



Tuberculosis patient and family education through videography in El Salvador



John W. Wilson^{a,*}, Julio Garay Ramos^b, Francisco Castillo^c, Evelyn F. Castellanos^d, Patricio Escalante^e

^a Division of Infectious Diseases, Mayo Clinic, 200 First Street, SW, Rochester, MN 55905, United States

^b Coordinador Nacional, Programa de Tuberculosis y Enfermedades Respiratorias, Ministerio de Salud El Salvador, República de El Salvador

^c Colaborador Técnico Médico, Programa Nacional de TB y Enfermedades Respiratorias, Ministerio de Salud/MINSAL, República de El Salvador

^d Medical Director, Operation Blessing El Salvador, República de El Salvador

^e Division of Pulmonary and Critical Care Medicine, Mayo Clinic, 200 First Street, SW, Rochester, MN 55905, United States

ARTICLE INFO

Article history:

Received 18 February 2016

Revised 1 May 2016

Accepted 3 May 2016

Keywords:

Tuberculosis
Videography
Education
El Salvador
Communication

ABSTRACT

Background: Tuberculosis (TB) and the approaches to successful management are commonly misunderstood health topics among patients and family members within resource-limited settings. Such public misconceptions often result in delayed diagnoses of afflicted patients, suboptimal compliance with prescribed therapies and a negative community social stigma that hinders effective contact investigations.

Objective: To determine through an observational field pilot study if videography-based TB education program can be implemented in busy resource-limited outpatient TB clinic settings and improve both patient and family understanding of TB and its treatment, as well as, improve the efficiency of TB medical evaluations and corresponding contact investigations.

Methods: We produced and implemented a videography-based health educational pilot strategy in 14 TB clinics within El Salvador to supplement the discussions between health providers, patients and families. Field observations and impressions after the first year of implementation were recorded.

Results: After viewing the video, patient impressions revealed greater understanding of TB including how it's transmitted and successfully treated, as well as, a more optimistic outlook of the diagnosis. Family members viewing the video displayed less fear and greater interest in TB and also exhibited more support for relatives undergoing evaluation or treatment. Salvadorian TB health providers reported improvements in patient compliance with treatment, contact investigations of suspected patients, delivery of sputum samples for testing, clinic time-efficiency spent with patients, and an observed reduction of negative family stigma of TB.

Conclusions: Our findings suggest that videography-based TB education can be successfully implemented in busy and resource-limited outpatient settings, and can provide a potentially efficient and low-cost effective strategy towards optimizing patient understanding, acceptance and compliance with TB treatment recommendations. This feasibility pilot study provides an opportunity within underresourced clinics for further evaluation regarding the favorable educational and sustainable impact of videography-based health education.

© 2016 The Authors. Published by Elsevier Ltd.
This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

In 2014, approximately 9.6 million people developed active tuberculosis (TB) resulting in 1.5 million deaths [1]. Over 95%

* Corresponding author. Tel.: +1 507 255 7938.

E-mail addresses: wilson.john@mayo.edu (J.W. Wilson), jgaray@salud.gob.sv (J.G. Ramos), fcastillo@salud.gob.sv (F. Castillo), castellanosflores_ob@yahoo.com (E. F. Castellanos), escalante.patricio@mayo.edu (P. Escalante).

<http://dx.doi.org/10.1016/j.jctube.2016.05.001>

2405-5794/© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

of these TB-related deaths occur in low- and middle-income countries where education and public health information are often less accessible [2]. Consequently, many patients diagnosed with active TB or latent infection have minimal or no understanding what tuberculosis 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 [3]. Patient-driven reluctance in seeking medical attention or resorting to local or 'traditional' healers can result in significant delays in TB diagnoses and associated worsening prognoses [4–6].

For many patients and family members who have some awareness of TB, there often remains an abundance of confusion, social misperceptions and negative social stigma [7,8]. Such misunderstandings by patients and misinformation circulated within a family or local community about their disease often create a distrust of modernized health care, compromise medication tolerability and reduce treatment compliance [9,10]. Additionally, family and community misinformation of tuberculosis often lead to patient social isolation or ostracism and pose barriers towards efficient public health contact investigations [9].

Face-to-face discussions with patients and family members are vital towards achieving an adequate fundamental understanding of TB; however, many patients commonly continue to have unresolved questions and confusion. Many factors contributing to persistent patient confusion include underlying health care anxiety; ethnic, cultural and language barriers; and information provided in an uncomprehensive manner to patients with limited educational backgrounds.

Although perhaps more pronounced, these problems are not limited to only low- and middle-income countries, as similar patient misconceptions and barriers between effective patient-health provider communication commonly are encountered within Europe, Canada and the U.S. [11]. Within busy hospital or outpatient clinic practices, health providers often will not have adequate time for more detailed discussions with their patients about TB. This particular problem is notably compounded among many TB clinics within low- and middle-income countries, where the incidence of TB is generally much higher compared to the U.S. According to the World Health Organization (WHO), El Salvador reported an incidence of TB of 33.8 per 100,000 population in 2013 [12], which is over 11 times higher compared to the US (approximately 3.0 per 100,000 since) [13–15]. Indeed, many TB clinics within the San Salvador region are typically very busy, and actual provider face-time spent with patients can be quite limited.

We therefore hypothesized that the implementation of a low-cost educational strategy to improve the basic patient and family understanding of TB and the corresponding treatment plan would result in more effective and time-efficient management of TB patients, help reduce negative disease stigma and subsequently improve contact investigations. Such an approach may seem intuitive as health education by videography has been successfully used in other venues, including community-based participatory research and in general medical practice [16–19]. However, how best to apply such a strategy within an under-resourced and busy international TB health care setting has not been well outlined.

To improve patient and family understanding of tuberculosis, we developed a videography-based educational tool utilizing visual aids and patient testimonials to discuss basic principles of TB, including how it can be successfully treated and cured. This pilot 'field' study aims to evaluate the implementation and effectiveness of this low-cost educational intervention in improving patient understanding of TB and compliance with treatment recommendations by gathering impressions of patients, family members and health care providers in TB clinics in San Salvador.

2. Methods

2.1. Partnership and review process

Working with the El Salvador Ministry of Health (MOH) and corresponding National Tuberculosis program (Programa Nacional de TB y Enfermedades Respiratorias; Ministerio de Salud, El Sal-

Table 1
Participating TB clinics in El Salvador.

Name	State/region	Setting/region
1. UCSF Mejicanos	Central San Salvador	Metropolitan
2. UCSF Zacamil	Central San Salvador	Metropolitan
3. UCSF Apopa	North San Salvador	Metropolitan
4. UCSF Popotlán	North San Salvador	Metropolitan
5. UCSF Unicentro	East San Salvador	Metropolitan
6. UCSF Quezaltepeque	La Libertad	Central-west
7. UCSF Ciudad Arce	La Libertad	Central-west
8. UCSF Díaz del Pinal	La Libertad	Central-west
9. UCSF Puerto de la Libertad	La Libertad	Central-west
10. UCSF Periférica Chalatenango	Chalatenango	Central-west
11. UCSF Periférica de Zacatecoluca	La Paz	South-central
12. UCSF Periférica Cojutepeque	Cuscatlán	Central
13. UCSF Periférica San Vicente	San Vicente	Central-east
14. UCSF Periférica de San Miguel	San Miguel	Eastern

UCSF=La Unidad Comunitaria de Salud Familiar (Community family health unit).

vador/MINSAL), we first performed an on-site educational needs-assessment of the MOH TB clinics within El Salvador. Supplemental TB educational strategies for patient and their family members were identified as a priority need. We therefore developed an educational video specifically designed for patients, family members and local communities. The script and visual content for the video was composed in partnership with Salvadoran TB clinic physician-leaders and nurses and was formally approved by the El Salvador MOH TB program health directors. The medical content was additionally examined to ensure consistency with current published TB management guidelines by the Pan American Health Organization (PAHO) [20] and WHO [21] as well as with local established clinical practice TB protocols within El Salvador. The filming was performed entirely on location in El Salvador (San Salvador and surrounding municipalities). All personnel filmed in the video including health providers and former patients are from El Salvador.

2.2. Settings

The 14 participating MOH TB clinics, including locations, are listed in Table 1. Given the diverging educational and literacy backgrounds of the regional patient populations, the video includes as much visual imagery for select teaching points as possible. Spanish is the primary language of El Salvador; therefore, the script was composed in Spanish using verbal dialogue that was both readily understandable and appropriate for the general population (as determined by the Salvadorian health providers).

2.3. Educational video content

The educational composition of the video is listed in Table 2. The video content is divided into 4 short sections: (1) basic information on what TB is and how it is acquired, (2) fundamental points how TB is detected and successfully treated, (3) common public misconceptions and misunderstandings of TB and (4) patient testimonials regarding their experiences with TB and its treatment.

The video opens with former patients discussing their initial perceptions and misperceptions of TB and what they subsequently learned about TB after seeing their health provider. The content of the video is delivered verbally by Salvadorian health providers and former TB patients superimposed with informational graphics and imagery along with select narrated text added to reinforce specific points. The video portrays real patients speaking with or being examined by their health providers, patients interacting with family members at home, and images of the general public and notable local landmarks. The video concludes with patient testimonials

Download English Version:

<https://daneshyari.com/en/article/3405547>

Download Persian Version:

<https://daneshyari.com/article/3405547>

[Daneshyari.com](https://daneshyari.com)