

Training in epidemiology and health surveillance: Tripartite Cooperation between Brazil, Cuba, and Haiti

Stela Nazareth Meneghel

Professor and researcher, Programa de Pós-graduação
em Saúde Coletiva (PPGCol)/Universidade Federal
do Rio Grande do Sul (UFRGS).
Rua São Manoel, 903
90620-110 – Porto Alegre – RS – Brazil
stelameneghel@gmail.com

Joyce Mendes de Andrade Schramm

Researcher, Escola Nacional de Saúde Pública
Sergio Arouca/Fiocruz.
Rua Leopoldo Bulhões, 1480/8º andar
21041-210 – Rio de Janeiro – RJ – Brazil
joyce.mendes.andrade@gmail.com

Alcindo Antônio Ferla

Professor and researcher, PPGCol/UFRGS.
Rua São Manoel, 903
90620-110 – Porto Alegre – RS – Brazil
ferlaalcindo@gmail.com

Ricardo Burg Ceccim

Professor and researcher, PPGCol/UFRGS.
Rua Antônio Carlos Guimarães, 155
90050-382 – Porto Alegre – RS – Brazil
burg.ceccim@ufrgs.br

Received for publication in May 2015.

Approved for publication in August 2015.

Translated by Tracy Miyake.

<http://dx.doi.org/10.1590/S0104-59702016000200009>

MENEGHEL, Stela Nazareth et al.
Training in epidemiology and health
surveillance: Tripartite cooperation
between Brazil, Cuba, and Haiti. *História,
Ciências, Saúde – Manguinhos*, Rio de
Janeiro. Available at: [http://www.scielo.
br/hcsm](http://www.scielo.br/hcsm).

Abstract

The article reports a training course which was a cooperative effort by Brazil, Cuba, and Haiti and was intended to strengthen the operational capacity of Haitian professionals in epidemiology, surveillance, and health situation analysis. This training course included forty professionals from Haiti's Ministry of Public Health and Population who work in the country's ten health departments, and linked epidemiological knowledge, public health, and educational action based on issues related to this work. This training permitted data on the epidemiological condition of the country to be collected and was a true laboratory for participative methodologies in epidemiological and social research.

Keywords: Haiti; training in epidemiology; health surveillance; permanent education in health.

*The Haytians shall hence forward be known
only by the generic appellation of Blacks.*

(Article 14 of the Haitian Constitution
of May 20, 1805; see Haiti, s.d.)

This article presents a training experience involving epidemiology, health surveillance, and health situation analysis in the setting of an international cooperative effort involving Brazil, Cuba, and Haiti. This tripartite project arose based on the successful experiences of the Brazilian Unified Health System (Sistema Único de Saúde, SUS) and the Cuban health system, as well as on the contributions that Cuban health professionals have made to public health over the past 14 years. Considering the existing multilateral cooperative relationships between the three countries, their governments, in hopes of meeting Haiti's needs in the area of health signed a memorandum of understanding in March 2010, agreeing to combine their efforts and to propose actions to strengthen Haiti's public health system (Pessoa et al., 2013).

This training course ran from 2012 to 2015, and its main objective was to provide support to Haiti's Ministry of Public Health and Population (MSPP) in activities related to epidemiology and public health. The course was intended for health workers responsible for epidemiological surveillance and health information systems in the country's ten health departments; it was attended by forty professionals.

When the course was organized, it was understood that training in epidemiology would be a strategic step in conducting health situation analysis in a territory, which was identified as an important function to be carried out by the students and extremely relevant for MSPP to support health planning activities. In Haiti, epidemiological surveillance is coordinated by the central level of MSPP, where qualified health workers are found, most notably professionals trained in epidemiological surveillance and management of the service system. However, the country had been facing difficulties at regional and local levels related to system operability, notification and investigation of diseases, laboratory support, and maintenance of information systems; there are no registry systems or continuous information systems for vital statistics, which makes compiling health statistics impossible. These difficulties increased significantly after the 2010 earthquake, which led to the formation of the tripartite cooperation project that is the focus of this report.

Historically, MSPP has had few resources and has needed to depend on support from the many non-governmental organizations (NGOs) that are active in the country; so many are present that Haiti has been called "the republic of NGOs" (Casimir, Dubois, 2010). There are problems related to access and communication in producing health information which create an impediment to epidemiological surveillance. Many of the NGOs and international institutions have their own databases and do not always share their data with the national epidemiological surveillance service. This situation motivated us to present an "intervention course" targeting the professionals who work in the country's health departments. The idea was to simultaneously conduct a training, help to decentralize surveillance activities, and stimulate critical epidemiological thinking in Haiti's health regions.

Thus began the process of collectively building a course, a process that involved a set of actors representing Brazilian institutions (Fundação Oswaldo Cruz and the Universidade

Federal do Rio Grande do Sul) and representatives from MSPP and the Brigadas Médicas Cubanas (Cuban Medical Brigades). The process included defining objectives, choosing significant topics of the Haitian health system, preparing the educational project, and selecting critical and participative methodologies, as well as creating the texts and support materials.

The course was structured along four main lines, and the content and methodology was drawn from workshops involving the teams from the three participating countries. Topics related to public health and epidemiology were included, as well as a transversal pedagogical line which guided the project, relying on action and on pedagogical agency for critical and participative intervention. Each of these main lines of content comprised thematic cores corresponding to knowledge and practices in the field of epidemiology and health surveillance, which were expanded through the discussion of public health, politicizing the topics which were addressed.

The intervention course stimulated participation and involvement by the workers enrolled in the course, offering readings, exercises, and projects that could make concrete contributions to everyday health services in Haiti. During this process, a large and diverse body of reflections, field investigations, and texts was produced and will be compiled into a book that is intended to record this cooperation between countries. The intercultural interaction between the international participants was intense, and brought literature, cinema, the arts, language and the political, cultural, and human history of the cooperating nations into the scenario of the course, along with texts and narratives produced by each of the three countries.

In this article, we present the didactic and pedagogical presuppositions of the course as well as a critical analysis of some significant aspects of the process. In the final section, we present the critical points and limitations along with the potencies and the results of this project, to the extent that it contributes to the international cooperation which modern worldwide strategies demand.

A pedagogy of potency

Traditional teaching experiences within health monitoring are based on transmitting the knowledge accumulated by epidemiology and public health. We took on the challenge of organizing a course that lay far beyond this design, one that was capable of activating the ownership of knowledge and practices present in reality and expanding the potency of and the desire for inventive action, recreator of the institutional presence as a commitment to the collective production of life. We wanted to develop institutional capacities for shared construction of knowledge as the object of this collective learning (Ferla, Ceccim, Dall Alba, 2012), stimulating these professionals to work as active agents in inventing the realities and activities of health surveillance, as participants in a network of institutions and services equipped with the resources needed to analyze the health situation in the country. This epidemiological training was based on the assumptions of permanent education in health (Ceccim, Ferla, 2008), with everyday issues in the services serving as guides to learning. We invested in constructing protagonists through actions throughout the training process, making the educational commitment to identify and face the problems that occur in the daily reality of the health services. This model selects everyday working practices to guide learning,

linking didactic and pedagogical approaches not only to real problems and experiences, but especially to the emergence of restlessness and yearning for knowledge related to change, to the movement of knowledge, and to creative exchanges. This breaks with the “banking” model of transmitting knowledge or technical and formal understanding (Freire, 1992) and instead focuses on questioning, on critical reflection, on the dilemmas of thought and practices in producing subjectivity. It also questions the meanings perceived by the workers who are involved in constructing healthcare practices, along with the composition of knowledge and practices based on reality and the network of knowledge exchanges that is involved in and flows out of unusual creative networks. According to the syllabus, the training process should recognize the participants as involved with the production of projects by society as well as collectives based on democracy, solidarity, and plurality (Brasil, 2012).

In this project, we created didactic and pedagogical approaches linked to the world of work and to the everyday problems of the health system. We developed, with the help of many hands, texts and exercises based on issues that are common in the Haitian reality, using elements of culture and society as well as epidemiological data and situation analysis. We provided a wide range of theoretical and practical activities, in the classroom and remotely, always taking care to firmly connect these activities to the country’s health situation. These activities were complemented with field interventions and operational surveys to generate data and to broaden the understanding of Haiti’s epidemiological profile. The student-workers sought out and organized data, interviewed key players, listened to people in focus groups, observed care and workflows, drafted articles and epidemiological reports, and intensely debated the different health situations within the scenarios of the health departments, considering cooperative solutions that were appropriate for the reality on the ground. No longer mere notifiers and collectors of data, they were able to model, implement, and analyze field studies, and understood that they themselves were able to produce and analyze data.

The themes that comprised the program included content, exercises, and practices which encompassed a wide range of epidemiological skills considered essential for graduate students in epidemiology, even though this training did not constitute a *stricto sensu* graduate course (Keyes, Galea, 2014; Huber, Fennie, Patterson, 2015). Those competencies comprised drafting critical reviews of the literature, identifying and using databases and information systems, and conducting epidemiological analysis of morbidity and mortality data, developing and implementing epidemiological investigations and field research, and did not omit ethical aspects or the composition of summaries and critical reports to support health planning and management. The history of health and epidemics in Haiti was discussed, along with health care models, demographic, social and health indicators, health information systems, epidemiology and gender, surveillance, and health situation analysis and evaluation, combined with Latin American thinking about social and critical epidemiology (Breilh, 2006).

The project provided supporting technology, so that learning not only trained each student individually, but strengthened the health surveillance system; in other words, the teaching strategy was used as a tool to increase epidemiological analysis of the country, forming an alliance between the training and the project, in which learning was connected to ethics and was operationally linked to the qualification of services. While it constructed institutional capacity and developed models and patterns for responses, the program of

permanent education in health produced on-the-job learning, in direct contact with the health conditions of the regions and the organization and functioning of the health system. In this way, the institutional experiences of the three cooperating countries as well as the specific knowledge of the subject areas constituted fundamental inputs to learning, and were constantly rewritten by topics related to the project. In this interface, potential emerged from the very “world of work” that creatively reinvented and reconfigured it, producing “border crossings” related to the limits and problems identified in daily life (Ceccim, Ferla, 2008).

The training course in epidemiology was the scene of intense discussions, cultural exchanges, important debates, historical analysis, and the development and implementation of practices and field investigations, too much to be analyzed in a single article. Consequently, here we present two situations occurring during the course that we considered significant, and which contain methodology that can be used in other health education contexts. One of these situations occurred during the first thematic core, when we challenged the group to develop time lines containing important health events in the country’s history in order to recover the memory of Haitian public health. The second situation was an investigation or study-activity conducted in the context of the training, which focused on the mortality information system.

Bringing together stories and memories, epidemics and revolutions, Brazilians, Haitians and Cubans

The events chosen to begin the course retold Haiti’s history, a history we wanted to explore and emphasize without presuming to teach it to the Haitians. Two artistic compositions helped us in this effort: one was Gillo Pontecorvo’s film *Queimada* (1969), which was a metaphor for the slave revolution in the Caribbean and an allusion to Haiti’s history and the iniquities imposed by European colonialism. This film was used as a tool, stemming from the desire to share our concern with researching and studying the social, political, and health-related history of the country with the group of Haitian professionals in a reciprocal manner, and not just transfer packages of techniques and tools for epidemiology and statistics. The film helped to leverage discussion on the historic character of health and disease portrayed by social cinema and by Pontecorvo’s accusation in *Queimada*, which depicts the situation in which slaves were exploited in the eighteenth-century Caribbean (Meneghel et al., 2012).

Another material used as a “passport” was the book *El reino de este mundo* by Alejo Carpentier (1985). His poetic language facilitated the breakdown of linguistic and cultural barriers through an understanding of the multidimensionality of “founding narratives.” Mackandal was a mythical and legendary hero of the Haitian revolution who had the power to transform into any animal (butterfly, snake, lizard), and showed that the oppressed would resist and not just survive, inventing ploys to confuse and disturb the enemy. These elements of culture and the arts, as well as affective bonds and the re-singularization of history resulting from metaphorical identification with Haitian beliefs and religion, mixing technical and epidemiological knowledge, helped us to overcome difficulties and misunderstandings and to fill in gaps and barriers, using “border crossings” (Ceccim, Ferla, 2008) in an example of multicultural South-South cooperation.

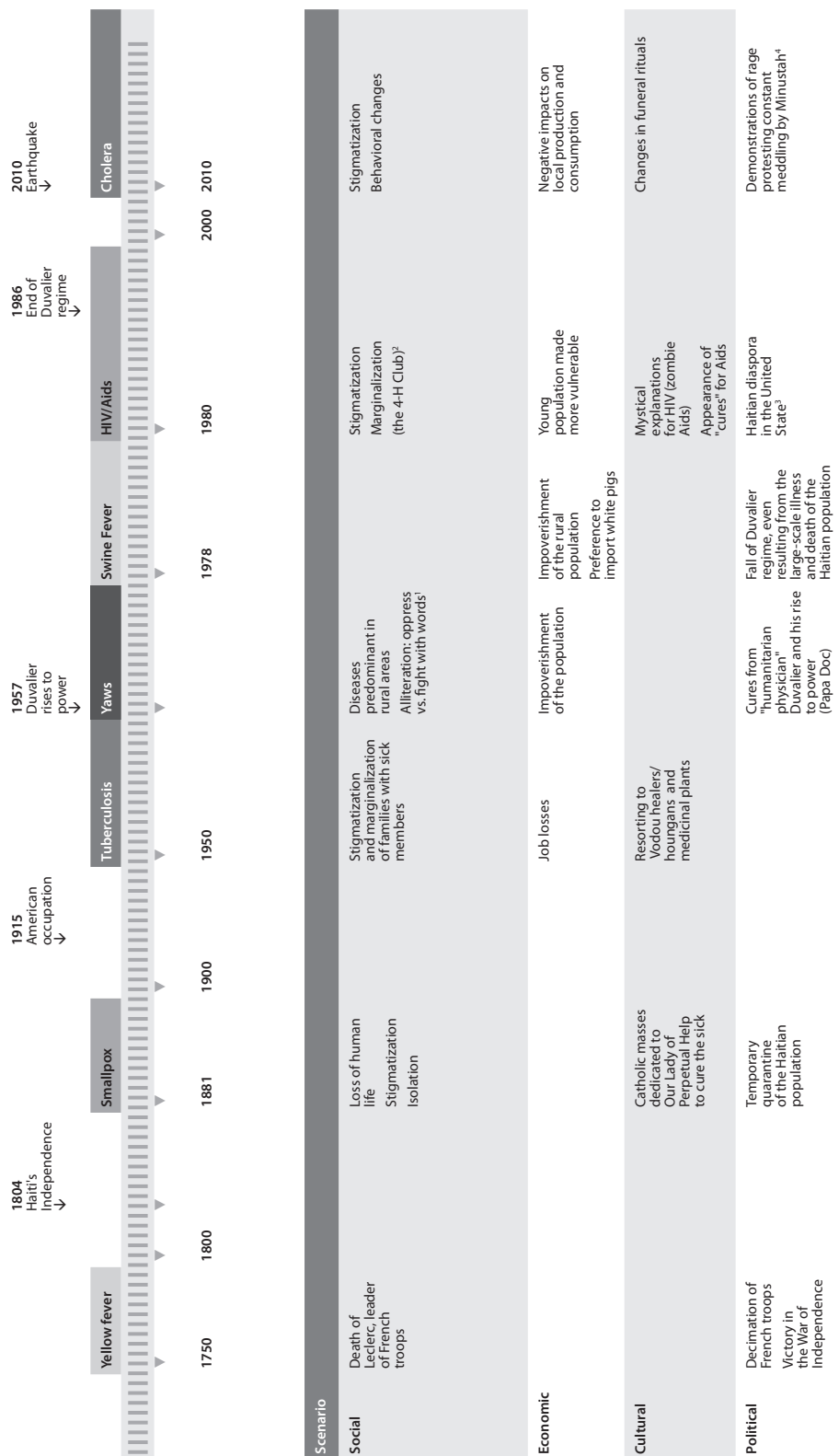
The proposal was to conduct a training in epidemiology that would not only transmit information (in the Freirean sense) but would also involve history, health practice in Brazil, Cuba, and Haiti, public health, and the invention of realities and worlds. We sought to recover health events from Haiti's history by creating the timelines that connected the history of epidemics with economic, historical, social, and political events, contributing to the memory of public health in the country whenever possible and bringing unregistered events back from the margins, events that existed only in the reports of some health professionals or the oral history of the population, in an effort to reaffirm memory and local culture. Figure 1 shows the timeline that guided the discussion of epidemics which marked Haitian public health.

The first health event recorded on the timeline was the yellow fever epidemic that struck Haiti during the War of Independence, killing general Leclerc and much of the French Army. Discussing an epidemic from a historical and social point of view, and avoiding traditional analyses focused on biology, meant recalling the details of the War of Independence, the first successful revolt led by Black slaves (Fig nolé, 2008; James, 2012). It meant commemorating the revolutionary epic, when slaves on the island of Hispaniola appropriated the concept of equality to demand that the Rights of Man and the Citizen touted by the French Revolution be applied to them, sparking a revolution that was decisive in destroying the colonial system of the West Indies (Dubois, 2009, 2011). This revolution thwarted Napoleon's megalomaniac plans and paved the way for men like Bolívar and San Martín to begin the wars of independence (Grandin, 2014). Consequently, the Haitian revolution was not only a key event during this era, it indicated that the land of freedom actually referred to Haiti, not to France (Ferrer, 2012).

To understand Haiti and the Haitians, according to Dubois (2009, 2011), we must return to the beginning, and the same applies to a country's health history. Since independence in 1804, the country's founding social contract established Haiti's radical refusal of slavery and French colonial control. At that time, there was a dispute over which economic model to select, whether to maintain the plantation system or adopt a cooperative system of subsistence agriculture. Family farming was a successful experiment during the nineteenth century, when Haiti proved to be an economically successful country where the descendants of slaves built a social order based on equality and enjoyed a significantly better quality of life than the descendants of slaves in other societies in the Americas. They owned land, supplied domestic and foreign markets, and maintained their cultural autonomy and social dignity. In the other colonial societies of the Americas, abolition did not bring full equality to the former slaves, who continued to face structural inequalities and extreme forms of political, social, and economic exclusion. However, post-independence Haiti needed to face the challenge of building a new order from the ashes of an exploitative system, and the colonial empire forced the country to pay a high price.

The twentieth century was marked by almost twenty years of US military occupation (1915-1934), bloody conflicts, the Duvalier dictatorship (which was one of the fiercest on the continent), and epidemics and diseases linked to poverty, hunger and poor quality of life. One of these epidemics was yaws, a neglected disease with a high prevalence in Haiti, especially among farmers. Brought from Africa by slaves, the disease was recorded on the island of Hispaniola as early as the sixteenth century. Haiti provided a favorable environment

Figure 1: History of epidemics in Haiti (Created by Daniella Azor, Nadège Jacques, Marie-Carmele Elisée, Marie-Rose Bonet, Robert Dossil, and Jethro Guerrier, reviewed by Ricardo Burg Ceccim, who also added footnotes)



¹ Alliteration both blames the use of French to dominate the imagination for illness in the rural population while also presenting a weapon against this same domination in recovering silenced Haitian poetries. Support by health service workers in rural areas will also be offered through alliteration that invokes thought-language that is in contact with imagination (popular poetry, not deterministic beliefs).

² 4-H Club or 4-H Syndrome: homosexuals, heroin users, hemophiliacs, and Haitians (an intolerable formula for prejudice and discrimination), even denying the arrival of HIV through the flow of American tourists seeking sex and exploitation.

³ The Baby Doc government: illiteracy, low life expectancy, hunger, and the Aids epidemic, Haitians flee to the United States in overcrowded boats.

⁴ Minustah: United Nations Stabilizing Mission in Haiti.

for yaws to propagate: the country's humid tropical climate and humble dirt-floor homes encouraged the transmission of *Treponema* bacteria through overcrowding and lack of water, in addition to poverty and the absence of health services. In the 1940s, yaws had become a national catastrophe and affected 40 to 60% of the population, with one and a half million cases. In this same decade, the first mass campaigns against treponematoses using penicillin were organized. The physician and future dictator François Duvalier participated in these campaigns and took advantage of the visibility he obtained from this work as a springboard to power (Beghin, 1969).

The emergence of conflicts, external interventions, and the authoritarian regime had strong impacts on the economy, social organization, and the types of challenges faced by the population. During the twentieth century, access to health services in Haiti was precarious, particularly in rural areas, and for most of the population the only alternative was popular healing systems operated by caregivers linked to African religions. The country's health situation, in turn, showed a high prevalence of diseases associated with poverty, hunger, and insufficient/inefficient hygienic standards (Beghin, 1969).

The timeline constructed in the classroom included outbreaks and epidemics of communicable diseases that showed the social character of human illness and the emergence of diseases resulting from the impoverishment of the population which in turn was caused by colonialist/imperialist interventions in the country. Another disease which was mentioned and caused considerable economic losses was the outbreak of African swine fever in the 1970s, even though this illness did not affect humans. The group discussion on this topic featured intense questioning, with some participants believing that this epidemic was manufactured to destroy the economy of small rural farmers, which had been based on pig farming and was perfectly suited to the country. The recommendations that were typical of the "health police" completely eliminated pig farming, which resulted in an unrivaled economic loss and the impoverishment of much of the rural population (Charles, 1977; Haiti..., 2011).

This event occurred during Duvalier's dictatorship; a new breed of pigs from the United States was subsequently introduced, but these were more fragile and difficult to maintain. Again, the epidemic represented a social imbalance which produced social and economic disruptions, particularly in rural areas of the country, clearly showing the interrelated connections between poverty, social crises, and disease (Breilh, 2006).

The timeline ended with the notification of the recent cholera epidemic that struck the country's Artibonite River region in October 2010. Cholera had not occurred in Haiti for over one hundred years, clearly demonstrating that contamination was caused by exogenous cases. The epidemic comprised approximately six hundred thousand cases and seven thousand deaths, straining the country's already ailing health system with care for the sick and demands related to sanitation and water supply. The first report on the origin of cholera in Haiti indicated that the focus originated in a camp where Nepalese soldiers had been stationed near the Artibonite, and where fecal matter was discharged into the waters of this river that supplies the region. Data from subsequent molecular analysis confirmed that the strains found in Haiti were compatible with Nepalese strains, clearly demonstrating that the Nepalese soldiers participating in the United Nations Mission for Stabilization in Haiti (Minustah) were the focus of the disease.

The United Nations (UN), however, distanced itself from responsibility for the outbreak, officially stating that the event resulted from a nebulous “confluence of factors.” This version was included in the official history of cholera in Haiti. In the discussion that took place during our training, the Haitians shared arguments indicating the iniquity underlying the entire process: Minustah’s military occupation of the country, the arrival of soldiers carrying *Vibrio cholerae*, the precarious living conditions for these soldiers, which contaminated the water in the country, and the UN’s “neutral” stance exonerating itself from responsibility for the epidemic (Zanella, Beraldo, 2012). The eruption of the cholera epidemic makes the UN’s attitude even more serious, since this the agency neglected health conditions in its installations within a country where basic sanitation infrastructure was already fragile. The published version of the facts is common among those who construct the “official history,” displaying the point of view of those who hold the power.

This timeline, created in class by health workers from the country’s ten health departments, represented an effort to recover the collective memory of Haitian public health and to expose invisible or hidden facts that affected less privileged groups in a country which suffers from a secular process of exploration. This meant contextualizing the epidemiological data against a political, economic, and social backdrop, removing the mantle of neutrality and weaving a movement to tell another story, no longer the story written by others, by the conquerors, the elites, or by those who have the power to tell the official story (Pollak, 1989; Gagnebin, 2001).

Working together: investigating under-reporting of deaths

The investigation into under-reporting of deaths in one Haitian community was another significant moment in the training (Meneghel et al., 2014). This was a research activity that combined epidemiological knowledge with organizing an applied study, motivated by the fact that Haiti has no information system based on a continuous record of deaths, and mortality rates are calculated from periodic surveys, such as the *Mortalité, Morbidité et Utilisation des Services* Survey (Emmus-V) (Cayemittes et al., 2013).

This study was conducted by the group of student-workers as a practical activity related to the study of mortality indicators. It used an exploratory approach and took place in the commune of Saint Marc, within the department of Artibonite, which had a population of 257,863 in 2012. The goal of the project was to establish the flow of information from the mortality system and explore the death registration system, as well as to present a possible strategy for improving the capture of deaths by health institutions. The data were collected for the month of January 2012 from five institutions within the commune of Saint Marc: Saint Nicolas hospital, the city hall, the hall of civil records, the cemetery, and the church.

The hospital was the institution where the highest number of deaths was recorded. Deaths were identified and counted from a nominal list obtained from the hospital archives, and were combined with those that occurred at and were recorded by the other institutions, corresponding to a total of 88 deaths. Based on a general mortality rate of 9/1,000 inhabitants, the expected number of deaths was estimated, and the mortality system was seen to have a coverage of 45.6%. The investigation only found records of children’s deaths at the regional hospital, which is barely acceptable for a country with a high infant mortality rate (50 per

1000 live births) (Cayemittes et al., 2013), leading the group to question where the children under 1 year of age were buried.

Reports from students and other health professionals presented explanations for the low number of infant deaths they found. One possibility was that these children were buried together with adults, which would explain the lack of deaths registered for this age group at the institutions responsible for burials. Burial practices near dwellings were also considered, as illustrated in the photo below (Figure 2). This scene is quite common along the road linking Port-au-Prince to Caye (the capital of the Southern health department). In the countryside, many families have their own cemeteries, and tombs are built in front of the houses and surrounded by gardens where people talk and children play. Maintaining the ancestors near the homes is a way of revering those who have died and protecting the family.

The investigation into under-reporting of deaths prompted the group to research other aspects related to the process of dying in the country. This in turn led to exploration of anthropological, cultural, and artistic references and the discovery of notable expressions of Haitian funeral rites in literature, painting, religion, and culture (Figure 3).

For Haitians, the role of the dead is very important in everyday life, and death does not represent a possible final rest, but instead a door connecting two worlds. These cultural and religious aspects were seen in the wake of the 2010 earthquake, when burying the dead presented a significant problem, since the country's burial practices do not permit interment before the religious rituals are performed.



Figure 2: Photo of graves near homes on the road to the Southern health department (Haiti, July 2013; photo by Joyce Schramm)



Figure 3: Painting of a funeral procession by Jacques Valmidor (Photo by El Saieh Gallery)

The goal of the rituals is to mediate with the souls of the dead, which are considered to be a type of force that could wander and cause problems. There are several categories of the dead, including a body without a soul (a zombie) or a soul without a body (a “zombie astral”). Accidental deaths may create zombies that need to be placated, since the soul acts as a force that is not necessarily positive. As a result, souls should be collected and placed into jars, and the orifices of the dead must be closed for the same reason (Derby, 1994, 2012).

Burials are prolonged and meticulously organized events, and should provide everything to allow the dead to rest in peace. Funeral rituals are granted significant importance, especially in rural areas. Consequently, when a rural dweller dies the family does not hesitate to spend all their resources to provide what is considered a proper burial, in accordance with the belief that the a rich and elaborate funeral will guarantee entry and good fortune for the soul in the world of the dead; to achieve this, a simple coffin made of rough wood or a quick and simple ceremony is not enough (Métraux, 1954, p.19).

After the 2010 earthquake, Port-au-Prince became one large tomb or memorial to the dead, since the funeral rituals were not performed as they should have been and many people did not receive a proper burial. In the horror and chaos that followed, as thousands of people returned to destroyed homes and thousands more lay dead under the rubble, there were several reports of apparitions of evil spirits, demons, and people who metamorphosed into animals. In Haiti, only rarely is a death viewed as natural, and there is always a moral connotation linked to the event. Accordingly, attributing the disaster to evil spirits was an attempt to find an explanation for an event that was so absurdly gigantic, severe, and cruel, and for the pain and despair that were so excessive that they could not be explained by anything else (Derby, 2012).

Final considerations

Our experience with the tripartite cooperative work carried out by Brazil, Cuba, and Haiti was unequalled, with committed and caring action that was both involved and enveloping. Haiti's initial need was to strengthen epidemiological surveillance actions and critical thinking in epidemiology. To this end, we proposed a “course-intervention” which was conducted as a resource for permanent education in health directed at the workers from all of the country's health departments, and we considered reinforcement of networking, reflective consciousness, communication between the country's different realities, knowledge sharing, and the search for joint solutions to everyday problems in the services.

The course contained nine general knowledge lines and 320 hours of classroom activities, including four field investigations which the student-workers organized and carried out on the following topics: the history of epidemics and public health in Haiti, gender equity in health services, investigation of under-reporting of deaths, and epidemiological surveillance of tetanus. It was a process of permanent education in health directed at forty health workers from health departments around the country. The course generated knowledge and changes, and depended on the autonomy of the workers, who at times can feel isolated and powerless in the face of demands, and mobilized local resources to improve the flows of communication between the regions. Several student-workers had already collected data for research by NGOs

or international groups without being told the purpose or the results of this research. In the epidemiology training course, the fact that they participated in all stages of the field studies allowed them to feel that they were not only “collectors of data” but instead “researchers,” which not only taught them how to carry out this activity but left them feeling they were capable of doing so.

We also emphasize the climate of cordiality, friendship, genuine interest, and respect that permeated all the activities we conducted in the country. No topic, methodology, or activity was proposed without submission, agreement, and approval. When a proposal, topic, or type of approach did not correspond to the Haitian professionals’ expectations, that specific project was reordered and restructured so that all the demands were considered, organized, and developed in the group. This allowed the objectives to be constructed collaboratively, the methodology was readjusted to the purposes of the training, and the analysis was carried out using successive questioning and inquiries that comprised the didactic and pedagogical activities. The language barrier was overcome through the desire to communicate and be understood, which was present on both sides, and we used poetry, folklore, music, literature, art, and cinema from the three cooperating countries.

The training permitted the construction of a multinational collective with space to better understand and propose international cooperation and intercultural educational practices. At the end of this project, we believe that all the participants – Haitians, Cubans, and Brazilians – left enriched by the aesthetic, ethical, and affective potency which is experienced during cooperation between equals. This journey invested in reciprocity, in the production of worlds, and in crossing borders, believing in the vibrant strength of agents involved with producing health as a social and historical process and the political struggle to achieve as much as possible.

REFERÊNCIAS

- EGHIN, Ivan.
Les problèmes de santé et de nutrition en Haïti: un essai d’interprétation. Bruxelles: Académie Royale des Sciences d’Outre Mer. 1969.
- BRASIL.
Cooperação tripartite Brasil-Cuba-Haïti: projeto pedagógico para formação de profissionais nos Espaços de Educação e Informação em Saúde. Brasil-Haïti-Cuba. [s.l.]: [s.n.]. 2012.
- BREILH, Jaime.
Epidemiologia crítica: ciência emancipadora e interculturalidade. Rio de Janeiro: Editora Fiocruz. 2006.
- CARPENTIER, Alejo.
O reino deste mundo. Rio de Janeiro: Record. 1985.
- CASIMIR, Jean; DUBOIS, Laurent.
Reckoning in Haiti: the State and society since the revolution. In: Munno, Martin (Ed.). *Haiti rising: Haitian history, culture and the earthquake of 2010*. Liverpool: Liverpool University Press. p.126-133. 2010.
- CAYEMITTES, Michel et al.
Enquête Mortalité, Morbidité et Utilisation des Services, Haïti, 2012. Calverton: Ministère de la Santé Publique et de la Population; Institut Haïtien de l’Enfance; ICF International. 2013.
- CECCIM, Ricardo Burg; FERLA, Alcindo Antônio.
Educação e saúde: ensino e cidadania como travessia de fronteiras. *Trabalho, educação e saúde*, v.6, n.3, p.443-456. 2008.
- CHARLES, Jean-Claude.
Sainte dérive des cochons. Montréal: Nouvelle Optique. 1977.
- DERBY, Lauren.
La ciudad de los muertos: los rumores como creadores de opinión pública en Puerto Príncipe, Haiti. *Istor: Revista de Historia Internacional*, v.18, n.50, p.37-55. 2012.
- DERBY, Lauren.
Haitians, magic and money: raza and society in the Haitian-Dominican borderlands, 1900-1937. *Comparative Studies in Society and History*, v.36, n.3, p.488-526.1994.

DUBOIS, Laurent.

Haiti: the aftershocks of history. New York: Metropolitan Books. 2011.

DUBOIS, Laurent.

Les vengeurs du nouveau monde: histoire de la révolution haïtienne. Port-au-Prince: Editions de l'Université d'État d'Haïti. 2009.

FERLA, Alcindo Antônio; CECCIM, Ricardo Burg; DALL ALBA, Rafael.

Informação, educação e trabalho em saúde: para além de evidências, inteligência coletiva. *Reciis*, v.6, n.2, p.815-821. 2012.

FERRER, Ada.

Haiti: free soil and antislavery in the revolutionary Atlantic. *American Historical Review*, n.117, p.40-66. 2012.

FIGNOLÉ, Jean Claude.

Une heure pour l'éternité. Paris: Sabine Wespieser. 2008.

FREIRE, Paulo.

Pedagogia da esperança: um reencontro com a pedagogia do oprimido. Rio de Janeiro: Paz e Terra. 1992.

GAGNEBIN, Jeanne Marie.

Memória, história, testemunho. In: Bresciani, Stella; Naxara, Marcia (Org.). *Memória e (res) sentimento: indagações sobre uma questão sensível*. Campinas: Editora da Unicamp. p.85-94. 2001.

GRANDIN, Greg.

O império da necessidade: escravidão, liberdade e ilusão no novo mundo. Rio de Janeiro: Rocco. 2014.

HAITI...

Haiti: Peppadep and the cochon creole. *The Public Archive*. Disponível em: <http://thepublicarchive.com/?p=2045> Acesso em: 1 fev. 2015. 13 fev. 2011.

HAITI.

The 1805 Constitution of Haiti. Disponível em: <http://faculty.webster.edu/corbetre/haiti/history/earlyhaiti/1805-const.htm>. Acesso em: 23 fev. 2016. s.d.

HUBER, Larissa R.B.; FENNIE, Kristopher; PATTERSON, Holly.

Competencies for master and doctoral students in epidemiology: what is important, what is unimportant, and where is there room for improvement? *Annals of Epidemiology*, v.25, n.6, p.466-468. 2015.

JAMES, Cyril Lionel Robert.

Os jacobinos negros: Toussaint L'Ouverture e a revolução de São Domingos. Rio de Janeiro: Boitempo. 2012.

KEYES, Katherine M.; GALEA, Sandro.

Current practices in teaching introductory epidemiology: how we got here, where to go. *American Journal of Epidemiology*, v.180, n.7, p.661-668. 2014.

MENEGHEL, Stela Nazareth et al.

Recherche sur les sous-declarations de décès, Saint Marc, Haiti, 2012. *Ciência e Saúde Coletiva*, v.19, n.11, p.4505-4512. 2014.

MENEGHEL, Stela Nazareth et al.

Queimada: o uso de um filme histórico na formação em saúde, Haiti, 2012. *Reciis*, v.6, n.2, supl., p.1-7. 2012.

MÉTRAUX, Alfred.

Rites funéraires des paysans haïtiens. Paris: Presses Universitaires de France. 1954.

PESSOA, Luisa Regina et al.

A educação permanente e a cooperação internacional em saúde: um olhar sobre a experiência de fortalecimento da Rede Haitiana de Vigilância, Pesquisa e Educação em Saúde, no âmbito do Projeto Tripartite Brasil-Haiti-Cuba. *Divulgação em Saúde para Debate*, v.49, p.159-165. 2013.

POLLAK, Michel.

Memória, esquecimento, silêncio. *Estudos Históricos*, v.2, n.3, p.3-15. 1989.

ZANELLA, Cristine K; BERARDO, Maria Carolina.

ONU introduz epidemia de cólera no Haiti. *Le Monde Diplomatique*. Disponível em: <http://www.diplomatique.org.br/artigo.php?id=1102>. Acesso em: 6 fev. 2015. 2012.

