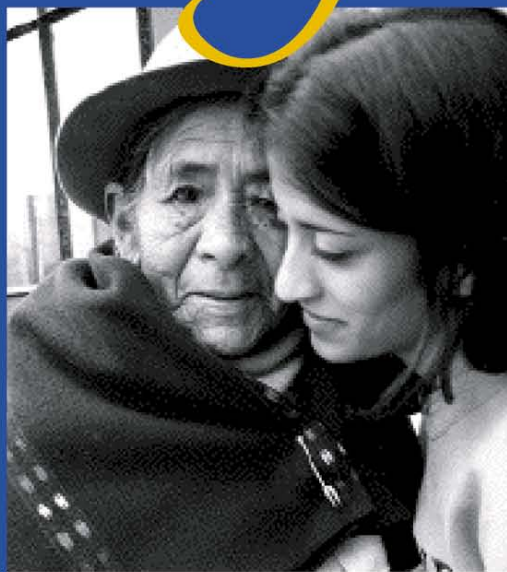




HEALTH COMMUNICATION
Insights



*The Role of Communication
in Peru's Fight Against
Tuberculosis*

August 2004



HEALTH COMMUNICATION
Insights



*The Role of Communication
in Peru's Fight Against
Tuberculosis*

September 2004

Fernandez Llanos-Zavalaga MSc, MD

Patricia Poppe, MS

Youssef Tawfik, MD, MPH

Cathleen Church-Balin, MHS, MBA

HEALTH COMMUNICATION PARTNERSHIP

based at: Johns Hopkins Bloomberg School of Public Health / Center for Communication Programs

111 Market Place, Suite 310 • Baltimore, Maryland 21202, USA Tel: 410-659-6300 • Fax: 410-659-6266 • www.hcpartnership.org

Contributors:

Fernandez Llanos-Zavalaga, MSc, MD, *Consultant, HCP, Peru*

Patricia Poppe, MS, *Senior Communication Advisor, HCP, Peru*

Youssef Tawfik, MD, MPH, *Associate Director, Health Sciences, HCP, Baltimore*

Cathleen Church-Balin, MHS, MBA, *HCP Consultant, Baltimore*

Suggested Citation:

Llanos-Zavalaga, F., Poppe, P., Tawfik, Y., Church-Balin, C. (September 2004). The Role of Communication in Peru's Fight Against Tuberculosis. *Communication Insights*. Baltimore: Health Communication Partnership based at Johns Hopkins Bloomberg School of Public Health / Center for Communication Programs.

This publication may be reproduced without permission provided the material is distributed free of charge and the Health Communication Partnership is acknowledged. Opinions expressed in this report are those of the authors and do not necessarily reflect the views of sponsoring agencies.

Editor: Kim S. Martin

Designer: Rita C. Meyer

Photo Credits:

Cover: Todd Shapera; page 1, CCP Photoshare; page 7, Maria Pia Valdivia, CCP; page 15, Harvey Nelson.



*Supported by a five-year cooperative agreement from
the U.S. Agency for International Development
(#GPH-A-00-02-00008-00)*

Stop TB Partnership

*Endorsed by Stop TB, a global partnership organized by the World
Health Organization to accelerate social and political action to stop the
unnecessary spread of tuberculosis around the world.*

Contents

Preface & Acknowledgments	iv
Executive Summary	v
Chapter 1: Country & Program Overview	1
Introduction	1
Country Background	2
The Tuberculosis Problem in Peru	2
Peru's Tuberculosis Control Program	3
Chapter 2: The Role of Communication	7
Communication Goals	7
Communication Activities	8
Impact	12
Chapter 3: Implications for Other National TB Programs	15
References	19

Preface & Acknowledgments

The Health Communication Partnership (HCP) is a global communication initiative based at Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP) and supported by the U.S. Agency for International Development (USAID). HCP also includes the Academy for Educational Development, Save the Children, the International HIV/AIDS Alliance, and the Tulane University's School of Public Health and Tropical Medicine. Developed by the Health Sciences Group within HCP, this issue of *Health Communication Insights*, provides a look at how health communication has helped tackle public health problems in developing countries. This issue shows how Peru turned back a mounting tuberculosis epidemic and used health communication as an integral component in its fight against this infectious disease.

HCP would like to thank USAID's Tuberculosis Team, particularly Susan Bacheller and Clydette Powell for their support. We would also like to thank Gloria Coe for her advice and guidance. We are grateful for the contribution of the members of the Advocacy and Communication Task Force of the Stop TB Partnership, particularly Satyajet Sarkar. We appreciate the contribution of Dr. Pedro Suarez, Management Sciences for Health and former Director of the National Program for Infectious Diseases and Tuberculosis Control in Peru.

We are also grateful to the Ministry of Health in Peru for its collaboration during field work. A special thanks to HCP's Jose Rimon, Peter Gottert, Alice Merritt, Susan Krenn, and Marcela Aguilar for their help in completing this report. Finally, we thank Alejandro Gutierrez-Pons for translating the original manuscript.

Executive Summary

Nearly 2 billion people around the world are infected with the bacillus that causes tuberculosis (TB). Each year, about 8.4 million people develop active, or infectious, TB and more than 2 million deaths are TB-related. Some 95 percent of global TB cases and 99 percent of TB deaths occur in the developing world. In most of these countries, TB affects the most economically productive age group (those 15 to 54 years of age), pushing many families into poverty or preventing them from moving up the economic ladder.

Directly Observed Therapy - Short Course, or DOTS is an effective and widely accepted treatment for TB. The World Health Organization (WHO) set a global target of detecting 70 percent of infectious cases and curing 85 percent of those by the year 2005. Few countries, however, are able to expand coverage of DOTS to enough people to meet those targets. The main constraints to achieving the global targets include lack of political commitment, insufficient and ineffective use of financial resources, neglect of human resource development, poor health system organization, poor quality and an irregular supply of anti-TB drugs, and weak communication components in TB control programs.

Despite these obstacles, a few countries have succeeded in reaching or exceeding the global targets. Peru is one of these success stories. Before Peru declared TB a widespread public health problem and decided to fight it, the burden of disease was unacceptably high. Between 1983 and 1988, 30,000 deaths were due to TB, with half occurring among those between 25 and 65 years. A 1999 study showed that the economic cost of TB was between \$67 million and \$108 million per year. The tuberculosis

incidence rate reached 243 cases per 100,000 before Peru's National Tuberculosis Control Program (NTCP) succeeded in turning the trend around. According to WHO, Peru fell off the list of high burden countries in 2000 and TB cases are now falling at a rate of 6 percent per year.

This report describes how Peru achieved its success, with a particular emphasis on the role of strategic health communication. The report includes an analysis of lessons learned and implications that may help other developing countries in their fight against TB. The authors compiled this report by reviewing reports from Peru's National TB Control Program, as well as interviews with Ministry of Health staff, policymakers, and representatives of international organizations working in Peru, interviews with leaders and staff engaged in TB program implementation, and interviews with TB patients and their families.

After decades of neglect, underfunding, and poor program performance, the NTCP finally received the attention it deserved in the early 1990s. Strong political will combined with international support revived the national TB control effort. Peru's political leadership recognized the impact tuberculosis was having not only on people's health but also on the country's economy. In 1991, Peru declared tuberculosis a widespread public health problem and allocated increased resources to the NTCP. The NTCP worked hard to extend DOTS to the entire population. To accomplish this, the program worked in several areas to expand and improve clinical services, train personnel, and identify patients.

Another reason for Peru's success in its fight against tuberculosis was that it integrated communication activities into all levels of the program. Health

communication focused on providing information about the causes of TB, sources of infection, how it is transmitted, symptoms, treatment, and prevention to political leaders, community leaders, and the public. The slogan “*Treatment of one is prevention for all*” encouraged community participation in the program. Demand creation was carefully timed to correspond with the increasing coverage of clinical and laboratory services. The communication activities that contributed to Peru’s success in TB control included advocacy, mass media, interpersonal communication and counseling, and community mobilization.

The program conducted formative research to assess the public’s and health care workers’ knowledge of and attitudes about TB. The research found that stigma against TB patients in Peru is deep and passed down from generation to generation. It also found widespread misconceptions among health workers about how TB is transmitted. Some believed that one could get TB by shaking hands with an infected person or by sitting on a chair that an infected person sat on. Health workers often stigmatized TB patients by setting two desks between them and the patient or by asking a patient not to face them while they talk. For many years, health workers perceived an assignment to work on TB at a clinic as a punishment.

To combat this, NTCP aired several well-designed television and radio spots to raise community awareness about TB, correct common misconceptions, motivate patients to seek care, and encourage the public to participate in Peru’s fight against TB. In addition to the widely recognized slogan “*If you cough for more than 15 days, you should go to the health center,*” the program developed other messages to encourage the public to help family members, neighbors, and other community members seek care. Messages for patients stressed the importance of completing treatment to achieve a total cure. The program also emphasized the fact that treatment and other services such as counseling and

laboratory services were provided free of charge. Messages stressed the word “free” to appeal to low-income groups and motivate them to seek care.

To counter health care providers’ perceptions about TB and TB patients, the NTCP trained all health staff in interpersonal communication and counseling skills. Training focused on health care workers’ first contact with patients and addressed workers’ fear of infection. The program also created several incentive programs, including one for health care workers, to motivate participation in the program.

Peru’s successful fight against TB provides several lessons for other national TB control programs. First, political commitment at the highest levels of government was vital to the success of the program. The political commitment provided much needed resources and leverage. This in turn led to the ability of the program to expand DOTS nationwide and put in place the clinical services necessary to detect, treat, and cure all patients. Once the clinical services could be assured, the program implemented an integrated communication plan that included interpersonal communication and counseling training for all TB control staff, mass media to reach the public with information and to create an enabling environment for change, and community-level activities to support patients and their families. Continuous advocacy activities, including public events around World TB Day, also keep TB top of mind among political and community leaders and the public.

While Peru succeeded in meeting the WHO targets, challenges to its success remain. Advocacy and strategic communication must keep TB control a national priority so the NTCP is supported financially and in the hearts and minds of the government and the public. In addition, the program faces the challenge of multi-drug resistant TB and the rise of tuberculosis cases combined with HIV/AIDS.

chapter 1 **Country & Program Overview**



- INTRODUCTION
- COUNTRY BACKGROUND
- THE TUBERCULOSIS PROBLEM IN PERU
- PERU'S TUBERCULOSIS CONTROL PROGRAM

INTRODUCTION

Nearly 2 billion people around the world are infected with the bacillus that causes tuberculosis (TB). About 8.4 million people develop active, or infectious, TB each year and over 2 million deaths are TB-related. Some 95 percent of global TB cases and 99 percent of TB deaths occur in the developing world. In most of these countries, TB affects the most economically productive age group (those 15 to 54 years of age), pushing many families into poverty or preventing them from moving up the economic ladder.

The World Health Organization (WHO) has set a global target of detecting 70 percent of infectious cases of TB and curing 85 percent of those by the year 2005. An effective and widely accepted treatment for TB—the Directly Observed Therapy - Short Course, or DOTS — can be implemented to accomplish this goal. Few countries are able to expand coverage of DOTS to enough

people to meet WHO's targets, however. The main constraints to achieving the global targets include lack of political commitment, insufficient and ineffective use of financial resources, neglect of human resource development, poor health system organization, poor quality and an irregular supply of anti-TB drugs, and weak communication components in TB control programs.

Despite the challenges, a few developing countries have succeeded in achieving the global targets set by WHO. Peru is one of the success stories. Peru achieved universal DOTS coverage nationwide and surpassed the WHO global target of detecting 70 percent of infectious cases and curing 85 percent of them. This report describes Peru's success and emphasizes the role strategic health communication played in helping it reach the global targets. Also included is an analysis of lessons learned and implications that may help other countries in their fight

against TB. The report was compiled by reviewing reports from Peru's National TB Control Program, as well as interviews with Ministry of Health staff, policymakers, and representatives of international organizations working in Peru, interviews with leaders and staff engaged in TB program implementation at the provincial, district, and commune levels, and interviews with TB patients and their families.

COUNTRY BACKGROUND

In 2004, Peru's population was estimated to be 27.5 million people. At present, 72 percent of the population is classified as urban, and this number is increasing. Between 1980 and 1995, the urban population increased at the annual rate of 2.9 percent. In the early 1990s, the country faced political, economic, and social destabilization caused by internal terrorism. By the end of the decade, Peru's economy suffered substantial losses and many families became even more impoverished. By 2002, 12.8 million Peruvians (54 percent) lived below the poverty line, with 15 percent living in extreme poverty. In the past two years, economic conditions have improved, however, and currently Peru is considered one of the fastest growing economies in Latin America.

More than 90 percent of Peru's citizens are Roman Catholic. The literacy rate is quite high, with 94 percent of men and 84 percent of women able to read and write. The main industries include mining, petroleum, fishing, textiles and clothing, food processing, cement, auto assembly, and steel. The official languages are Spanish and Quechua, but other languages include Aymara and a large number of minor Amazonian dialects. Amerindians make up the majority of Peru's population (45 percent), with mixed race Amerindians and whites accounting for another 37 percent, and the rest classified as other ethnic groups.

Peruvian adults' life expectancy is 65.9 years for men and 70.9 for women. The infant mortality rate is 33 deaths for every 1,000 live births, and the mortality rate

for children under five is 61 per 1,000 live births. The maternal mortality rate is 265 deaths for every 100,000 births. The fertility rate is 2.7 births per woman. Tuberculosis is one of the five leading causes of death. WHO estimates new cases of tuberculosis in Peru at 66,000 per year and 7,000 estimated deaths each year from TB-related illnesses.

THE TUBERCULOSIS PROBLEM IN PERU

Tuberculosis in Peru dates back to ancient times when the Incas described TB bone lesions. In the 1990s, while Peru accounted for only 3 percent of the population of the Americas, it had 15 percent of the TB burden. The tuberculosis incidence rate reached 190 cases per 100,000 before Peru's National Tuberculosis Control Program (NTCP) succeeded in turning the trend around. According to WHO, Peru fell off the list of high burden countries in 2000 and TB cases are now falling at a rate of 6 percent per year.

Tuberculosis is not distributed evenly throughout Peru, a country with an arid coastline, the mountainous Andes region, and the tropical forests of the Amazon Basin. Most cases occur in urban areas; the capital city of Lima accounts for 60 percent of all cases in the country, although it has only 29 percent of the country's population.

TB mainly affects the most economically productive age group — generally defined as those between 15 and 54 years of age. Between 1983 and 1988, there were 30,000 deaths due to TB, with half occurring among those between 25 and 65 years. A 1999 study showed that the economic cost of TB was between \$67 million and \$108 million per year. Tuberculosis was estimated to cost the average family with an infected member approximately \$533 a year. A death due to TB costs an average family about \$31,335 due to the cumulative loss of income.

Although it is succeeding in its fight against TB, Peru faces new challenges. The National Tuberculosis Control Program (NTCP) is carefully monitoring the development of multi-drug resistance TB (MDR TB). A recent study found MDR TB in 3 percent of those who have not been treated and in 16 percent of those who failed to complete treatment. Co-infection with HIV/AIDS is also increasing. In 2001, more than 34 percent of people living with HIV or AIDS were also co-infected with tuberculosis.

PERU'S TUBERCULOSIS CONTROL PROGRAM

After decades of neglect, underfunding, and poor program performance, the NTCP finally received the attention it deserved in the early 1990s. Strong political will combined with international support revived the national TB control effort. Peru's political leadership recognized the impact tuberculosis was having not only on people's health but also on the country's economy. In 1991, Peru declared tuberculosis a widespread public health problem and allocated increased resources to the NTCP.

The NTCP adopted the WHO global targets for TB control and established the following goals:

- Diagnose at least 70 percent of pulmonary TB cases
- Cure at least 85 percent of pulmonary TB
- Vaccinate 90 percent of children under one year of age, especially newborns, with BCG (*Bacille Calmette Guérin*), the only vaccine available to protect children from TB.

The NTCP worked hard to extend DOTS to the entire population. To accomplish this, the program worked in several areas to expand and improve clinical services, train personnel and identify patients.

Specifically, the NTCP worked to:

Ensure the availability of drugs and laboratory supplies.

The NTCP considered adequate laboratory and drug supplies critical for the program's success.

Collaboration with international and national pharmaceutical companies along with technical assistance from international agencies helped ensure a sufficient drug supply. Adopting a system of pooled procurement at the central level created an efficient and cost-effective distribution system. With support from the government and international donors, NTCP provided laboratories with microscopes and supplies. As a result, the network of TB laboratories expanded dramatically. See Table 1, below.

Integrate TB services into the primary health care system.

Previous experience in Peru showed it was not practical to have the national TB program function on the periphery of the primary health care system. Therefore, the NTCP integrated the TB services network into the MOH's primary health care system when the program expanded. NTCP supported and upgraded provincial hospitals, district-level hospitals, and primary health care clinics to provide more

Table 1. Progress in establishing tuberculosis laboratories in Peru, 1991-2000

	1991	1992	1993	1994	1995	1996	1997	1998
LNR	1	1	1	1	1	1	1	1
LRel	13	24	31	42	46	57	65	65
LL	425	514	579	651	823	987	1082	1127
URM	978	2460	2369	3238	4441	5022	4964	5124

LNR: National Referral Laboratory for Mycobacterium/INS

LRel: Regional and intermediate Laboratories (bacilloscopies, cultures and quality control)

LL: Local Laboratories (processes diagnostic BKs, and TB control)

URM: Sample Collection Units

Source: National Institute of Health

effective diagnostic services, counseling, and treatment. Primary health care center staff were included in NTCP's various program activities. Integrating TB services with primary health care resulted in system efficiency and created a win-win feeling for everyone involved.

Strengthen human resource capacity.

Staff at all levels received training in clinical, laboratory, and counseling skills. The NTCP developed and adapted national TB guidelines and developed training curricula with technical assistance from WHO and the Pan American Health Organization (PAHO).

Design an active communication strategy.

As the program matured, the NTCP staff realized that to achieve national targets, the program needed a communication strategy to dramatically improve case detection and treatment success rate. The communication strategy sought to encourage and motivate Peruvians to participate in the program.

Foster partnerships with international and national agencies.

The NTCP sought out strategic partnerships with several international organizations and donors. In addition, it developed partnerships with national governmental and non-governmental organizations

(NGOs), and played an active role in coordinating efforts and assigning roles between partners. Important international partners included PAHO, the Japan International Cooperation Agency, Canada as part of the Peru-Canada Agreement, and USAID. National partners included the BASIC Health and Nutrition Project, scientific societies—such as the Peruvian Society for Infectious and Tropical Diseases, the Peruvian Epidemiology Society, and the Peruvian Society of Pneumology — medical schools, the Association of Tuberculosis Patients, the pharmaceutical industry, and private health care practitioners. Table 2 (page 5) describes the type of support received from each organization.

Strengthen health information systems and surveillance.

The NTCP upgraded health management information systems, particularly at the district level. It provided computers to the provincial and district levels, and trained staff to record and analyze data using specially designed software.

While Peru succeeded in meeting the targets set by WHO, challenges to its success remain. Advocacy and strategic communication must keep TB control a national priority so the NTCP is supported financially and in the hearts and minds of the government and the public. In addition, as mentioned, the program is facing the challenge of multi-drug resistant TB and the rise of tuberculosis cases combined with HIV/AIDS.

Table 2.
The Roles of International and National Partners in Peru's TB Control Program

	PARTNER	ROLE
INTERNATIONAL PARTNERS	Pan American Health Organization (PAHO)	Provided technical support to the program at all levels including developing services guidelines based on the latest guidance from WHO and its Stop TB Partnership. PAHO also provided critical technical assistance for training and capacity building, data collection and surveillance, and quality control.
	Japan International Cooperation Agency (JICA)	Helped NTCP expand their laboratory services network by providing supplies and training
	Peru-Canada Agreement	Supported the development of NTCP's information system by providing computers for regional coordinators and software called SIS-TB that allowed for speedy information management.
	United States Agency for International Development (USAID)	Focused on supporting the communication component, such as conducting socio-anthropologic studies to inform and guide the advocacy and communication strategy development.
	International NGOs such as "Socios en Salud"	Provided valuable assistance in improving the diagnosis and treatment of patients with MDR-TB. They also addressed quality improvement and helped train health care workers to prevent TB infection in laboratories and clinics.
	BASIC Health and Nutrition Project	Helped implement communication activities including motivating health workers and TB educational flipcharts tailored to different country regions to strengthen and standardize counseling.
NATIONAL PARTNERS	Scientific societies, such as the Peruvian Society for Infectious and Tropical Diseases, the Peruvian Epidemiology Society, Peruvian Society of Pneumonology, and medical schools	Collaborated with NTCP on advocacy activities including securing an endorsement from Peru's medical leaders and facilitating medical leaders' participation in seminars to update medical knowledge. Medical schools included up-to-date information on TB in their curricula.
	The Association of Tuberculosis Patients	Played an influential role in advocating for NTCP support at national and local levels.
	The pharmaceutical industry and private medical practitioners	Facilitated pooled purchasing of TB drugs at the national level and distributed information materials provided by the NTCP to private practitioners through drug representatives. Private practitioners participated in NTCP training activities and their records were added to the public record for monitoring case detection and treatment success rates.

chapter 2

The Role of Communication



- COMMUNICATION GOALS
- COMMUNICATION ACTIVITIES
- IMPACT

Communication was an essential part of NTCP's comprehensive and integrated strategy. Communication activities were fully coordinated with other aspects of NTCP and the demand created by those activities was timed to correspond with the increasing coverage of clinical and laboratory services.

COMMUNICATION GOALS

The NTCP designed its communication component to help achieve its overall goal of detecting 70 percent of infectious TB cases and treating 85 percent of them. These program objectives also became the goals of the communication strategy.

The NTCP used communication to address several issues that challenged the program. These issues included:

- Reducing stigma about the disease, especially among health care workers, and introducing an enabling environment for case detection and cure
- Gaining support from political, governmental, international, and local leaders for the program
- Raising awareness about TB in general, including the effectiveness of treatment and that diagnosis and treatment were available at no cost
- Improving knowledge about TB case detection
- Encouraging those with symptoms to seek help
- Strengthening the link between health facilities and the community to improve case detection and treatment success
- Improving both passive and active case identification by building health care workers' capacity to approach and counsel patients and

by increasing community involvement in detecting new cases

- Improving compliance with treatment by motivating patients and supporting volunteers, family members, and the community
- Reaching high-risk groups, particularly the urban poor
- Reaching “closed population” groups with high TB prevalence, such as those living in prisons, mental institutions, retirement homes, and homeless shelters.

COMMUNICATION ACTIVITIES

The communication activities that contributed to Peru’s success in TB control included advocacy, mass media, interpersonal communication and counseling, and community mobilization.

Advocacy

Advocacy was necessary to gain support from political leaders and to keep a high level of political commitment and visibility for the program. The NTCP engaged political leaders, community leaders, the medical community, and the public with the slogan “*Treatment of one is prevention for all.*”. It invited the press to relevant seminars, public gatherings, and parades to encourage media coverage.

“When we invited a high-level politician to speak, the entire press came to cover.”

— Female communication worker

NTCP helped organize high visibility events on World TB Day, including parades and other public

gatherings. It organized TV and radio coverage of important events, such as World TB Day proceedings that were attended by political leaders. It invited the press to patient gatherings and Association of TB Patients’ meetings to stimulate interest and media involvement in TB as a political issue. The Association of TB Patients turned out to be one of the program’s most effective advocacy groups. They garnered the attention of political leaders and the media as the group representing the voice of the poor. Although Peru’s poor are among those most affected by tuberculosis, they often felt that their needs for treatment and care were ignored. This group was able to bring the needs of the poor to political leaders’ and the public’s attention.

The NTCP made a special effort to include private practitioners in the program. In reviewing health care-seeking behaviors, NTCP realized that private practitioners were important sources of care for TB patients and that including them would accelerate the drive to reach program goals. NTCP invited private practitioners to meetings and training sessions, and their data on TB cases was added to the NTCP information system.

“Private practitioners were contacted and if they diagnosed a patient with TB they sent him or her to the TB clinic with a written note so that the patient would be treated.”

— Clinic director in Lima

The NTCP reached private practitioners through an innovative partnership with the pharmaceutical industry. Pharmaceutical company representatives distributed NCTP materials to private practitioners on behalf of the program.

Mass Media

Mass media can reach a large number of people, extend the reach of the program, and legitimize a topic by creating an enabling environment for action. The NTCP used mass media, including television, radio, and print, to reach the public with information about TB. Peru's high literacy rate made print media an important tool for improving knowledge of tuberculosis as well.



The project developed a manual for street theater production with strong messages about dealing with tuberculosis.

The program conducted formative research to assess the public's and health care workers' knowledge of and attitudes about TB. The research found that stigma against TB patients in Peru was deep and passed down from generation to generation. It also found widespread misconceptions among health workers about how TB is transmitted. Some believed that one could get TB by

shaking hands with an infected person or by sitting on a chair that an infected person sat on. Health workers often stigmatized TB patients by setting two desks between them and the patient or by asking a patient not to face them while they talk. For many years, health workers perceived an assignment to work on TB at a clinic as a punishment.

“Before the program, people did not want to say they have TB; they felt shame.”

— A TB patient

Television and Radio

NTCP aired several well-designed television and radio spots to raise community awareness about TB, correct common misconceptions, motivate patients to seek care, and encourage the public to participate in Peru's fight against TB. In addition to the widely recognized slogan “If you cough for more than 15 days, you should go to the health center,” the program developed other messages to encourage the public to help family members, neighbors, and other community members seek care. Messages for patients stressed the importance of completing treatment to achieve a total cure. The program also emphasized the fact that treatment and other services such as counseling and laboratory services were provided free of charge. Messages stressed the word “free” to appeal to low-income groups and to motivate them to seek care.

“I know that I can go to the clinic and get my treatment after work. This helps me a lot.”

— A TB patient

The NTCP also worked with local authorities to strengthen their capacity to design and air messages on local radio stations.

Print Materials

The NTCP logo appeared at all TB service sites and was widely disseminated through television and printed media. This “branding” led to wide recognition that helped the public easily identify TB service sites. Local authorities also designed and funded their own print materials such as posters and billboards, including several print materials in the local Quechua and Aymara languages.

The NTCP developed a comprehensive and simple counseling flipchart and adapted it for urban and rural audiences. It was disseminated to clinics and widely used to guide staff and volunteers on how to counsel patients, families, and the general public.

Interpersonal Communication and Counseling

The NTCP trained all health staff in interpersonal communication and counseling skills to improve the



A project flipchart helps guide health providers as they deal with tuberculosis patients.

quality of counseling at the health clinics. The health staff was encouraged to reach out to all visitors at the health facility, not just those with respiratory problems. Training focused on health workers' first contact with patients and addressed the workers' fear of infection by teaching them how to avoid TB while still being inviting and welcoming.

“When it was explained to us that we can’t get infected when we shake hands with a patient, we were at ease to do it.”

— Female nurse

The program developed video spots about TB for health care providers to show in health care facility waiting areas, replacing the traditional talks and flipchart presentations. Clinic staff in the facility talked with patients after the videos and answered their questions.

Health staff organized home visits to strengthen the link between the clinic and households in their catchment area. Home visits included educational messages about TB, case detection and treatment, and follow-up.

Community Mobilization

The NTCP adopted the slogan “*Treatment of one is prevention for all*” to encourage the community to participate in the TB control program. The NTCP organized training in social participation techniques for health care workers to help them engage different sectors of the community in the program.

To further reinforce the need to work at the community level, the NTCP trained the Health Directorates at the provincial level to develop and implement strategic communication plans specific to their province. The training included different levels of health care workers and was focused on capacity building and workplan development.

NTCP engaged local NGOs, such as churches and local community-based organizations, to reach out to the community and provide a link to health clinics. In 1995, NTCP established community organizations called “Community Surveillance Units” (CSUs) to help detect TB and follow up on treatment. The CSUs played an important role in linking the health team to the community.

“The health promoter was a link between us and the community. We trusted him because he was chosen by us.”

— Female nurse

Figure 1 shows progress made in the number of community volunteers who participated in the CSUs. By 2000, 22,672 CSUs with 48,420 volunteers served 751,771 families. Other important community groups included mother groups (Clubes de Madres), patient and family support groups, and Family Parents Associations. These groups allowed the community to feel ownership of the program and played an important role in case detection and ensuring treatment compliance.

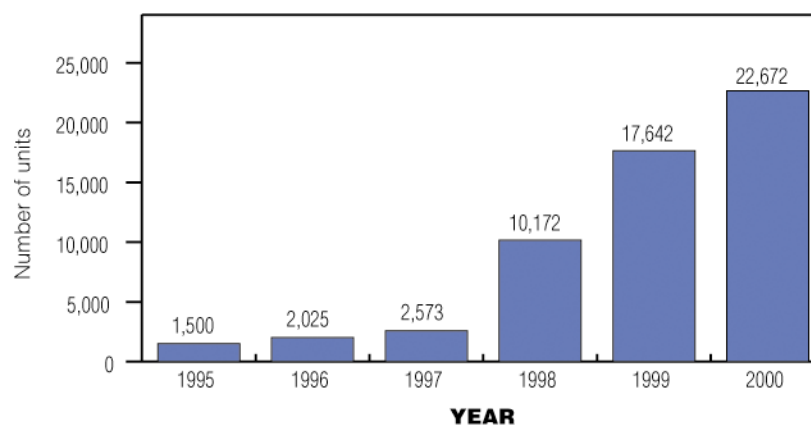
The NCTP used community-based approaches to reach high-risk groups. TB was concentrated in crowded, urban areas that were called “TB pockets” or “hot spots.” NTCP worked closely with local authorities and health clinics located in these hot spots to organize events, including theater shows, card games with questions and answers, and focused group

discussions using flipcharts to disseminate messages about TB. So-called “closed populations” with high TB prevalence — including prisoners, patients in mental institutions, retirement home dwellers, and homeless people sleeping in shelters—were also targeted for outreach. The NTCP empowered health facilities located near these groups to provide counseling and medical services.

Incentive Programs

The NTCP created several incentive programs to motivate health care workers, patients, and communities to become involved in the TB control program. These helped to create a positive environment for TB control. For example, the NTCP publicly recognized health directorates that succeeded in reaching program targets. The program published the results of different directorates and distributed them widely in an annual report that reached all health facilities. This rewarded those that succeeded in achieving global targets and encouraged other directorates to work harder. The NTCP also published program success stories and publicly recognized health directorates that created good materials.

Figure 1. Progress in developing community surveillance units, 1995-2000



Source: National Program for Control of Communicable Disease, National Program for Tuberculosis Control, Ministry of Health, Peru 2000

“Seeing our results published in the annual report and distributed all over made us see the value of our work.”

— Female physician

The program provided incentives for patients as well. Low-income patients received food as an incentive to complete treatment. Some low-income patients also received reimbursement for transportation costs to the health facility. In addition, the NTCP started a micro-credit loan program for patients to help them start a small business and leave disease and poverty behind. Some NTCP officials said that the micro-credit system was hard to manage, however, and its impact was not evaluated.

“Counseling patients and giving them food aid motivated them to finish the treatment.”

— Male physician

IMPACT

The health communication activities described here all worked together, along with the expansion of clinical and laboratory services and other programmatic components, to create an environment that supported the fight against TB, helped identify TB patients, and supported patients during treatment. The expansion of DOTS to all areas of the country provided the infrastructure necessary to assure services to all citizens. This ultimately led Peru to meet the WHO targets of 70 percent case detection and 85 percent cure. Yet there were also intermediate outcomes that are important to recognize, including:

The Peruvian government’s decision to make TB a priority of the national health program

This was a decisive turning point in the fight against TB and a result of advocacy efforts at all levels. This commitment to fighting TB gave the program leverage when approaching international donors and helped ensure participation at all political levels. Peru’s success in TB control merited international recognition. The American Association for World Health and PAHO/WHO, awarded NTCP the “Alleyene World Health Day Award” in 1997.

Increased resource allocation for TB control programs.

This outcome resulted from the government’s decision to make TB a national health priority and advocacy efforts. The NTCP also actively solicited resources from international partners.

An increase, then decline, in the number of new cases.

As expected, the number of TB cases per 100,000 people increased dramatically as the program expanded. This was a result of the expansion of DOTS as well as the communication efforts that encouraged people to get tested if they had symptoms. In the first half of the 1990s, the extensive national effort to detect cases caused TB incidence to reach 243 per 100,000. Then, due to the successful case detection and treatment efforts, the incidence rate dropped gradually to reach about 133 cases per 100,000 in the year 2000 (see Figure 2).

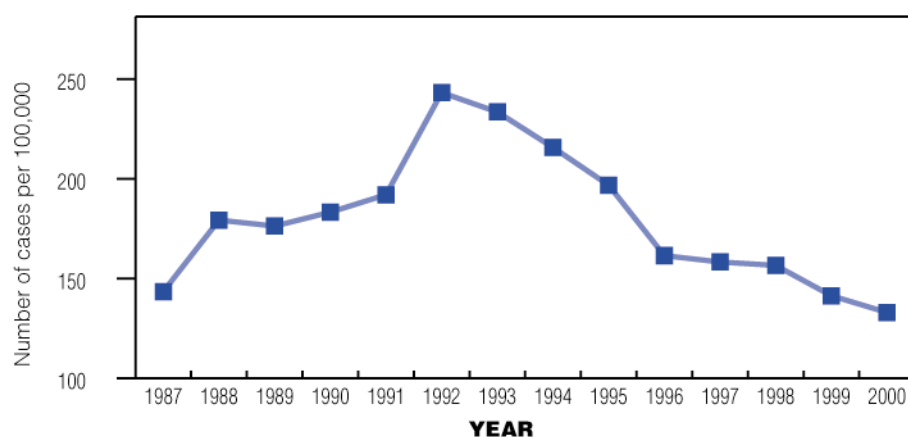
The number of patients who began, then abandoned, treatment also decreased. In the late 1980s, when only 50 percent of cases were treated, many patients discontinued treatment before completing the full course. As the comprehensive program expanded, the abandonment rate decreased from 12.1 percent in 1991 to 2.8 percent in

2000 (see Figure 3). This important trend impacts both the prevention of the disease and the rise of MDR TB.

“Face-to-face counseling greatly helped patients to complete their treatment.”

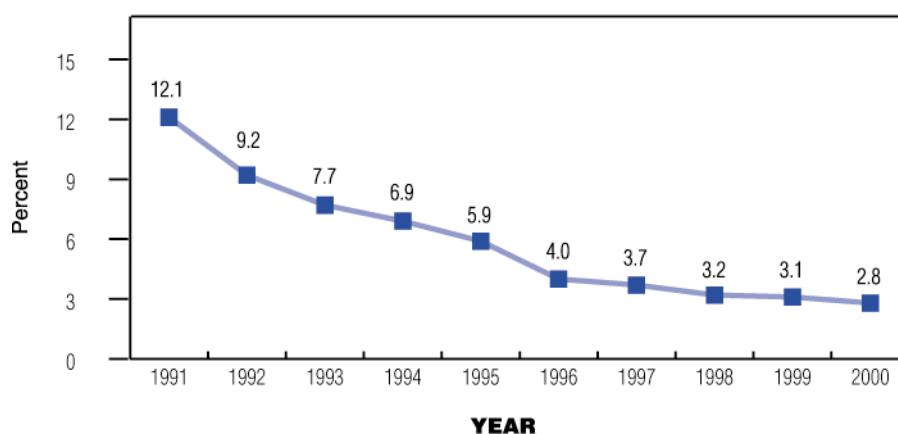
— Female nurse

Figure 2. Trend of TB Incidence in Peru, 1987-2000



Source: National Program for Control of Communicable Disease, National Program for Tuberculosis Control, Ministry of Health, Peru 2000

Figure 3. Treatment Abandonment Rate, 1991-2000



Source: National Program for Control of Communicable Disease, National Program for Tuberculosis Control, Ministry of Health, Peru 2000

Table 3. How Communication Efforts Helped in Peru's Fight Against TB

AREA OF IMPACT	ROLE OF COMMUNICATION	TOOLS	IMPACT
Gaining political commitment to TB control	- Educate national policymakers and political leaders about the health and economic benefits of TB control lead to the inclusion of TB as a national health priority. - Educate local and community level authorities to encourage them to contribute to TB control efforts. - Solicit support of international and national partners.	- Seminars and meetings - Print information—letters, fact sheets - Events around World TB Day and other occasions - Promotion of patients' rights through "The Association of TB Patients."	TB was designated a national health priority. It was given a line in the MOH budget and increased support from international donors.
Increasing case detection	- Raise public awareness about TB and create a positive environment for case detection and treatment - Reduce stigma against TB patients and correct misconceptions about TB infection - Help health workers, communities, and individuals identify TB cases - Encourage individuals to seek care from appropriate sources. - Reach the hard-to-reach populations (prisoners, urban poor, homeless)	- Formative research to determine best messages and approaches - Mass media including radio and television - Extensive distribution of print materials - Interpersonal communication and counseling training for health workers - Including the private practitioners in case detection. - Community mobilization activities including the development of Community Surveillance Units.	Peru achieved the WHO target of 70 percent case detection.
Raising treatment success and discouraging the spread of MDR TB	- Give patients hope of complete cure (TB is curable) - Encourage patients to seek treatment from appropriate sources - Provide counseling before and during treatment - Encourage patients to complete treatment even if they improve before the end of treatment - Make patients aware of possible side effects and where to seek care if present - Encourage health workers, family members, and community members to directly observe patients while taking medicine - Engage fully recovered patients in encouraging current patients to complete treatment	- Interpersonal communication and counseling training for health workers - Mass media including radio and television - Extensive distribution of print materials - Community mobilization activities - Peer education	Peru achieved the WHO target of 85 percent successful treatment. It also decreased the treatment abandonment rate from 12.1 percent to 2.8 percent between 1991 and 2000.

chapter 3 ***Implications for Other National TB Programs***



It is clear that a number of interrelated factors led to Peru's success in TB control, including political commitment to make TB control a national priority, the allocation of resources needed to extend service at no cost, support from international and national partners, and community involvement. Without an effective communication strategy, however, Peru would not have made the necessary leap to reach the global targets. In fact, Peru's story demonstrates that ensuring adequate TB drugs, diagnostic supplies, and clinical services is essential, but not sufficient to reach global targets for TB control.

Other TB programs can learn from Peru's experience. Here are some of the several lessons that can apply to other countries.

Political commitment is essential, especially when combined with increased resources.

Political commitment can increase awareness of the issue and help a program leverage additional resources. NTCP succeeded in engaging political leaders through advocacy activities such as seminars and presentations organized with international experts. It also raised awareness about the issue and used locally organized groups, such as the Association of TB Patients, to exert pressure on political leaders to address patients' needs. In addition, political commitment can help augment the contribution of international partners, local authorities, community-based organizations, the private sector, and the general public in the fight against TB.

Communication activities should be strategically timed to correspond with improvements in clinical services.

Clinical services must be in place to serve the demand generated by communication activities. If patients or potential patients are not able to receive high-quality services, including drugs, as promised, they may not return for services or complete treatment. In Peru, this preparation included training health care workers in interpersonal communication and counseling skills to help them overcome their own biases towards people with TB.

Integrate communication activities into all program activities at all levels.

Communication activities were seamlessly integrated into all of the NTCP's activities as needed. The program used advocacy to secure political commitment and involvement at all levels and to keep the issue in the national spotlight. It used mass media to educate the public, motivate them to utilize services and complete treatment. All personnel in the TB program were trained in interpersonal communication and counseling to improve relationships between providers and patients to ensure compliance and continuation with treatment. The program conducted community mobilization activities to educate the public, reduce the stigma around TB, and create a supportive environment for case detection and treatment.

Formative research can unlock key communication challenges.

Formative research, conducted before a health communication intervention is designed, allows program planners to hear — and learn — from the intended audiences. The NTCP in Peru benefited from the results of socio-anthropologic studies to

inform and guide the development of advocacy and communication activities. They found that health care workers had some of the greatest misperceptions about TB. Program planners took this finding and others into account when designing the overall communication strategy.

Communication programs are more effective when consistent messages are conveyed through a mix of mass media and interpersonal communication.

This approach helps emphasize and reinforce messages and enables the program to reach different sectors of the population, who may be more receptive to one form of communication over the other. NTCP disseminated consistent messages through national television, radio, local radio stations, print materials, billboards, community gatherings, theater shows, video spots in clinics, and home visits.

Involve the community and local health care providers, including private practitioners, in the TB control program.

Strengthening the link between the health facility and the community is essential to enhance the community's utilization of available clinical services. In Peru, this effort included recruiting community volunteers, organizing and engaging local community groups such as Community Surveillance Units and Mothers' Groups, and encouraging home visits by the health staff. The program also built the communication capabilities of local staff and volunteers. As a result, local staff designed some of the most innovative print materials. Local health care practitioners were encouraged to share their experiences treating TB with the program, and their statistics were included in the national data.



Question and Answer cards from Peru's National Tuberculosis Control Program

Create partnerships at all levels.

Everyone has a role to play in TB control. Partnerships were created at all levels of the program, from the top levels of government down to the community. At lower levels, partnerships focused on relationships between the health system and

community-based organizations to expand the reach and visibility of the program and create a supportive environment for case detection and treatment. One innovative partnership between the national program and the pharmaceutical industry helped distribute TB control materials to private practitioners.

Put some effort into reaching the hard-to-reach, especially if they have high prevalence rates.

As the program in Peru matured, program planners began to put special emphasis on reaching high-risk groups and closed populations with high TB prevalence. Because of the uneven epidemiological distribution of TB cases among the population, the Peru program determined that it was important to make a special effort to reach susceptible groups, such as the poor living in crowded urban areas. The program also focused some attention on so-called closed populations with high TB prevalence rates—such as prisoners, retirement home dwellers, patients in mental hospitals and homeless people who gather in night shelters—because of their high rates of disease.

Create a positive and encouraging culture.

The success of a national program greatly depends on the creation of an enabling environment for behavior change. Peru provides us with a dramatic example of how important this is. Before the program started, the predominant feeling among the Peru's health workers was that working in TB control was a sort of

punishment. NTCP's communication program transformed this negative feeling into one of proud achievement and competitiveness among health teams. The NTCP used low-cost incentives extensively. It published and widely disseminated the achievements of all health teams that reached annual TB targets. These teams were recognized in public gatherings. Also, the locality that designed the best communication poster received an award. In addition, the NTCP motivated poor patients to continue treatment through food incentives and the opportunity to receive small loans.

Simple and consistent messages can help the public recognize TB cases

The slogan “*If you cough for more than 15 days, you should go to the health center*” became known throughout Peru. It helped the public recognize TB symptoms, and encouraged them to seek action or encourage others to do so. The slogan “*Treatment of one is prevention for all*” motivated the community to become involved with the program. In addition, messages to the public always stressed that clinical services were free to encourage low-income people to go for care.

References

- Basic Health and Nutrition Project. Socio-medical Study on Tuberculosis. Cusco. Lima, 1998.
- Basic Health and Nutrition Project. Socio-medical Study on Tuberculosis. Lima Norte. Lima, 1998.
- Health Directorate, East Lima. Information, Education and Communication Plan with Health Personnel for the Improvement of the Education Counseling on Tuberculosis in Three Priority Facilities of the Ate-Vitarte district. Lima, 2003.
- KNCV, MSH & USAID. Europe and Eurasia Regional Tuberculosis Evaluation. Regional Report. 65 pp.
- Ministry of Health, National Program for Tuberculosis Control. Tuberculosis in Peru. Report 1999. Lima, 2000.
- Ministry of Health. Vigia Project. Economic Impact of Tuberculosis in Peru. Lima, 2001.
- Ministry of Health, National Program for Tuberculosis Control. Tuberculosis in Peru. Report 1996. Lima, 1997.
- Ministry of Health. Vigia Project. Living With Tuberculosis. Socio-anthropologic Study of Tuberculosis in Two High-Risk Areas in Lima: San Cosme and El Agustino. Lima, 2000.
- Ministry of Health, National Program for Tuberculosis Control. Tuberculosis in Peru. Control Program Year 1994. Lima, 1995.
- Ministry of health, National Program for the Control of Communicable Diseases. Tuberculosis Control. Update of the Doctrine, Norms and Procedures for Tuberculosis Control in Peru. Lima, 2001.
- Ministry of Health, National Program for Tuberculosis Control. Tuberculosis in Peru. Control Program Year 1993. Lima, 1994.
- Ministry of Health, National Program for Tuberculosis Control. National Workshop and Seminar: Evaluation of the Program for Tuberculosis Control. Year 1991-Perú. III Subregional Andean Seminar for Evaluation and Control of Tuberculosis. Lima, 1992.
- Ministry of Health, National Program for Tuberculosis Control. Tuberculosis in Peru. Report 1995 Lima, 1996.
- Ministry of Health, National Program for Tuberculosis Control. Tuberculosis in Peru. Report 1997. Lima, 1998.
- Ministry of Health, National Program for Tuberculosis Control. Tuberculosis in Peru. Report 1998. Lima, 1999.
- Ministry of Health, National Program for Tuberculosis Control. Tuberculosis in Peru. Report 2000. Lima, 2001.
- Ministry of Health. General Directorate for Peoples Health. Nacional Program for Tuberculosis Control Headquarters. Prevalent and Annual Risk for Tuberculosis Infection in Students of the Lima - Callao and Provinces Schools. Report Peru 1997-1998.
- National Institute of Health. Evaluation of Nutritional Impact of the Food and Nutrition Program for Tuberculosis Ambulatory Patient and Family. Lima, 2002.
- Rosenberg J. The Effect of Stigma on the Experience of Illness and Treatment Outcome for Patients with Multidrug-Resistant Tuberculosis in Carabayllo – Lima, Peru. Thesis presented to the Department of Anthropology. Harvard, Massachusetts. March, 2003.
- Singhal A, Rogers EM. Combating AIDS. Communication Strategies in Action. Sage Publications. California, USA. 2003.

- Singhal A, Cody MJ, Rogers EM, Sabido M. Entertainment-Education and Social Change. History, Research and Practice. Lawrence Erlbaum Associates, Publishers. New Jersey, USA. 2004.
- Suárez PG, Watt CJ, Alarcón E, Portocarrero J, Zavala D, Canales R. et al. The Dynamics of Tuberculosis in Response to 10 years of Intensive Control Effort in Peru. *Journal of Infectious Diseases* 2001; 184:472-8.
- Vásquez-Campos L, Asencios-Solís L, Leo-Hurtado E, Quispe-Torres N, Salazar-Lindo E, Bayona J, Becerra MC. Drug resistance trends among previously treated tuberculosis patients in a national registry in Peru, 1994–2001. *Int J Tuberc Lung Dis* 2004;8(4): 465-72.
- World Health Organization. Adherence to Long-Term Therapies. Evidence for Action. Ginebra, 2003.
- Zárate H. Determinant Factors for Abandonment of Treatment for Pulmonary Tuberculosis. Thesis toward receiving the degree of doctor and surgeon. “Alberto Hurtado” Medical School. Universidad Peruana Cayetano Heredia. Lima, 1999.



The Health Communication Partnership

Based at:



Center for Communication Programs:

In partnership with:



Academy for Educational Development



Save the Children



*Tulane University's School of Public Health
and Tropical Medicine*