Compassion Med International
Short Term Medical Mission to Honduras
Program and Evaluation Plan

By

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INTRODUCTION

Honduras is a country that has had more than its share of difficulties. Roughly the size of Tennessee, it is a small country spanning 43,277 square miles, of which 80% is mountainous. (Department of State 1992) In a recent count in 2007, the country had approximately 7.5 million inhabitants. In the western hemisphere it is the second poorest country, following Haiti, and the mean Honduran salary in 2005 was $1,170 USD. More than half of people living in Honduras fall below the country’s subjective poverty line (World Bank 2007).

In 1998, Honduras experienced massive devastation due to Hurricane Mitch, in which 5,750 people were killed, 8,058 went missing, 12,000 were injured, 75% of all infrastructure was destroyed including nearly all bridges and secondary roads, and 80,000 homes were destroyed or damaged leaving countless families and children homeless. In all, the estimated damage ranges from $3 billion USD or approximately 40% Honduran GDP (World Bank 2007) to the estimate of $6 billion USD nearly 80% of the GDP (NACLA 1999). The loss was so severe that the Honduran president, Carlos Roberto Flores, stated that 50 years of progress in the country was reversed (USAID 2006). Nearly ten years later, Honduras is still recovering from Hurricane Mitch, and the many vacant buildings lying in rubble bear testimony to its desolation. Although Hurricane Mitch was particularly devastating, the area is riddled with major hurricanes on a regular basis. Just last year in 2007, a category 5 storm named Hurricane Felix struck near the border of Honduras and Nicaragua, leaving an estimated death toll of 11,000 people (Lacey 2007).

Even though Honduras is a poverty stricken country still recovering from a natural disaster, changes in spending on health and education have shown improvements in the last decade. Vaccination rates are remarkably high, and similar to those of the USA. Honduras has a
remarkably successful vaccination program, vaccinating more than 80% of its total citizens. The Honduran Ministry of Health provides vaccines to the country and keeps detailed vaccination records of its citizens, which is more than even wealthy developed countries with national health care, such as Canada, are able to do (Sibbald 1999). In Honduras, rates of DPT and measles vaccination of children are 91 and 92% respectively, very similar to rates in the USA of 96 and 93% (World Bank 2007).

Besides high vaccination rates, many other markers of improving health care are present in Honduras. For example, maternal mortality decreased by 38% in the past ten years from 182 deaths per 100,000 live births to 108. Chronic malnutrition in children aged 1-5 also dramatically fell from 44% to 33%. Infant mortality dropped from 39 deaths per 1000 live births in 1996 to 25 in 2006 (Secretary of Health 2005). Primary school attendance improved from 78% in the year 1980 to 85% in the year 2002 (World Bank 2007). Even though the trends are improving, and this is very encouraging, major problem areas still exist today.

In 2006, the president of Honduras, Zelaya, declared a state of emergency of the healthcare system, because the country only had enough medications to treat 30% of their need. The cause was attributed to poor administration, crime, and lack of funding. (BBC 2006) Even though health care spending has improved in Honduras, it is still small in comparison to the USA. In Honduras, health care spending per person is $77 per year, and this comes to 7.2% of the Honduran GDP. By comparison, the United States of America spends $6,096 per person, per year which is 15.4% of its GDP. The World Health Organization (WHO) reports show a vast disparity between the USA and Honduras for easily treatable or preventable health measures. The death rate (per 100,000 people) for infectious disease in Honduras is 112, versus the USA rate of 22 deaths. The death rate of perinatal conditions show a similar ratio of 42 versus 5, in
Honduras versus the USA. And nutritional deficiency death rate is 18 in Honduras compared to only 2 in the United States. These disease conditions are quantifiable markers of the health care services available in various countries, and allow for a direct comparison of disparities (WHO 2007).

Deficiencies in basic hygiene and sanitation are the root cause of many of the health problems in Honduras. Access to clean drinking water is very limited. Sewer systems are primitive or non-existent. Personal hygiene is limited due to lack of education, as well as lack of money to purchase soap secondary to widespread poverty. Food preparation and storage is often not done safely. Education regarding proper nutrition is lacking and often, even access to food is difficult. Housing conditions are poor with many people living in rudimentary dirt floored shelters and in close contact with livestock. Air quality in urban areas and occupational hazards in the largely agricultural and industrial workforce also contribute to poor health.

The major causes of pediatric death in Honduras and the developing world are malnutrition, diarrhea/dehydration, and respiratory infections and all of these are complicated by lack of access to medical care and poor sanitation, hygiene, and nutrition (Secretary of Health 2006). Roughly a third of deaths in children are caused by diarrhea/dehydration and another third of deaths are due to respiratory infections. All death rates are aggravated and increased by underlying malnutrition (Secretary of Health 2006). In Honduras, among young children aged 1-5, the incidence of diarrhea is 13%, and bloody diarrhea is 1.5%. Between the ages of 6-11 and 12-23, roughly 25% of children have diarrhea and 2% of these children have bloody diarrhea (Secretary of Health 2006). Before the widespread use of oral rehydration, this diarrhea posed a large contributor to mortality. Nationally, 11% of children less than 5 years had signs of
pneumonia in the last two weeks. Only half of these children were seen by medical personnel (Secretary of Health 2006).

It is important to note that these measurements are highlighted not only because they are statistics used to judge the poverty in a country and its healthcare, but they also point to preventable diseases that affect the most vulnerable in the population. Vaccine programs are a valuable first step in fighting childhood mortality and morbidity, still they do not address malnutrition, diarrhea, and respiratory infections; the main killers in Honduras and the rest of the developing world.

Clearly, Honduras is a country in need. Because of this, many relief organizations target Honduras as a country to focus their relief efforts. Compassion Med International is an organization that strives to bring hope and healing where it is most needed. It shares the wisdom and vision of Nicholas de Torrente, the executive director of Doctors Without Borders, who is often quoted as saying:

“We find out where conditions are the worst, the places others are not going, and that’s where we want to be.”

In this paper I will set out to describe the conditions in Honduras, and show what needs are there. I am writing on behalf of a short term medical missions group called Compassion Med International (CMI), and will be performing a review of the literature with regard to short term medical missions, develop a program plan for CMI, and set up a framework for a program evaluation process.
DISCUSSION OF THE LITERATURE

The focus of this literature review is to evaluate and examine the literature as it pertains to short term medical relief missions in Central America. The medical literature was searched using PubMed (and GoogleScholar for articles not accessible through the Health Science Library and PubMed at UNC) for any articles that were written using the search terms; “medical missions, short-term missions, medical tourism, humanitarian relief, Honduras, Central America, overseas missions, developing world.” The search yielded several articles that can broadly be broken up into three groups: 1) Problems with short term missions, 2) Cross cultural issues of short term medical missions, and 3) Suggestions for successful missions. These three themes will be discussed, and examples given for each from the literature.

Problems with short term missions in the developing world

Some important questions that one should ask before becoming involved in a short term mission are; 1) How is this mission helping the people I intend on serving? 2) How may it possibly harming them? 3) Do the benefits outweigh the possible harms? Although at first glance, the answer may appear obvious, there are many people who do not believe that short term missions accomplish anything beneficial, and may in fact unintentionally harm the community they are trying to help. It is worthwhile to explore these objections and weigh their value. Also, authors who strongly disagree with the utility of short term missions (Bezruchka 2000; Bishop 2000; Wall 2006), and pejoratively label them “medical tourism” or “surgical tourism,” have some valuable insight in improving trips and minimizing the problems for which they are critiqued.
One common criticism is that the trips do not make a strong enough impact to affect the health of the population, especially in the long term. Crutcher, who is not thoroughly opposed to missions, does note their limitations. He asserts that although they are a very valuable learning experience, short term missions often do not have long term effects on the health of the local population. The major factors that limit their impact include the short amount of time spent in the country; lack of follow-up care or referrals; immense numbers of patients to be seen; lack of national and local governmental support; limited supplies and medications; barriers in language and culture; and the providers’ poor training for exotic endemic diseases. After the medical team leaves, the physical environment is often unchanged, disease exposure is not affected, and the vectors of transmission remain in place (e.g. sanitation, hygiene, food, livestock cohabitation, etc). Reinfection is a matter of time. (Crutcher 1995) He asserts that to most dramatically and effectively change the health of a community, disease processes need to be prevented at the source. Attempts to provide sanitation and clean food and water are what is most needed in these communities.

Another author criticizes short term missions by stating that “much of the curative efforts...merely delay morbidity and mortality rather than reduce them.” (Montgomery 1993) This statement seems provocative on the surface, yet it is problematic as an argument against treating sick patients, because the vast majority of medicine does little more than delay the inevitability of disease and death. This statement, and entire line of thinking, invalidates all of medicine, and is not a compelling argument against short term missions.

Another critique of short term missions is that when they are viewed from a perspective of a cost/benefit analysis, they fail due to their high cost and mediocre benefit. In the work, *Short Term Missions: Are they worth the cost?*, van Engen points out that short term missions are
extremely expensive. Frequently, a plane ticket cost equals a year’s wage in Honduras. Work done by short term mission teams can often be accomplished better and cheaper by locals, and hiring local workers would also benefit their economy and give them a sense of ownership and accomplishment. Even though she sees the trips as financially wasteful, she does make the following suggestions: “Read as much as you can about the people and culture. Find out what some of their problems are. Learn a little of the language you will be hearing. Find someone from the country you will be visiting who can speak to your group about its culture. Show respect for people by knowing something about their lives before you arrive…. Focus on learning, not doing.” She also points out that team members need to seek answers to questions like; “Why is this country so poor? What problems do the people face? What has our own country done to help or harm this country? What can we do to help?” A final suggestion that she gives to try to offset the poor cost benefit ratio, is to spend some money locally where it will further your mission after you leave. She states, “One good rule of thumb for short-term missions is to spend as at least as supporting the projects you visit as you spend on your trip. Invest your money on people and organizations working on long-term solutions.” Supporting local organizations that share your vision can help make a lasting impact long after the mission trip is over (van Engen 2000).

Not only is the cost of these types of mission trips quite high, they are also critiqued as having costs being out of proportion to the benefit. This is thought by some to reflect the “American” approach to healthcare. The argument is that the USA does not have the strongest health care system globally, and ranks the lowest among rich nations of the world even though the country spends the greatest percentage of its GDP and the most money in total. The USA spends 42% of the world’s total health care dollars to take care of 5% of the world’s population.
Still, among rich nations, the USA ranks 25th in the world’s ‘health olympics,’ ranking even behind some poor countries (Bezruchka 2001). Interestingly enough, the infamous 2000 World Health Organization’s publication of the World Health Report which ranked countries states that the USA ranks 37th in the world. Honduras still lags behind at 131 out of the 190 countries ranked (WHO 2000). Even so, Bezruchka goes on to say that the US is not an expert in healthcare, its model is expensive and of questionable efficacy, and the USA is not helping the developing world with missions. However, even those against short term missions make some constructive suggestions, as Dr. Bezruchka states; “Most of the reasons that we engage in international work sound humanitarian but are self serving. If you must go, focus on one country or region; learn the local language; and learn about the local health problems, as well as the systems of traditional and introduced care. Respect local cultural norms. Do not further propagation of the US-centered, global monoculture. Consider your strengths and what you have to offer. Teach appropriate skills using the limited locally available resources, and sign up for the long hauls, at least in spurts. Meanwhile, we have a lot of work to do at home.” (Bezruchka 2000)

Other authors have wrestled with the quandary of cost/benefit analysis regarding short term missions. Dr. DeCamp discusses how difficult it is to measure to accurately know what benefits or harms are being done by a mission trip. Lacking this critical knowledge, he suggests that before engaging on any type of medical relief mission, we should carefully scrutinize and attempt to maximize the benefits of the mission, scrutinize and attempt to minimize any possible harms of the mission, and analyze the cost of the mission as with a grant proposal to see if the mission is worth the money spent. Dr. DeCamp appropriately points out that many short term missions are not designed to accurately measure any benefits of the trip. Nor do they measure
any harms that may occur. Both the benefits and harms are extrapolated from general medical knowledge of the disease burden in the country and of the pharmaceuticals administered. Still the actual benefits and harms remain a matter of conjecture, and this muddies any meaningful cost/benefit analysis (DeCamp 2007).

The cost benefit argument is difficult, because for a cost benefit analysis to be done properly, there needs to be accurate measures not only of the cost, but also of the benefits, and this proves difficult. The benefits and the possible harms of most short term medical trips are not recorded, in part because they are difficult to measure (DeCamp 2007). Further, there are not only medical benefits or harms to patients seen in clinic, but there are other less readily tangible benefits. For one, there is the benefit of an international experience on the medical team. And these benefits to care givers are more than just broadened clinical and cultural competence. The experience teaches “cost-conscious practice and back-to-basics diagnosis.” The team then returns to home sharing many reports of what they have seen, experienced, and learned. These reports increase public awareness, especially in the medical community, and may help account for our country’s recent policy change increasing U.S. foreign aid for public health (Panosian 2006). Also, Dr. DeCamp emphasizes that we should not undervalue the cross cultural educational benefits;

In fact, good reasons exist to include these benefits in our ethical calculus. The educational benefit of understanding the plight of those in the developing world helps develop one’s own moral capacities. The stories and presentations one can later give might also develop the moral imagination of peers. Problems addressed in short-term medical outreach are only symptoms of broader inequalities in health that require more radical solutions at the national and international level. Therefore, short-term medical outreach might be an investment in human capital to achieve lasting solutions.... And if this “investment” partially justifies outreach, we should document how much “return on investment” outreach actually produces. (DeCamp 2007) [Italics mine]
Much of this theorized increase in “moral imagination” and “moral capacities” are dramatically manifesting around us. For example, “in 2003, at least 20 percent of students graduating from U.S. medical school had participated in overseas activities related to international health during medical school, as compared with 6 percent of 1984 graduates.” (Panosian 2006) This is a significant increase and is likely due to increasing international awareness and desire to serve internationally. The trend is steady, and continues today. Each year the number of students serving abroad increases, and from 2002-2006, the Medical School Graduation Questionnaire, has shown steady yearly increase. The trend is increasing from 20.2% to 21.7% to 22.3% to 24.9% to 27.2% during the years 2002, 2003, 2004, 2005, and 2006 respectively (MSGQ 2004, MSGQ 2006).

There are also equally important intangible benefits to the patients. Patients do not only gain from the physical benefits of much needed medicine, they also gain the valuable experience of having outsiders from a rich nation come to their poor country to spend time with them and care for as well as care about them. This has been the anecdotal evidence expressed by many who go on such trips. Communities verbally express thanks, not primarily for the medicines given, rather first giving thanks for what the medicines express. It gives communities hope knowing that people from far away care about them and their country that lies at the margin (DeCamp 2007). Faith-based Christian group also bring their message of hope as well as the
love of Jesus, expressed for them in tangible ways, and this is received warmly, in a country that mostly Christian, reported as being 97% Roman Catholic and 3% Protestant (CIA 2008). These multiple antidotal case reports “suggest that the ‘medical benefits’ might not even be the ones that those in the target community most value. They realize that ibuprofen and multivitamins are not a panacea for inequalities in global health. They realize that the only way to successfully reduce global health inequities might be by fostering a normative sense of solidarity, that their suffering is our suffering, as a result of our ‘common humanity.’ The communities understand the significance of an ethics of mutual caring and solidarity – notions of ‘we’ versus ‘us’ and ‘them’ --- more than any who offer aid.” (Decamp 2007) These intangible benefits are valuable both to patients and providers, and further complicate the cost versus benefit analysis.

Still other authors question the ethics of humanitarian medical short term missions, and suggest that because of their potential for harm, they should be ethically scrutinized by a review panel as thoroughly as international medical research. Dr. Roth questions the assumption that medical humanitarian aid is innately moral, or is it more inherently ethical than a research study in the developing world. He states that, “doing a research study and handing out free drugs are far more alike in a developing country than they might be in a affluent one.” Roth goes on to compare how similar an observational study of malaria in the developing world with a control arm and a treatment arm is to a group bringing humanitarian aid. In his mind, he views the two as being very similar. The humanitarian aid group brings down doctors and medicine for a limited amount of time and then leaves, giving questionable benefit to the recipients of care. The research group comes down to the same locale, observes incidence of malaria and offers medications and medical care to some people for a limited amount of time, and then leaves.
Roth questions “the assumption of an ethical dichotomy between research studies and charitable medical interventions in developing countries.” Medical research in the developing world is subject to intense ethical scrutiny, yet no such review is needed for humanitarian aid.

This is an interesting and intriguing viewpoint. However, Dr. Roth fails to appreciate is that even though they may appear similar on the surface because they both provide short term care, the motives and ends of each are greatly disparate. For one, a study with a placebo control arm is deliberately not giving treatment to a group of people, and although humanitarian efforts cannot treat everyone, they do not intentionally not treat anyone. The IRB, and other ethical review panels, are in place to protect subjects from unethical exploitation. This is a serious issue as it has been done in the past at home in Tuskegee syphilis study (Corbie-Smith 1999), recently in Africa during placebo controlled AIDS trials (Clark 1998), and the atrocities committed by the NAZIs in the name of medical research (Emanuel 2004). These abuses of research resulted in patient/subject protection, and resulted in the Nuremberg Code in response to the NAZI’s, and the Belmont Report following the Tuskegee scandal (Emanuel 2004). These and other historical guidelines have resulted in our current thinking of international biomedical research ethics. Current guidelines require that any research satisfies: 1) social or scientific value, 2) scientific validity, 3) fair subject selection, 4) favorable risk-benefit ratio, 5) independent review, 6) informed consent, and finally 7) respect for potential and enrolled subjects (Emanuel 2004). Almost of all of these criteria do not apply to humanitarian relief efforts, with the exception of #4 and perhaps #7. Criteria number four, “Favorable risk benefit ratio” is based on the theories of non-malfeasance, beneficence, and non-exploitation, which in essence is summing up the Hippocratic Oath, the moral compass to medical practice for centuries. Any benefit of a therapy should outweigh the potential risks. Criteria #7 involves respecting subjects’ autonomy and right
to information and refusal of the study. The problem with Roth’s argument, is that the ethical criteria set up for protection of subjects in international research is not even relevant to humanitarian aid efforts, and could not be directly applied to these groups as it currently is stated. Even so, the heart of his intentions is valid, and with the greatest amount of care, planning and reflection, it is imperative that groups make their mission trips as ethically sound as possible, and this includes reviewing benefits and harms that occur from our interventions. “We are more likely to cause lasting harm when we fail to critically evaluate our actions.” (Decamp 2007)

A more surprising potential problem with medical missions is that they may inadvertently affect the local economy. Some authors also point out that outside doctors providing free services may disrupt the local health care system. Local practitioners must also scratch out a living, and it is feared that mission groups might disrupt the local health care economy and undermine the financial security and local reputation of indigenous doctors (Montgomery 1993). There has been a report of two physicians who drive a taxi instead of practicing medicine because they cannot make ends meet as a doctor (Doyal 2007). In such a poor country where patients have little money to spend on medicine, the local economy of healthcare hangs by a thread. This is a strong objection, and it is the unexpected result of a good natured physician trying to help an impoverished nation. One way to combat undermining doctors is to work in concert with local health care providers. This helps to affirm their competency in the eyes of the patients, allows for better delivery of care, and can help to build up the skill and knowledge base of indigenous providers. This fits with another of Montgomery’s critiques that skill and equipment transfer should be a priority of short term mission trips instead of focusing on patient volume (Montgomery 1993).
These are good suggestions to take to heart. Another helpful idea is to imagine the roles reversed, as done by Bishop. He asks us to imagine if a third world, unregistered doctor on vacation set up a clinic in a shopping center in the United Kingdom there would be public and professional outcry. If this is required and respected in the West, it should be done so in developing countries. Bishop goes on to criticize short term missions because chronic disease can not be treated realistically after a single consultation. From his observations he goes on to suggest that at times physicians on these trips are working outside of their trained specialty (Bishop 2000).

Another problem is that it has been observed that completely untrained laypersons act as competent medical personnel while overseas. Based on her observations, Maya Roberts points out the serious problem of non-trained people acting as physicians in Guatemala. She relates story of a 19 year-old boy, with no medical training, and who does not speak the language dons a stethoscope and dispenses pharmaceuticals while loosely observed by a physician who oversees twelve of these ‘providers.’ (Roberts 2006)

Not only are some providers unskilled medically, more competent doctors may not understand the local illness presentation, language, or culture. Feeling pressured to give something during an encounter, they may give inappropriate treatment instead of nothing. Almost always they cannot offer follow up care or consultations. He suggests that medical research should not be done, as this is unethical. In a more positive note, he recommends that doctors should work with local health professionals hand in hand. And of course, all persons engaging on a short term mission trip should seriously and soberly consider whether you are causing more good than harm for the community (Bishop 2000).