

FROM RAPID RESPONSE TO SUSTAINABLE SOLUTIONS

DISASTER RESPONSE AND RECOVERY IN
POST-EARTHQUAKE HAITI



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INITIATIVE

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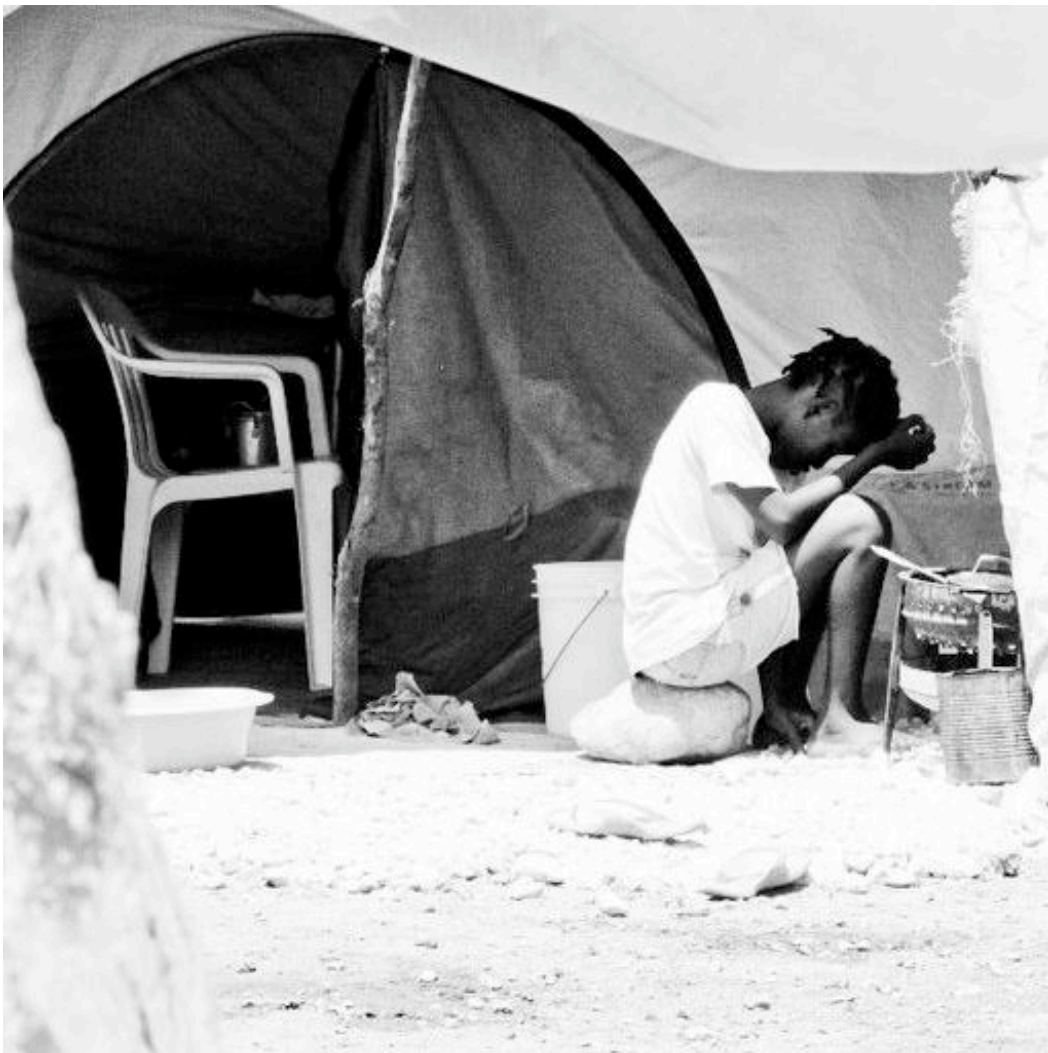
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HARVARD HUMANITARIAN INITIATIVE

The Harvard Humanitarian Initiative (HHI) is a university-wide center involving multiple entities within the Harvard community that provide expertise in public health, medicine, social science, management, and other disciplines to promote evidence-based approaches to humanitarian assistance.

The mission of the Initiative is to relieve human suffering in war and disaster by advancing the science and practice of humanitarian response worldwide. Harvard Humanitarian Initiative fosters interdisciplinary collaboration in order to:

- Improve the effectiveness of humanitarian strategies for relief protection and prevention;
- Instill human rights principles and practices in these strategies;
- Educate and train the next generation of humanitarian leaders.



LETTER FROM THE DIRECTOR

Today we publish our report chronicling eleven months of the Harvard Humanitarian Initiative's disaster response and recovery efforts in Haiti. In the aftermath of the devastating 2010 earthquake, close collaborations with two organizations, Love A Child and American Refugee Committee (ARC), were instrumental to the success of our programs. Love A Child, a faith-based humanitarian organization with three decades of experience in Haiti, generously shared its deep experience and resources in Fond Parisien. We are also grateful for ARC's capacity to care for displaced populations after crisis. Because of these critical partnerships on the ground, HHI was able to leverage its technical expertise to manage the medical and public health consequences of this extreme disaster.

TOGETHER, WE WERE ABLE TO DESIGN APPROPRIATE AND EFFECTIVE PROGRAMS TO BRIDGE THE GAP BETWEEN DISASTER RESPONSE AND DEVELOPMENT.

Over the past year, we have treated more than 2,000 patients, performed over 350 surgeries, and provided clinical care to a population of 1,700 displaced survivors living at Camp Hope. Moreover, we have trained nearly 250 Haitian men and women in public health and medicine, empowering the local community for years to come. Along with partners such as the University of Chicago, Hands of Light in Action, Operation Smile, the United Nations, and the governments of Haiti and the Dominican Republic, we truly have made a difference in the lives of thousands.

Countless individual and organizational donors made our work possible. A special thank you to: *Hilarie Cranmer, Stephanie Rosborough, Janet S. Lloyd, Bobby and Sherry Burnette, Carole Stufflebeam, Jean Claude Mardy, Eric James, Sylvie Louchez, Amelia Kendall, Vincenzo Bollettino, Sasha Chriss, Christian Theodosis, Miriam Aschkenasy, Jennifer Chan, Jennifer Scott, Gregg Greenough, Hani Mowafi, Chrissy Babcock, Clay Heaton, Stephen Morris, Jennifer Furin, Moira Hennessey, Vicki Lopez, Sylvia Thompson, Iyah Romm, Nancy Malone, Betsy Murphy, and others.*

Many of our partners on the ground remain, working tirelessly to improve the lives of vulnerable men, women and children. We think of them every day.



Michael J. VanRooyen, MD, MPH

Director of the Harvard Humanitarian Initiative

EXECUTIVE SUMMARY

On January 12, 2010, a massive 7.0 magnitude earthquake struck just off the coast of Port au Prince, Haiti. In the coming days, more than 220,000 Haitians were killed, 340,000 seriously injured, and 1.6 million displaced from their homes. More than 3 million people – just less than one in three Haitians – were affected.



The initial outpouring of aid into Haiti was one of the largest humanitarian operations in the past three decades. Human and physical resources were rushed to the tiny island country from all corners of the globe. The scope of search and rescue operations was unprecedented. Spontaneous field hospitals were set up by Medecins Sans Frontieres, Project Medishare, the Israeli military, the U.S. government's Disaster Medical Assistant Teams/International Medical Surgical Response Teams, the Harvard Humanitarian Initiative, and many others.

From Rapid Response...

The Harvard Humanitarian Initiative's field hospital was located in Fond Parisien, a small town near the Dominican border on the primary roadway connecting Port Au Prince to Santo Domingo. Love A Child, a faith-based organization with 30 years of experience in Fond Parisien, is renowned for its array of outstanding health and education programs. Immediately following the earthquake, at the prompting of the Haitian and Dominican governments, Love A Child mobilized a network of technical partners to operationalize the Disaster Recovery Center, led by the Harvard Humanitarian Initiative.

...To Sustainable Solutions for the Future

In the year that followed the earthquake, the Harvard Humanitarian Initiative has implemented programming across multiple medical and public health sectors to address both the acute and long-term health needs of the Haitian people.

In total, the Harvard Humanitarian Initiative coordinated more than 725 volunteers from 16 countries and employed more than 350 Haitian staff through its health programs. Community health workers were offered advanced training in medicine, public health, sanitation, and mental health. The nurses that HHI's medical director has diligently trained over the past six months will be staffing a permanent dispensary embedded within this new community. Currently, permanent housing is being built for hundreds of families living in Camp Hope. In this small corner of Haiti, the future looks a little brighter!

THE DISASTER RECOVERY CENTER: ACUTE TREATMENT

The Harvard Humanitarian Initiative's presence in Haiti began a mere 48 hours after the earthquake struck, when HHI faculty and international emergency physicians, Hilarie Cranmer and Stephanie Rosborough rushed to Port au Prince to provide emergency care. Shortly thereafter, Drs. Cranmer and Rosborough established a field hospital, known as the Disaster Recovery Center, to treat earthquake survivors in Fond Parisien on land owned by a local faith-based organization called Love A Child. At that time, the Love A Child compound included a school, an orphanage, a medical clinic, a warehouse, and a church. Within days, it was transformed into a state of the art surgical and rehabilitative center which maintained international Sphere Standards for providing care during humanitarian crises.

Meanwhile, back in the US, HHI supported coordination of the Harvard-wide disaster response including that of the Harvard-affiliated hospitals within the Boston-based Partners Health Care System. HHI oversaw the deployment of more than 725 doctors, nurses, physical therapists, psychologists and non-medical staff. In total, HHI staff, affiliates, and volunteers cared for more than 2,000 patients and their families at the Disaster Recovery Center from January-May 2010. During this period, Harvard-affiliated teams performed hundreds of critical surgeries, and worked to meet the needs of thousands of injured survivors.

The Disaster Recovery Center provided shelter and three hot meals a day for 2,000 patients and their family members. On an adjacent parcel of land, also owned by Love A Child, the American Refugee Committee began managing a large camp for displaced families, called Camp Hope. The camp, whose population at its peak swelled to about 4,000 injured Haitian earthquake survivors, was created to accommodate those who underwent surgery in nearby hospitals and required longer-term rehabilitative support. This temporary community also served as a place for reuniting families separated during the immediate aftermath of the earthquake.

"...From day one when a fellow doctor scoped out the site [for the DRC] to day 105 when I arrived at the end of a long line of 700 relief workers - doctors, nurses, physical therapists, engineers, IT experts, and operation support workers, there was help, and lots of it. People with missing limbs and broken body parts found their way to the Love A Child site on which the hospital set up camp. The patients brought with them family members, confusion, pain and little else. Harvard Humanitarian Initiative put together a top notch relief effort, providing some of the best care in the country and creating a safe, clean, orderly and respectful environment."

-Stephanie Dodson, Departing with Dignity



IMPACT OF THE DISASTER RECOVERY CENTER

- The first measles campaign post-disaster was conducted at the DRC.
- 2,000 Haitians were served by the Disaster Recovery Center, one of the largest "bed" field hospitals in Haiti.
- HHI demonstrated that not only could Sphere Standards be attained, but that achieving these standards improved quality of care and patient outcomes
- By being the primary post-operative discharge site for the USNS Comfort, the DRC expanded the surgical capacity of the medical ship which housed 11 sterile operating rooms.
- Zero pre-operative infections were reported among all patients transferred to the USNS Comfort from the DRC, an unprecedented statistic in disaster settings
- Over 350 limb-saving operations were conducted at the DRC. Only two amputations were necessary.
- Over 120 Haitian National staff were paid as a result of the DRC's operations for five months.
- More than 725 volunteers from over 16 countries volunteered their time and talents at the center.

KLINIK LESPWA: CLINICAL CARE AND CAPACITY BUILDING

In May 2010, the Harvard Humanitarian Initiative was able to appropriately and effectively transition from complex disaster response to recovery phase operations through a grant from the United States Agency for International Development's Office of Foreign Disaster Assistance. The acute care field hospital was closed, and focus turned instead to full-time operation of "Klinik Lespwa," the out-patient medical clinic at Camp Hope. In addition to clinical management, HHI's in country Medical Director, Dr. Janet S. Lloyd, designed and led educational programs to build local capacity. During this phase, HHI transitioned its programs to focus on outpatient care, training, public health, and mental health.

From May to November, HHI teams provided medical leadership and direct clinical care to the 1,700 displaced persons living in Camp Hope. The camp population consisted of Haitians displaced from Port-Au-Prince in the immediate aftermath of the earthquake and included more than 50 amputees, nearly 700 children, and 170 individuals who required the use of assistive devices for independent mobility.

In addition to clinical care, HHI teams provided medical and technical support to bolster the existing local infrastructure. HHI trained more than 75 Haitian nurses and 45 Haitian physicians. These clinical and public health training programs were critical to the Harvard Humanitarian Initiative's success in transitioning the acute-phase Disaster Recovery Center into a model that, with the support of local partners, can be self-sufficient in providing excellent clinical care to the displaced population for years to come.

KLINIK LESPWA: A SUMMARY OF ACTIVITIES

- **HHI PROVIDED MEDICAL/CLINICAL OVERSIGHT AT CAMP HOPE:** HHI provided medical leadership at Klinik Lespwa and technical support to the American Refugee Committee. HHI medical teams of physicians and public health professionals provided medical case management, primary care, and medical/post-operative care.
- **HHI STRENGTHENED THE LOCAL MEDICAL NETWORK:** HHI managed coordination of a referral network of clinical partners and worked with local organizations to construct an optimal health network. These endeavours provided a robust network for patient care, referral, and ongoing management that maximizes the availability of medical services and reduces duplication of effort.
- **HHI BOLSTERED THE CAPACITY OF EXISTING CLINICAL SITES:** HHI provided medical/technical expertise to bolster the capacity of local clinics, particularly the clinic managed by Love A Child. HHI worked to increase the capacity of local staff through formal and informal trainings on malnutrition, safe motherhood, and safe nursing, and through community involvement in physical therapy. HHI also facilitated

trainings on clinical management, use of essential medicines, medical equipment, and medical consumables, including proper disposal. These efforts further supported transition initiatives to enhance long term sustainability and community-level capacity building.

- **HHI SUPPORTED PUBLIC HEALTH EDUCATION:** HHI provided strong public health management for the families living in Camp Hope. This included public health education campaigns led by HHI trained nurses and was disseminated to the camp population through community health workers..
- **HHI MITIGATED THE POTENTIAL IMPACT OF FUTURE EMERGENCIES:** HHI leveraged its expertise in disaster preparedness to mitigate the impact on human health and wellbeing in case of future hurricanes, earthquakes, and disease outbreaks. This included preparations for Hurricane Tomas and the community-wide response to mitigate the spread of cholera.



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IMPACT OF HHI'S CLINICAL CARE AND CAPACITY BUILDING PROGRAM

- 1,700 displaced persons living in Camp Hope received direct clinical care from HHI teams.
- Rotating volunteer physicians and physical therapists provided expert treatment to our patients and training to our local teams.
- 4 mental health support groups were created, one each for men, women, boys, and girls.
- An extensive assessment of childhood nutritional status and vaccination status was conducted.
- A vaccination campaign for all young children and women of childbearing age took place in Camp Hope.
- HHI developed triage tools to inform appropriate medical care and referrals to clinical facilities within the surrounding area.
- 38 health workers were trained in Psychological First Aid. A rapid mental health assessment was conducted and targeted programming was created as a result.
- 2 Haitian nurses and one auxiliary nurse received intensive clinical education.
- 75 Haitian nurses and 45 Haitian physicians learned to conduct neonatal resuscitation as a result of a course HHI developed and implemented with the Haitian Ministry of Health.
- More than 50 health workers were trained in: malnutrition, safe motherhood/well baby care, cholera prevention and treatment, family planning, hygiene, wound care, management of vomiting and diarrhea, and responding to gender-based violence.

LOOKING TO THE FUTURE



Partnerships with Love A Child and the American Refugee Committee (ARC) were instrumental to the success of the Harvard Humanitarian Initiative's programs in Haiti. ARC has committed to remaining in Haiti for at least five years. Their work in spontaneous camps and settlements across the country will continue for the foreseeable future. In Fond Parisien specifically, ARC has committed to maintaining a presence until all internally displaced persons have been transitioned into permanent shelters.

Love A Child has dedicated extraordinary time and resources to victims of the earthquake. The experiences of the past year have reshaped their organization and its role in Fond Parisien and the surrounding communities. Most recent

in its long list of contributions is the construction of permanent housing for all patients who were treated at the DRC. Beyond simply providing shelter, Love A Child has committed to financially and logistically supporting clinical care in the new 'Miracle Village.' The two nurses employed by Harvard Humanitarian Initiative will continue to live in the community, hired by Love A Child to provide necessary primary care services in an on-site dispensary. As cholera sweeps through the region, countless Haitian Harvard Humanitarian Initiative trainees have been hired to support response efforts.

Over the past year, HHI's medical and public health programs helped to establish a setting-appropriate, sustainable model of care that will continue to serve this community long into the future. Although the Harvard Humanitarian Initiative no longer maintains a physical presence in Fond Parisien, the impact of their work will contribute to the well being of the community for years to come.

As we look to the future, HHI will continue to pursue its core mission of research and education to improve humanitarian response worldwide.

Report Photo Credits: Shannon Hannon, Jon LeFor, and Love A Child.