

# The Global Fund and Tuberculosis in Nicaragua

## Building Sustainable Capacity?

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### ABSTRACT

**Objective:** The purpose of the study was to explore and provide feedback on local stakeholders' experiences with the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) as it related to capacity building for tuberculosis (TB) services in Nicaragua.

**Methods:** An ethnomethodological approach was used to capture the experiences of three different groups: service providers, service recipients, and decision-makers. Data collection involved reviewing secondary texts and records, participant observation, and in-depth interviews and focus groups in both rural and urban municipalities.

**Results:** Stakeholders felt that Nicaragua's Global Fund project improved TB control, built human resource capacity and strengthened community involvement in TB programming; however, they noted several contextual and structural threats to sustainable capacity development. The nature of the GFATM's performance-based evaluation de-emphasized qualitative assessment and, at times, created pressure to meet numeric targets at the risk of decreasing quality. Contextual challenges often determined or limited the potential sustainability of activities. Two examples (training volunteer health workers and establishing TB Clubs) from the broader study are offered here to highlight these challenges from health systems and community perspectives.

**Conclusions:** Current approaches to GFATM evaluation and accountability may compromise its positive impacts on capacity building in Nicaragua. Greater consideration needs to be given to ensuring more comprehensive evaluation of project implementation.

**Key words:** Nicaragua; health care sector; tuberculosis; international cooperation

*La traduction du résumé se trouve à la fin de l'article.*

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As globalization continues to evolve, the relationships between global and local contexts are becoming increasingly complex. Global health research must respond by developing new ways of understanding the interactions between global-level decisions and locally experienced impacts. This study was conceived to improve understanding of such connections using the tuberculosis (TB) component of Nicaragua's Global Fund Project (GFP), supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), as the specific case. This paper highlights two examples from a broader in-depth analysis of the GFP in Nicaragua (to be discussed in future publications). Training volunteer health workers (known as *brigadistas*) in community DOTS\* and establishing TB Clubs are offered as examples to highlight potential for and threats to building sustainable program capacity. Discussion of these examples is preceded by a brief background of the context and followed by a discussion of the study's methods. The paper concludes by arguing for changes to the project evaluation structure used by the GFATM. The researcher's familiarity with the context, pre-existing relationships between local partners and the University of Saskatchewan, and, most importantly, the relevance of the study to local stakeholders made Nicaragua an appropriate setting for the study.

### Background

The GFATM was created in 2001 under mounting pressure on the G8† to respond to the HIV/AIDS crisis in Africa,<sup>1</sup> concern over the threat of infectious diseases to global security,<sup>2,3</sup> the political agenda of the Millennium Development Goals, and advocacy efforts of international leaders.<sup>4</sup> It was intended to act as a new financing instrument to filter funds from high income countries to lower-middle income

\* The DOTS strategy involves five core activities: access to quality-assured TB sputum microscopy, standard short-course chemotherapy to all confirmed cases of TB, uninterrupted supply of quality-assured drugs, recording and reporting of each patient and overall program performance, and sustained political commitment (From: WHO. DOTS. 2005 Available online at: <http://www.who.int/tb/dots/whatisdots/en/print.html> (Accessed February 27, 2005).)

† The G8, or Group of Eight, is an informal group of eight countries (Canada, Japan, the United States, Germany, the United Kingdom, Italy, France and Russia) that meets annually to discuss broad economic and foreign policy issues. More information can be found at: <http://www.g8.gc.ca/common/faq-en.asp> (Accessed September 15, 2006).

countries affected by HIV/AIDS, TB and malaria.<sup>5</sup> The GFATM offered a new approach to delivering aid – it encouraged country ownership of projects, maintained a small bureaucracy, promoted transparency, and was performance-based.<sup>6</sup> Although a number of studies explored local impacts of the GFATM in other areas of the world,<sup>7-10</sup> few considered Latin America.

In October 2003, Nicaragua signed a second-round GFATM grant<sup>11</sup> with the goal of reducing incidence and mortality from TB in seven prioritized regions.<sup>12</sup> Nicaragua faced many challenges in achieving progress toward these goals, among them poverty, mass un- and under-employment, a post-conflict social environment, erosion of the community-based movement in primary health care, and the long-term effects of extreme natural disasters in a resource-scarce country.<sup>13,14</sup> All of these challenges contributed to a political and economic context that was intricately tied to the country's potential progress in meeting their GFP goals and objectives.

The timing of the study period coincided with the last six months of the first phase of funding, offering an opportunity to explore local experiences from the time of proposal development through to performance-based evaluation. The TB component of the grant was appropriate because, unlike the malaria and HIV/AIDS components, the only subrecipient of funds was the Ministry of Health's National TB Control Program (NTP), a successful program that had been providing services and support in TB control since the 1980s.<sup>15</sup> This component of the grant was therefore introduced into an organized, stable program with well-established norms, infrastructure and patterns of interaction. The research question driving this study was: "How do those affected by the GFATM (service providers, service recipients, and decision-makers) experience the GFATM's impact at a local level?"

## METHODS

A critical population health perspective<sup>16</sup> acknowledging the complex interaction of multiple determinants of population health guided both the research questions and analytical approach. From this perspective, the GFATM became a window through which these interactions could be examined at mul-

tiples levels. The study's intent to explore a time-bound experience within a specific setting and its emphasis on deep contextualization lent itself well to an ethnomethodological case-study design. Quality and rigour in study design were ensured by incorporating strategies (prolonged engagement, triangulation, member checking, etc.) proposed by Guba.<sup>17</sup>

Ethnomethodology (EM) offered a conceptual framework for understanding how a particular structure, the GFATM, could be understood through an examination of local experiences. EM allowed for exploring experiences of people connected to the NTP (service providers, service recipients, or decision-makers) without requiring participants to have direct knowledge of the GFATM or its policies.<sup>18</sup> Data collection included reviewing historical texts and secondary data, analyses of academic and unpublished literature, participant observation in a range of clinical and administrative settings, semi-structured and in-depth interviews with 19 participants, and focus groups with 6 additional participants. Participants included persons affected by TB (PATB) (individuals receiving treatment for TB or their family members), *brigadistas*, front-line health workers, regional and national administrative staff within the NTP, and individuals working at a national level in support or advisory roles for the NTP or GFATM.

The study was conducted entirely in Spanish, with translation of quotes into English occurring at the final stages of analysis. The study was approved by the Research Ethics Boards at both the University of Saskatchewan and Nicaragua's Ministry of Health. Cultural competency was addressed following the framework for culturally competent scholarship offered by Mileis.<sup>19</sup> Analysis followed a cyclical, continuous process that began with data collection.<sup>20</sup> Study findings were shared with stakeholders and study participants in Nicaragua following analysis for both feedback and reciprocation.

## RESULTS/DISCUSSION

The following examples emerged from the iterative process of analysis and include data from participant observation, interviews and focus groups. Participants in this study identified several ways in which the

GFP contributed to building capacity within the NTP; for example, by enhancing capacity among health workers, creating greater community awareness of TB, and improving communication at local, regional and national levels. Participants, however, frequently expressed concern over the potential for program sustainability. This paper offers two examples from the broader analysis to demonstrate the intersection of successful capacity building and threatened sustainability: training *brigadistas* in community DOTS and establishing TB Clubs. The former was an objective outlined in Nicaragua's GFP and therefore a component of the ongoing performance evaluation framework. Establishing TB Clubs, while also part of the GFP, was not articulated as a key program objective.\*

### Example one: Training brigadistas

Strengthening community participation in the application of the DOTS strategy by training *brigadistas* in community DOTS was the first main program objective for the TB component of Nicaragua's GFATM grant.<sup>11</sup> This objective was evaluated by reporting a) percentage of health units implementing training for and b) number of *brigadistas* trained in community DOTS. According to the first phase evaluation of the grant, the project performed at 211% and 230% on these indicators, respectively (i.e., surpassing its target by more than twofold). By the end of this phase, 19 rather than the proposed 9 health units were delivering community DOTS, and 2,809 instead of the projected 1,220 *brigadistas* were trained in the community DOTS strategy.<sup>21</sup> At first glance, this objective was met with astounding success, representing tremendous capacity building within Nicaragua's health systems. Certainly, study participants felt that capacity building among *brigadistas* was a major success of the GFP within prioritized health regions.

Expanding TB control activities to include *brigadista* training, however, occurred within a complex historical context. *Brigadistas* were considered to be a key link between communities and the NTP because they provided information and community education throughout the country and, in rural and remote areas,

\* For complete details on the evaluation framework included in the grant agreement, see: [http://www.theglobalfund.org/search/docs/2NIC\\_T\\_181\\_194\\_ga.pdf](http://www.theglobalfund.org/search/docs/2NIC_T_181_194_ga.pdf) (Accessed June 15, 2005).

were often the only accessible health personnel. Historically, they played an integral role in a model of health care delivery that emerged from the wave of activism that spurred the expansion of community-based, comprehensive primary health care in revolutionary Nicaragua. This model was foundational to dramatic improvements in health and wellness in Nicaragua during the 1980s. In 1990, following a change in government and the end of the counter-revolutionary war, neoliberal economic reforms were introduced and selective primary health care (targeted, disease-focused interventions) became the dominant model. Economic reforms led to reductions in public investment in health and social services, causing successive Nicaraguan governments to rely on *brigadistas* to deliver services in rural and remote settings. This reliance, however, drew upon a population that no longer shared the same social vision and commitment to change as was seen in the early 1980s.<sup>22-25</sup> In the face of this contextual shift, study participants considered capacity building among *brigadistas* to be an ongoing challenge. The lack of prioritization of the TB control program within the broader public health system, limited resources and time, and participant perceptions of being unacknowledged for work further complicated the potential for sustainability.

These challenges were highlighted during participant observation at several community clinics. At a community DOTS training event attended by 12 *brigadistas*, participants expressed appreciation for the opportunity to learn how to recognize and respond to symptoms of TB but were concerned over the lack of consistency in training. They worried that they would not receive regular follow-up training or educational materials on community DOTS, and felt that opportunities to learn in a clinical setting were unlikely. In fact, in this particular training session, the only materials provided were a pencil and small notebook. The National TB Control Guidelines were not available for the *brigadistas* or for the nurses providing the training. Additionally, many of the *brigadistas* felt unrecognized for their work. During a training activity, one *brigadista* stated, “We don’t even have the basics – we don’t even have any government issued identification to show the people we pro-

vide care to.” The pattern of inconsistent training with little practical application, scarce provision of resources, and under-acknowledgement of the role that *brigadistas* play in providing health services in the country all represent real threats to the sustainability of the capacity-building success.

### Example two: TB Clubs

TB Clubs demonstrated success in reducing stigma and improving access to case detection and treatment in Ethiopia.<sup>26,27</sup> Such clubs were proposed as a key tool for addressing social stigma against TB in Nicaragua.<sup>28</sup> Almost all participants considered the development of community networks through TB Clubs to be a particular advantage of the GFP for raising community awareness and enhancing TB control. Participants considered TB Clubs an effective tool for creating networks for improving community education, initiating community-based recruitment of symptomatics for testing, and reducing stigma and discrimination against PATB. When interviewed, one participant described the networks as creating community-based TB prevention:

“...they [the patients] are going to be spokespersons for the teaching that we’re doing...our strength is in this network...the community network. That is the most important thing to do together with us [nurses]—to strengthen this network for prevention and promotion...”\*

Particularly in rural or remote settings, creating such networks offered a remarkably simple and cost-effective strategy for strengthening TB control in Nicaragua; but some participants doubted the sustainability of the recruitment model used to establish and maintain the TB Clubs.

The GFP provided funding through the regional health authority to initiate TB Clubs and offered lunch and other small incentives for PATB to meet periodically. The establishment and maintenance of TB Clubs varied substantially among different regions and health centres. Some participants, however, felt that providing funding for the TB Clubs was counterproductive because it established an unsustainable precedent of incentives for participation. Additionally, participants felt the quality

\* Translation into English was done to fulfill the degree requirements of an English speaking university. All original Spanish quotes are available upon request.

and effectiveness of the networks established through the TB Clubs depended most heavily on the leadership and initiative of the local clinics’ nurses. In some TB Clubs, PATB felt a strong sense of community support; in others, PATB expressed feelings of intimidation and disconnection. The reporting and evaluation to the GFATM for these activities was limited to a count of PATB attending. As a result, TB Clubs experiencing highly successful community capacity development remained unrecognized and unsupported.

### Compounding challenges

Other structural challenges compounded the difficulties in sustaining effective TB Clubs and building capacity among *brigadistas*. Most participants expressed frustration with the historical lack of prioritization of the NTP within the country. One participant stated, “even the health authorities don’t pay attention to tuberculosis...it’s one of the weaknesses we have within the system.” Several participants felt that the GFP made the NTP more prominent in the country, implying that the increased funding and high profile of the GFATM raised the status of the program. Concern remained, however, that other policy and disease priorities would continue to take precedence in the public health system once the grant’s term was complete.

Participants identified additional challenges in the nature and structure of the GFP itself, which will be elaborated on in future publications. The most relevant to the examples offered here, however, were the cascading effects of disbursement delays. These delays often left administrators at local and regional levels with less than a week to complete activities that were scheduled for completion over a four-month period. Because the health centres delivering training to *brigadistas* or establishing TB Clubs were required to report indicators in the specified time frame, funds were often forced into expenditure at the sacrifice of quality. This cycle was not captured by the evaluation of the grant because of the nature of the indicators defined within the GFATM’s performance-based evaluation.

### CONCLUSIONS

The five-year GFP in Nicaragua offers potential for building meaningful capacity

at a local level in many ways; however, this potential is threatened because of contextual challenges, dependency on local leadership without investment in leadership development, and gaps in evaluation that do not address quality. As one interview participant articulated,

“...this investment is very important but it has to be sustainable ...if you only talk about this for one day, one month later the people forget about it. We’re talking about the sustainability of a large project. If, after five years, it falls to a minimal level it could be that it loses much of its strength, but the local personnel continue to create awareness among the population, that’s good, much depends on this commitment, right – at a local level...”

Although the GFATM’s use of evaluative indicators was intended to ensure transparency and keep funded programs ‘on track’ and producing results, the quantitative format resulted in a focus on meeting numerical targets that did not necessarily reflect the achievement of ‘results’. As was demonstrated by the examples above, achieving count-based targets can create an opportunity for specious validation of ‘success’ while diminishing the space for acknowledging other significant gains and progress. The pressure to produce performance indicators creates a disincentive to invest in more qualitative forms of program assessment. The GFATM’s emphasis on narrowly defined quantitative measures risks rewarding the achievement of targets at the expense of failing to assess the quality of the education and training; yet it is the quality of these programs that is likely to facilitate the local commitment and motivation needed for long-term sustainability. Changes to the nature and structure of evaluation are needed in order to identify strengths of program activities, particularly to ensure that community DOTS and TB Clubs become effective networks for improving TB control, enhancing community education and awareness and addressing issues of stigma and discrimination.

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## RÉSUMÉ

**Objectif :** Nous avons voulu analyser et rendre compte de l’expérience vécue par les intervenants locaux à l’égard du renforcement des capacités des services de lutte contre la tuberculose au Nicaragua dans le cadre d’un projet du Fonds mondial de lutte contre le sida, la tuberculose et le paludisme.

**Méthode :** Au moyen d’une approche ethnométhodologique, nous avons recueilli les expériences de trois groupes : les fournisseurs de services, les bénéficiaires de services et les décideurs. Pour recueillir les données, nous avons examiné des documents écrits et des relevés préexistants, observé des participants et tenu des entretiens en profondeur et des groupes de discussion dans des municipalités rurales et urbaines.

**Résultats :** Selon les intervenants, le projet du Fonds mondial au Nicaragua a amélioré la prophylaxie de la tuberculose et renforcé les capacités des ressources humaines et la participation communautaire aux programmes de lutte contre la tuberculose; plusieurs menaces contextuelles et structurelles à un renforcement durable des capacités nous ont cependant été signalées. Comme l’évaluation du Fonds mondial était axée sur le rendement, l’aspect qualitatif était moins accentué, ce qui a parfois poussé les intervenants à respecter les objectifs chiffrés au détriment de qualité. Les difficultés contextuelles ont souvent déterminé ou limité la durabilité potentielle des activités. Nous présentons ici deux exemples (la formation d’agents de santé bénévoles et la fondation de clubs de patients tuberculeux) tirés de l’étude complète pour faire ressortir ces difficultés du point de vue des systèmes de santé et des municipalités.

**Conclusion :** Les méthodes actuelles d’évaluation et de responsabilisation du Fonds mondial pourraient compromettre les effets positifs de son projet sur le renforcement des capacités au Nicaragua. Il faudrait étudier de plus près les moyens d’assurer une évaluation plus complète de la mise en œuvre du projet.

**Mots clés :** Nicaragua; secteur des soins de santé; tuberculose; coopération internationale