking questions
  - Ashamed about asking perceived "dumb questions"
  - May feel intimidated with their doctor
- Patients may not fully understand what their provider is saying – via language, cultural differences
  - Barriers between effective patient-health provider communication commonly are encountered both within resource rich and poor countries
- Health providers may not have adequate time for more detailed discussions with their patients
  - Busy hospital or outpatient clinic
  - More problematic among many TB clinics within low- and middle-income countries, where the incidence of TB is generally much higher compared to the U.S.





## External Education: Optimal approach for Patients, Families, Communities??

- Inform patients of the facts
  - -not 'freak them out'

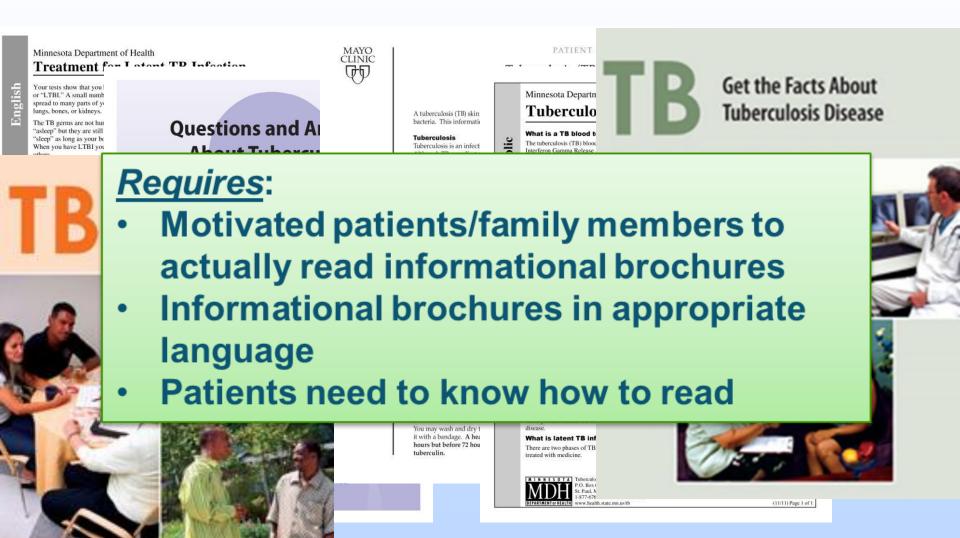


- Tuberculosis is a very serious disease; BUT
  - It's very treatable
  - It's very curable
- Treatment can be challenging many medications over a prolonged period of time
  - But very important to follow your health providers recommendation and complete treatment



#### Patient Education – What's the Best Approach?

- lots of reading material available



# Are there alternative strategies to optimize patient & family health eduction?

- and in a culturally appropriate fashion?
- Most people like to watch movies

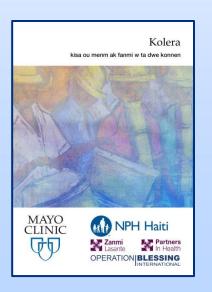


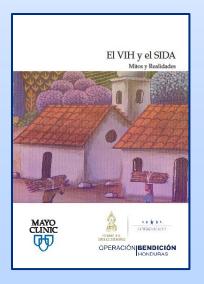
Expanding upon this idea – with health educational videos

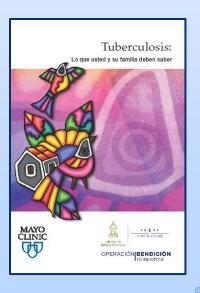


### Health Education: examples - Mayo Clinic

- Videography health education project (patients/family/community)
  - Tuberculosis El Salvador, Honduras
  - HIV infection El Salvador, Honduras
  - Cholera prevention Haiti









### Video Educational Principles - I

- Resource, culturally diverse groups
- Requires solid "partnership" with local medical and community leadership
  - Mutual trust and respect of project goals
  - Full transparency of project intentions



 Mayo Clinic (or other US Med. Cntr) cannot do this alone



### Video Educational Principles - II

- Resource, culturally diverse groups
- **Vital roles** of <u>Local Medical/Community</u> <u>colleagues</u>:
  - Ensure educational content is appropriate:
    - C/w local practice and/or regionally published guidelines
    - Appropriate for educational levels/medical literacy of viewing patients/public
  - Ensure use of *local language* (e.g. dialect) and word choice is appropriate
  - Co-Directorial roles
    - What is filmed (& what is NOT filmed)
    - Video messaging





### Video Educational Principles - III

- Resource, culturally diverse groups
- Filming on-location
  - Including local landmarks (e.g. scenery, monuments, buildings, etc)
- All people in the video are from the local community(ies)
  - Local health providers
  - Local / former patients (consenting)
    - Ideally with family members
- An emphasis on Patient Testimonials
  - Provides an opportunity for patients to:
    - "Tell their story"
    - Be heard





### Selection of Video Education Topics

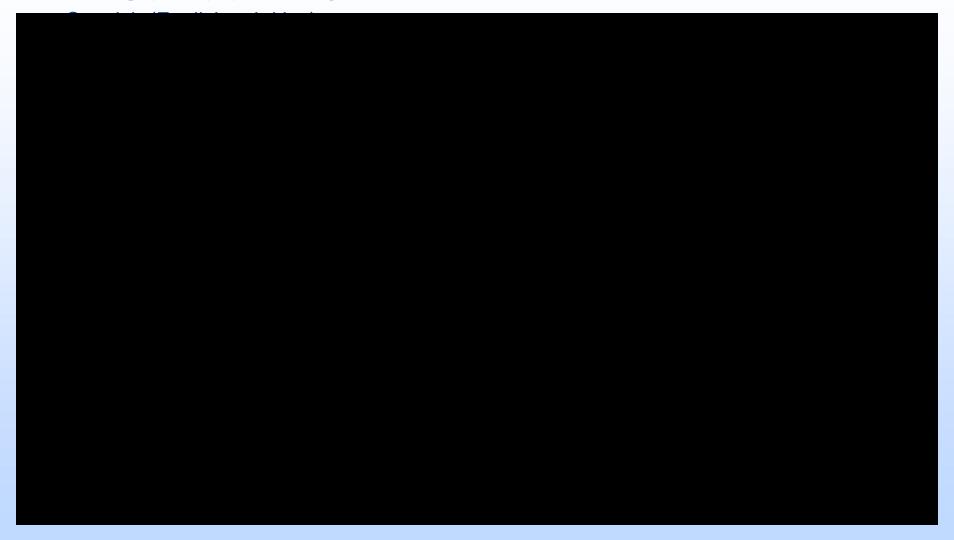
#### - Tuberculosis



- Significant medical problem both domestically and internationally
- Common misperceptions & misunderstandings about TB
- Negative community / public stigma about TB
- Opportunity to educate patients/family/community:
  - TB is very treatable and curable
  - Importance of following providers recommendations
  - Need to complete all the treatment



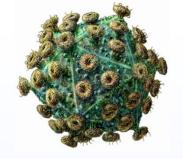
## El Salvador Tuberculosis Education Video El Salvador 2012





## Selection of Video Education Topics

#### - HIV



- Significant medical problem both domestically and internationally
- Common misperceptions & misunderstandings about HIV
- Negative community / public stigma about HIV
- Opportunity to educate patients/family/community:
  - TB is very treatable and controllable to maintain a healthy life
  - Importance of following providers recommendations
  - Need to take you medications every day



## El Salvador HIV Education Video El Salvador 2014

Spanish (English subtitles)



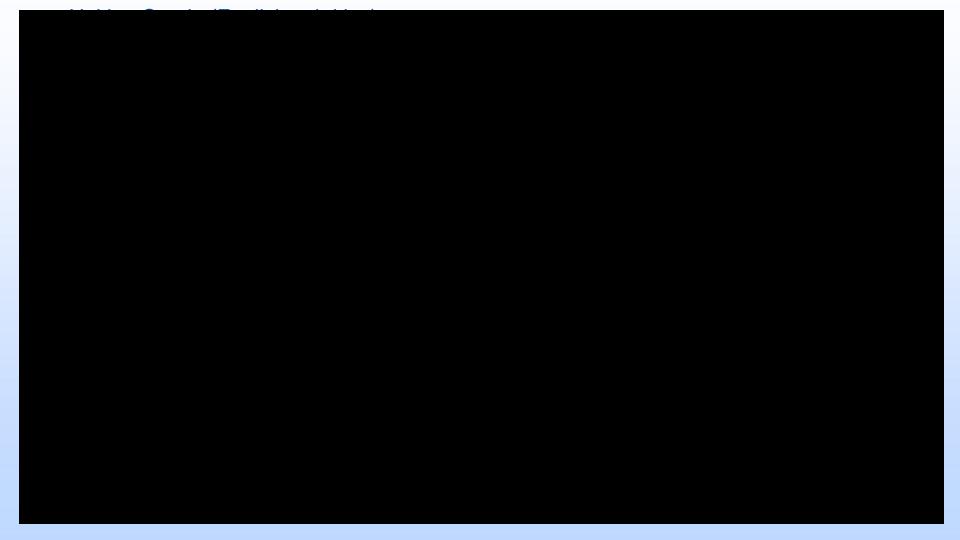
## Selection of Video Education Topics - Cholera



- Significant medical problem Post earthquake Haiti; post-Hurricaine Matthew Haiti
- Common misperceptions & misunderstandings about cholera
- Common public fear and negative stigma about cholera
- Opportunity to educate patients/family/community:
  - Cholera is preventable through simple steps
  - Cholera is very treatable and curable
  - Clean water is very important for your health



# Cholera Education Video Haiti – 2015





# El Salvador: Patient / Family / Community TB Education by Videography

Pilot Project: San Salvador central region



#### In partnership with:

- ES Ministry of Health
- ES Division of TB Mgmt
- Local TB clinics





Patient/Family Videography-based health

education (TB, HIV)

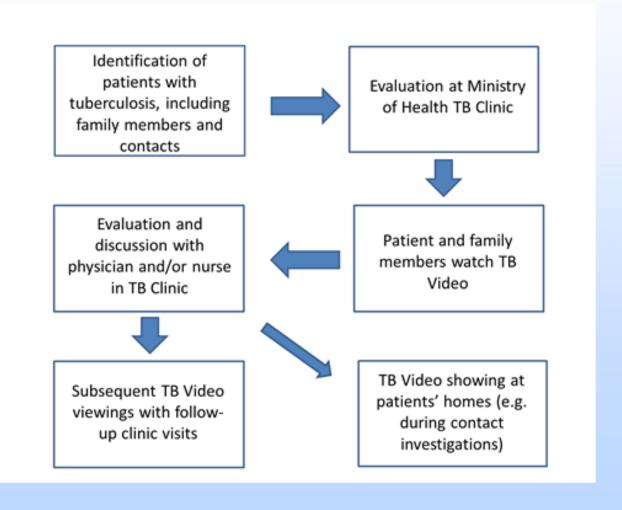


Video content - covering basic points:

- What TB is (Gen information)
- How TB is spread and not spread
- How TB is diagnosed & treated
- TB is treatable, curable and preventable

#### Flow Process for Patient TB Video Viewing

- El Salvador





# 3-tiered assessment of the TB educational video impact

#### Tier 1: Patient impact and observed changes

- "Improved patient knowledge of TB":
  - Better understanding of what TB is, how TB affects people and how TB is treated
  - Better patient acceptance of TB diagnosis
  - More patient interest in TB
- "Improved TB treatment adherence"
  - Typically linked to a greater understanding of TB and rationale for treatment
- "Better patient understanding for producing sputum samples (why sputum collection is important in diagnosis and treatment monitoring)



# 3-tiered assessment of the TB educational video impact

Tier 2: Family members, neighbor, community

- "Reduced fear and negative stigma of TB"
  - Including the procurement of greater community TB interest
- "Improved family support of TB patients"
  - Also including an improved family knowledge of TB
- "Facilitated contact investigations and helped to identify secondary active cases/contacts"



# 3-tiered assessment of the TB educational video impact

Tier 3: MOH TB health provider observations

- "Improved contact investigations by public health nurses"
- "Improved delivery of respiratory samples for AFB testing"
- "More time-efficient health provider evaluations and discussions with patients"
  - Less time spent on repeated explanations





## Using what we have learned in El Salvador, Honduras and Haiti:

- Navajo Nation Tuberculosis Educational Video
  - Short 6-minute information video
  - Filmed on location Navajo Nation (Arizona,

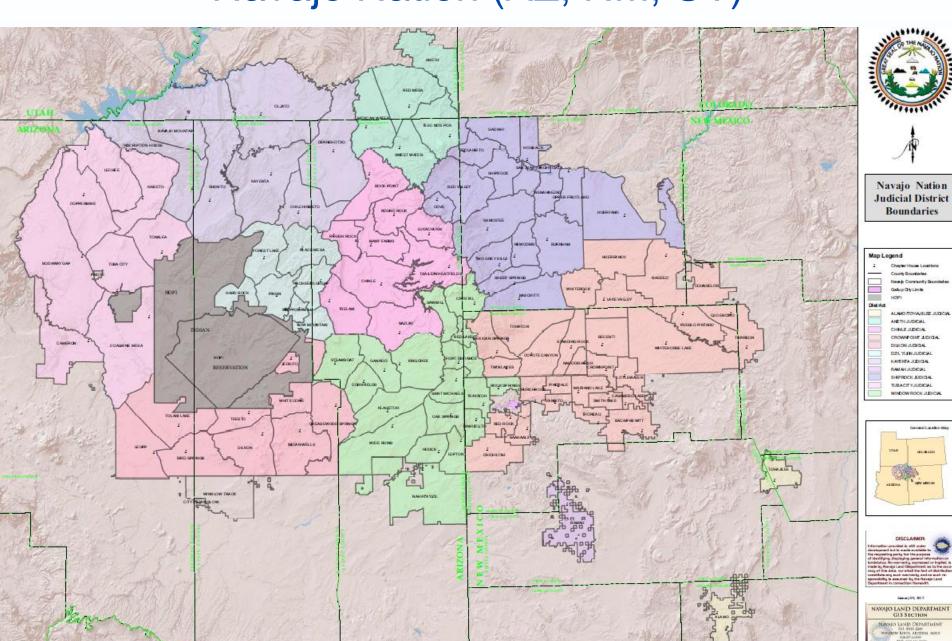
New Mexico, 2016)

- Window Rock
- Ft. Defiance
- Tuba City
- Language: Navajo
- Film involves Navajo / local health providers & Navajo former TB patients





## Navajo Nation (AZ, NM, UT)



## Navajo TB Educational Content - The "What"

- 1. TB General information
  - What TB is, how it's spread
  - Signs and symptoms of TB
- 2. Diagnosis and Treatment of TB
  - Role of Health Dept., DOT, etc
- Addressing misconceptions/misunderstandings of TB
  - Emphasizing that TB is very treatable & curable
- 4. Patient Testimonials (those who have been treated for TB)



## Recognizing our Navajo neighbors

- The "How"
- Building partnerships & trust
- Recognition and full respect for a people, a culture, a rich tradition
- Integrating 'westernized medicine' with local healers, cultural beliefs, etc.
- Production and ownership of the video and educational program – is with Navajo Nation
  - Navajo TB health colleagues integral with:
    - Video script information content
    - Filming, locations, persons on film
    - Implementation of educational video to Navajo patients/families/communities





## Navajo Nation Tuberculosis Education Video Arizona/New Mexico, 2016

Navajo (English subtitles) & English







### **Questions & Discussion**