## ORIGINAL SCIENTIFIC REPORTS AND REVIEWS



# **Seven Sins of Humanitarian Medicine**

David R. Welling · James M. Ryan · David G. Burris · Norman M. Rich

Published online: 9 January 2010

© Société Internationale de Chirurgie 2010

**Abstract** The need for humanitarian assistance throughout the world is almost unlimited. Surgeons who go on humanitarian missions are definitely engaged in a noble cause. However, not infrequently, despite the best of intentions, errors are made in attempting to help others. The following are seven areas of concern: 1. Leaving a mess behind. 2. Failing to match technology to local needs and abilities. 3. Failing of non-governmental organizations (NGO's) to cooperate and help each other, and and accept help from military organizations. 4. Failing to have a follow-up plan. 5. Allowing politics, training, or other distracting goals to trump service, while representing the mission as "service". 6. Going where we are not wanted, or needed and/or being poor guests. 7. Doing the right thing for the wrong reason. The goal of this report is to discuss these potential problems, with ideas presented about how we might do humanitarian missions more effectively.

### Introduction

The Catholic Church during the Middle Ages had a list of seven cardinal sins [1]. Commission of any of these sins was considered to be a severe act. The list addressed many of our human foibles and included extravagance, gluttony,

The opinions and thoughts expressed in this article are those of the authors and do not necessarily reflect doctrine or opinions of the Uniformed Services University or the Department of Defense.

D. R. Welling (☒) · J. M. Ryan · D. G. Burris · N. M. Rich Norman M. Rich Department of Surgery, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814, USA e-mail: dwelling@usuhs.mil



greed, sloth, wrath, envy, and pride. These "deadly" sins were more serious than the "venial" sins that we all commit more regularly. Forgiveness from the seven sins required confession, penitence, and extraordinary efforts. When considering the topic of humanitarian medicine, it has occurred to us that we could craft a list of seven areas of concern, seven mistakes that are common and continue to challenge those who go forth on humanitarian missions (Table 1). With each area mentioned, we provide examples. Finally, we propose the ideal humanitarian mission, with its features.

Almost invariably, applicants for medical school when asked why they have decided to become a physician, give as an answer: "...the desire to help others." Humanitarian medicine provides the almost perfect opportunity to do just that. To go to an area where good care is not available, to provide services that can make a huge difference in the health and welfare of a fellow human being, to provide this service freely and without personal gain—surely these sorts of activities can be life-altering for both provider and recipient of care. And yet we do not always successfully accomplish our goals of providing safe, modern, successful, appropriate care.

This article is in no way meant to denigrate the good works of those who participate in humanitarian missions. We salute all those in these sorts of activities, realizing that there often is real sacrifice made, including the sacrifice of time, money, and equipment. Occasionally, humanitarian missions can even expose us to serious disease, accidents, or assaults. We have great respect for all who go forth to serve. Surely those who aspire to help others almost always do so with honorable intent, and almost never set out to satisfy selfish desires. However, despite our good intentions, mistakes continue to be made, which we attempt to demonstrate in this paper. In our view, there are (at least)

Table 1 The seven sins of humanitarian medicine

Sin #1: Leaving a mess behind

Sin #2: Failing to match technology to local needs and abilities

Sin #3: Failing of NGOs to cooperate and help each other, and to cooperate and accept help from military organizations

Sin #4: Failing to have a follow-up plan

Sin #5: Allowing politics, training, or other distracting goals to trump service, while representing the mission as "service"

Sin #6: Going where we are not wanted, or needed and/or being poor guests

Sin #7: Doing the right thing for the wrong reason

seven major opportunities for improvement in the art and science of humanitarian medicine.

The following are major reasons for failures in humanitarian medicine:

Sin #1: Leaving a mess behind. Complications can ruin everything. The death of a child can quickly erase the memories of a thousand successful operations. A good example of this principle is found in reviewing the story of Operation Smile. Operation Smile had been described as a "model charity." It was founded in 1982, to increase vastly the ability to treat cleft palate and cleft lip cases throughout the developing world. This humanitarian effort quickly gained popularity and traction. Supporters of this organization have even included Mother Theresa, Goldie Hawn, and Bill Gates. It became a well-funded charity. The problems with Operation Smile began in 1998 with the death of a child in China. It was alleged that "... It was the direct result of a poorly run mission with far too much attention being paid to publicity and not enough to patient safety and standard operating techniques." Medical professionals at the Beijing hospital where Operation Smile conducted the mission also were severely critical, saying "There was a high number of serious complications where children suffered from excessive bleeding or had to have emergency surgery because their palates had collapsed." Besides the criticism of the Chinese mission, there was a child who died because the oxygen supply had run out in Kenya, and another child died in Viet Nam of unrecognized asthma. This sort of adverse publicity has had a predictable, negative effect upon the organization, which continues to operate missions throughout the world. Major contributors withdrew offers of support, and the organization has undergone some serious restructuring and introspection as a result of these accusations. "After Operation Smile came to Bolivia, several children needed extensive follow-up care at San Gabriel Hospital, according to Dr. Roberto Rosa, a pediatric surgeon there who was sharply critical of Operation Smile and other charities. "This is a form of neo-colonialism," argued Dr. Rosa, saying that Operation Smile had committed "surgical safaris against our children," who are from poor families who are unlikely to complain [2].

Perhaps some of the difficulty encountered by Operation Smile revolved around the complexity of the cases they attempted. As a rule, the more difficult cases should not be routinely done by humanitarian medicine transient teams, in our view. Sometimes "No" is the best answer when pressed. Surely it is wise to always review the capabilities of the team and never allow providers to do more than they should be doing, given limitations of equipment, time, etc. Numbers of cases performed should not be allowed to trump patient safety and proper monitoring. Large and complex cases should be reviewed and only performed when the team is convinced that the case can be done safely, and that the patient will receive good care when the humanitarian team is no longer on the scene. This implies a great degree of trust and cooperation with local health care providers, which Operation Smile apparently did not always have. We also believe that ideally, visiting surgeons should be teaching local surgeons how to do the operations and have them fully onboard in the decision-making and care, especially if the visitors plan to leave patients with unresolved issues. If local surgeons feel that they lack expertise in a particular operation and ask for training by the visiting surgeons, then certainly that sort of training is sensible and more likely will have a positive outcome.

One good rule is to offer the types of procedures that are minimally invasive, to relieve immediate discomfort, and that require little follow-up care, especially for missions that are short-term. Thus, removal of abscessed teeth, removal of ingrown toenails, fitting of eyeglasses—simple acts of this sort will create good will and a positive memory of the care given, with little risk of leaving a mess behind [3].

Sin #2: Failing to match technology to local needs and abilities. Despite what we may think, a vast part of our world does not have high-speed Internet access, or even electricity, or potable water. As we prepare to go off on a mission to a disadvantaged country, we ought to be asking ourselves how we might best go about helping. Generally, bringing the latest and the greatest new technology into a society that is impoverished can be more a cruel joke than a boon for the people. Yet, as we prepare to go, we generally like to surround ourselves with equipment that we normally use, and so this error is very easily understood. Here is a telling quote from a Belgian plastic surgeon, Dr. Christian Dupuis, who has volunteered to go to South East Asia for several months each year since the 1970s: "I have seen professors from fancy American universities teaching endoscopy skills in Laos to internists who don't have access to an endoscope...." [4] Perhaps this foible is somewhat tied into the desire to do a "first," as in doing the first laparoscopic adrenalectomy in the Amazon basin. It is



more about bragging rights than about solid, needed care that will be sustainable after we leave.

Sin #3: Failing of NGOs to cooperate and help each other, and to cooperate and accept help from military organizations. Nongovernmental organizations (NGOs) are in a constant battle with each other as they compete for funding for their particular cause. If they can somehow show that their particular organization is doing more operations, or pulling more teeth, or treating more patients, this degree of activity can translate into getting more funds from the donors. It is well known that these organizations get into contests with each other, and spend a good deal of energy and resources trying to look better than the competition. To quote Dr. Anthony Redmond, a British Professor of Accident and Emergency Medicine: "...Teams must cooperate with each other. Competitive humanitarianism is destructive and very wasteful of resources, both human and material. There can be pressure, either real or imagined, to be seen to be doing something in the eyes of those who have sponsored the team. This must be resisted. Much useful work can be done away from the glare of publicity in support of the work of others" [5]. One area that certainly could be improved is the attitude of NGOs toward the military. Both U.S. and non-U.S. military capabilities for transportation of supplies and personnel, for setting up tent hospitals, for bringing in operating room capabilities and blood banks—this sort of amazing capability is available and has been proven effective throughout the world. And yet at times the NGOs would appear to rather go without than to be seen working with someone in a military uniform. Ultimately, that attitude hurts the mission. We believe that both sides, military and nonmilitary, could do more to foster cooperation in this regard. Perhaps some progress is being made. Very recently, Navy Captain Miguel Cubano, who is presently serving as the U.S. Southern Command Surgeon, reported that NGOs have been offered operating room time on board the USNS Comfort, and a number of NGOs were onboard as the ship was to sail into the Caribbean on its next mission, which began in April 2009 (Dr. Miguel Cubano, personal communication). This sort of planning, which is innovative and unusual, should be congratulated and encouraged in the future.

Sin #4: Failing to have a follow-up plan. A good example of this foible has been the activity of the United States military in Africa during the past several decades. We have had a yearly mission to a given area, a humanitarian effort, which is a wonderful and unforgettable opportunity for those lucky enough to be chosen to go along. The problem with these missions is that they have generally never gone back to the same place twice; thus perversely, instead of helping people, perhaps these efforts actually cause the good people of Africa to resent our

well-intentioned efforts. One of us (DRW) was involved in a humanitarian mission, called Operation Red Flag, to northern Cameroon in March 2000. This mission lasted almost a month. It involved several hundred medical and support military personnel, mainly stationed in Germany, who were transported via C-17 and B-747 aircraft to Garoua, Cameroon. Tons of supplies were brought in, as well as vehicles and other ancillary equipment. We presented the hospital with a vast array of new equipment, including autoclaves and operating room tables. Our teams built an xray suite at the military hospital. Teams went to villages, where wells were drilled, vaccinations were given, teeth pulled, and eye glasses distributed. We were very kindly hosted by the local populace, and when we finally left, dinners were held in our honor, toasts were made, and we said goodbye to our new friends. But what must the good people of Garoua think of those Americans now? Surely the supplies are long gone, and the equipment needs maintenance or replacement. Those who had our care no doubt need follow-up. It was almost a cruel joke, tantamount to taking a little child to Disneyland for 15 minutes, and then getting back into the car and leaving forever. We had given the citizens of Garoua just a taste of modern medicine, just a brief look at what might be. And then we left. Surely we should never have one-time-only missions. We should have an ongoing, regular visit schedule. We should see our patients again and again. We should know and have ongoing dialogue with our medical colleagues in these countries. None of this was done after the Cameroon mission. It is much better to pick one country and continue to serve it well, than to hopscotch all over Africa, going everywhere and truly getting nowhere.

Sin #5: Allowing politics, training, or other distracting goals to trump service, while representing the mission as "service." The U.S. Navy has two large hospital ships, the USNS Comfort and the USNS Mercy. The Comfort is berthed in Baltimore, MD, and the Mercy in California. Our Navy has fairly frequently used these ships to go on "humanitarian" cruises, as well as for response to natural and manmade disasters. For humanitarian missions, the Comfort usually goes to the Caribbean, while the Mercy goes to the South Pacific. Typically, at the end of a cruise, the Navy will announce the results of these missions, with invariably positive publicity. For example, a 2007 Caribbean tour by the Comfort involved more than 500 personnel and lasted several months; 98,000 patients were seen, 1,170 surgeries were performed, 32,322 shots were given, 122,245 prescriptions were filled, 24,242 eyeglasses were fitted, 3,968 teeth were pulled, and 17,772 animals were treated. Schools were built, and even the U.S. Navy Show Band participated [6]. On another mission, the *Mercy* left in May 2008, on a South-East Pacific voyage, and after several months, reported that their providers had examined



more than 90,000 patients and had performed almost 1,400 operations [7]. Obviously, for those aboard for these missions, this was a remarkable experience. But truly it was more about photo opportunities, training, diplomacy, and "showing the flag" than about service. These huge ships (894 feet long) are not well-suited to these missions. At times in the Caribbean, the Comfort was required to anchor a dozen miles offshore, relying on helicopters and smaller boats to ferry patients back and forth. Each port in the Caribbean was visited for about a week, and the visits were not always well-coordinated with local organizations, which at times were not even consulted. Thus, resources were not maximized. Even Fidel Castro weighed in on this mission and was quoted as saying this about our efforts, and he has a good point: "You can't carry out medical programs in episodes" [8]. Interestingly, President Barack Obama, while attending a summit of the hemisphere's leaders in Trinidad and Tobago in April 2009, seemed to validate what Castro had previously inferred. President Obama felt the that United States could learn a lesson from Cuba, which for decades has sent doctors to other countries throughout Latin America to care for the poor. The policy has won Cuban leaders Fidel and Raul Castro deep goodwill in the region [9]. Apparently, the Cuban doctors have correctly realized that by staying in one place for a prolonged period of time, they can have maximum impact with the local populace. For a small and poor country, Cuba has made remarkable contributions to reducing infant mortality and helping disaster victims throughout the world. During the past four decades, some 52,000 doctors and nurses have been sent to 95 needy countries. Recently large numbers of doctors and nurses have been sent to Venezuela, with some subsequent discontent voiced by Cuban citizens, who now are noticing increased waiting times, and difficulty gaining access to routine care [10]. Cuba also has helped to establish medical schools in a number of third-world countries [11].

These Navy missions must be great for training, and for projecting power, and showing the flag, but probably could be modified by using smaller ships and more frequent missions to the same places. The *Comfort* and the *Mercy* have never been proven able to reach a disaster site in a timely manner, and their attempts at humanitarian medicine have not always been convincing in the aggregate. The last USNS *Comfort* mission to the Caribbean began on April 1, 2009 [12].

Sin #6: Going where we are not wanted, or needed and/ or being poor guests. Dr. Anthony Redmond teaches us that we need an official request to go into an area in need, asking for our specific help. He states this: "The pressure to do something immediately can be considerable. Emotive television and press reports galvanize public opinion into demands for immediate action. However, without recognized terms of reference and a clear mandate to enter and work in another country, foreign teams will at best be stranded at airports and at worst add considerably to the problems of an already beleaguered nation. Time spent in securing a safe passage through and identifying a task to be completed will result in a shorter journey to the scene [5]." Dr. Redmond also talks about the necessity of doing what the local officials want, instead of what we think they may need. "If assistance is to be most effective it has to be organized. Local officials are in charge and must be allowed to develop and execute their plans with foreign teams there as a resource and not a threat. When a team has gained local confidence and developed good local relationships they will have a better knowledge of local requirements. This process of 'bedding in' to the local network can be completed within 24 hours [5]." Mr. Jim Ryan, a surgeon from the United Kingdom and someone well-experienced in humanitarian medicine, relates seeing a whole team from Scandinavia, which had, with the very best of intentions, responded to the tsunami disaster in Sri Lanka without first getting permission from the government. Despite their great expertise and extensive equipment, they were sequestered and were not allowed to leave their compound, let alone go out and help the victims. As to how one should conduct oneself when on a humanitarian mission, a dose of humility might get us off on the right foot as we begin. Anything that looks like boorish behavior, or condescension, or a patronizing attitude—any such behavior is detrimental to our efforts and will leave an unpleasant memory of us for those who would be our patients and our colleagues. We need to be very careful with local customs and mores. How we dress, how we act, what we drink—all of these activities will define us to our hosts. We can learn much from third-world providers, as they maximize what they have in supplies, and innovate to give their patients the very best care possible. We should go with the desire to see a different way to render care, instead of insisting that our way is the only correct way possible.

Sin #7: Doing the right thing for the wrong reason. In *Murder in the Cathedral*, T.S. Eliot wrote about the various temptations that Thomas the Archbishop suffered through, and the very last was the most difficult. As Thomas proclaimed: "The last temptation is the greatest treason: To do the right deed for the wrong reason [13]." The list of wrong reasons to go off on a humanitarian mission is potentially a long list, and no doubt would vary somewhat from person to person. To name a few reasons not to go, one might include the desire to go on an unusual vacation, bragging rights for having done a "first," the desire to perform a large number of complex cases quickly (without the niceties of informed consent, proper monitoring, planned follow-up, and without training the local surgeons to do the



procedures themselves), to gain fame, to have a free trip to an exotic land, or to somehow get an advantage in academia. The corollary to this last observation would be that we should go forth with pure motives, with a well-thought-out plan of action, including host nation physicians, avoiding the types of operations that lend themselves to long-term complications, and with a teachable, humble attitude.

#### **Summary**

We have listed some of the common mistakes and pitfalls that can beset those who would go on humanitarian missions, with thoughts about how we might improve in this regard. The importance of doing humanitarian medicine properly cannot be overemphasized. To maximize our effectiveness as humanitarian providers, more time should be spent thinking about the details of a given mission. Motives should be questioned. We ought to aggressively plan activities that will do the most good for our patients, and we ought to shun those activities that are more designed for our own personal aggrandizement. There is an inexhaustible demand for modern medicine throughout the world, and we face that demand with finite resources and human foibles. How we go about doing humanitarian medicine can define us, for better or for worse.

**Acknowledgments** The authors wish to acknowledge the teaching, mentorship, and example of Drs. David C. Wherry, J. Leonel Villavicencio, Stanley L. Minken, and Arthur L. Trask, who helped in the formation of the ideas presented in this report.

#### References

- http://en.wikipedia.org/wiki/Seven\_deadly\_sins. Accessed 26 Mar 2009
- http://www.nytimes.com/1999/11/24/world/charges-of-shoddypractices-taint-gifts-of-plastic-surgery.html?sec=health&spon= &pagewanted=1. Accessed 26 Mar 2009
- Minken SL, Colgan R, Barish RA, Doyle J, Brown PR, Welling DR (2008) Waging peace: a medical military mission to Bosnia-Herzegovina. Surg Rounds 31:128–135
- Wolfberg AJ (2006) Volunteering overseas: lessons from surgical brigades. N Engl J Med 354:443

  –445
- Lumley JSP, Ryan JM, Baxter PJ, Kirby N (1996) Handbook of the medical care of catastrophes. Royal Society of Medicine Press Limited, London, p 37
- http://www.southcom.mil/AppsSC/factfiles.php?id=6. Accessed 20 April 2009
- Davis KD, Douglas T, Kuncir E (2009) Pacific Partnership 2008:
   U.S. Navy Fellow provide humanitarian assistance in Southeast Asia. Bull Am Coll Surg 94:14–23
- http://www.flacso.org/hemisferio/al-eeuu/boletines/02/86/rel\_07. pdf. Accessed 20 April 2009
- Wilson S (2009) Obama closes summit, vows broader engagement with Latin America. Washington Post, April 20:A6
- http://www.boston.com/news/world/latinamerica/articles/2005/08/ 25/as\_cuba\_loans\_doctors\_abroad\_some\_patients\_object\_at\_home/. Accessed 20 May 2009
- http://www.medicc.org/ns/index.php?s=46&p=12. Accessed 20 May 2009
- http://www.southcom.mil/appssc/factfiles.php?id=103. Accessed 20 April 2009
- Eliot TS (1964) Murder in the cathedral. In: Brooks C, Purser JT, Warren RF (eds) An approach to literature, 4th edn. Appleton-Century-Crofts, New York, p 816

