Ethics for International Medicine

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Medical facts are not always clear, unambiguous statements of the truth agreed upon by all stakeholders involved in a particular case. Rather, each stakeholder has his or her own perception of the medical facts, which is based on the information he or she has received, prior experience, and medical knowledge, among other factors. Oftentimes, when stakeholders do not agree or are unclear about the medical facts, ethical issues occur. For example, the family of a patient who is intubated after undergoing a major surgery may request to have the ventilator discontinued because the patient had expressed his desire not to be dependent upon machines for survival. The surgical team would undoubtedly disagree with the family’s request, because the ventilator is an acute treatment that they will be able to safely discontinue when the patient is able to breath on his own. The lack of clarity about the purpose of the ventilator and the patient’s expected course is the root cause of disagreement between the family and the surgical team in this case. If the stakeholders are able to identify different understandings about the medical facts as causes of their disagreement, then they can clarify these facts and come to a consensus about the best treatment plan.

Several contextual features of international medicine increase the frequency and severity of differences among stakeholders’ perceptions of the medical facts. Medical aid workers encounter patients who have unfamiliar medical problems—either diseases that are not common in developed countries or conditions that are much further advanced than similar conditions in developed countries. In addition, medical aid workers almost always serve patients who speak a different language. They commonly rely on interpreters who do not have formal training in medical translation. Even when medical aid workers speak the same language as their patients, low health literacy can create a barrier to commu-
nication. Moreover, because many medical aid workers serve in cultures where people have spiritual interpretations of illness, there may be genuine disagreements between them and their patients or local practitioners about what the medical facts actually are. The cases presented in this chapter illustrate how these contextual features contribute to misunderstandings among stakeholders regarding medical facts and result in ethical issues. The case analyses demonstrate how medical aid workers can use the assessment questions as a tool to prevent ethical issues from arising, to identify ethical issues early, and to begin the process of addressing ethical issues that arise from misunderstandings or disagreements about the medical facts.

**Different Medical Conditions**

Medical aid workers commonly encounter patients with medical conditions that they are unfamiliar with or that are more advanced than what they see in the developed world (Farmer 2003; Graf 2003; Hennessy 2003; Leo 2003). Diseases that have been virtually eliminated in developed countries, such as malaria, tuberculosis, and dysentery, are rampant in developing countries (Tan-Alora and Lumitao 2001). In addition, conditions that are easily treated in developed countries are sometimes allowed to advance so far that standard treatments are more dangerous or ineffective. For example, Graf (2003) describes seeing patients with hernias the size of basketballs and uterine fibroids so large that women look pregnant.

Because medical aid workers serve patients with significantly different medical conditions from those common in developed countries, they often encounter medical problems that they have not been trained to treat. At the same time they are serving in areas of limited resources and high medical need, so patients may have no alternative options for receiving care. When faced with patients who have unfamiliar or very advanced medical conditions, medical aid workers must determine whether they have the knowledge and skills appropriate to treat these patients. They must realistically consider alternatives for intervention, especially the option of not intervening, balancing the risks and potential benefits of each option. In addition, medical aid workers should keep in mind that they have a limited ability to follow up with patients and try to avoid treatments or interventions that require this. The following case
illustrates one situation in which a medical aid worker realizes that he is not prepared to treat the patients whom he encounters.

**Case 1.1: Vesico-Vaginal Fistula Repair Surgery**

A urogynecologist from the United States decides to go on a two-week medical mission to Ghana with a group of physicians to perform vesico-vaginal fistula repair surgeries. The urogynecologist has performed hundreds of post-hysterectomy vesico-vaginal fistula repair surgeries in the United States, and the other group members are similarly experienced.1

The area of Ghana where the group goes has staggering maternal and infant mortality rates because obstetric care is virtually nonexistent. There are many women in the area, particularly young women in their teens and early twenties, who have survived complicated pregnancies and now suffer from vesico-vaginal fistulae as a result of prolonged obstructed labor. Most of these women have been cast out of their communities or have left voluntarily because the urinary incontinence that results from vesico-vaginal fistulae is embarrassing and produces a foul odor.

The day that the group arrives, hundreds of women line up for evaluation. Some of the women have been living with vesico-vaginal fistulae for years and are desperate to have their problem fixed so that they can return to their communities and their families. Because of the overwhelming need, the team sets a goal of 10 surgeries per day for the remaining thirteen days, or 130 surgeries total. They base this goal on the time that it generally takes the physicians to perform routine post-hysterectomy vesico-vaginal fistula repairs in the United States.

On the second day of the mission, the urogynecologist arrives at the hospital early to prepare for the first surgery. His patient is a twenty-year-old woman who developed a vesico-vaginal fistula as a result of prolonged, obstructed labor during her first pregnancy three years ago. The fetus did not survive, and her husband left her soon after because of her incontinence. The urogynecologist begins the procedure, confident that it will be relatively uncomplicated. However, when he finds the fistula, it is surrounded by extensive dense scar tissue that most likely resulted from necrosis caused by the fetal head pushing against the pelvis during labor. The urogynecologist does what he can to close the fistula, but with the extensive scar tissue and the limited resources he has to work with, he is not confident that the closure will be successful long term.
After the procedure, the urogynecologist asks the other medical aid workers if they had experienced similar difficulties, which they all had. None of the physicians had expected these difficulties, and they are all inexperienced in dealing with extensive scarring around the vesico-vaginal fistulae. Several have suggestions about how best to perform the procedure, given the surrounding scar tissue, but these suggestions are based on speculation rather than evidence or experience. The urogynecologist, aware that he is not fully competent to perform vesico-vaginal fistula repairs on women with extensive scar tissue, wonders if he should continue with the surgeries, doing the best that he can with his level of training and the resources that are available.

**CASE ANALYSIS**

*Stakeholders*

The urogynecologist in this case must determine whether or not he should continue doing vesico-vaginal fistula repair surgeries given that they are more complicated than he had expected. Because there are many stakeholders in this case, namely the urogynecologist, the other medical aid workers, local medical personnel, and the women who have vesico-vaginal fistulae, it would be impossible for the urogynecologist to ask each individual the analysis questions. Rather, he could begin by answering the questions himself, asking a few other medical aid workers, and asking local medical personnel if available. Local medical personnel are a great resource because they can give both their own perspective and the general perspective of the women. This analysis focuses on the urogynecologist, but considers the other stakeholders where appropriate. While this chapter concentrates on misunderstandings or disagreements about medical facts as the source of ethical issues, each case analysis explores the five essential elements of ethical issues to illustrate how they affect the identification and justification of options.

*Medical Facts*

This case illustrates a common scenario in international medicine: a medical aid worker encounters patients who have more-complex medical conditions than he is accustomed to treating. From the perspective of the urogynecologist, several medical facts are clear. The women have vesico-vaginal fistulae, caused by prolonged, obstructed labor. Their
most prominent symptom is urinary incontinence. In developed countries, this condition can be managed with adult diapers if an operation cannot be done or is not desired by patients. However, the definitive treatment for this condition is surgical repair. The urogynecologist is not sure about how best to perform the operation, given the extensive scar tissue surrounding the fistulae. In addition, he is not confident that the operations will be successful long term. While this case does not provide details about the women’s understanding of their condition, it is clear that it has significantly affected their lives, causing them to be cast out of their families and communities, and that without successful treatment, they will continue to be outcasts.

Goals and Values

All of the stakeholders agree that the goal of the surgeries is to provide the women with definitive repairs of their vesico-vaginal fistulae. The individual and cultural values of the stakeholders are not explicitly stated in this case. However, the urogynecologist likely values his ability to improve the lives of his patients through surgical intervention. The women clearly value the ability to return to their families and communities.

Norms

The bioethical norms central to this case are nonmaleficence, beneficence, and relationality. Nonmaleficence requires that physicians do not perform procedures or provide treatments that exclusively cause harm to patients. The vesico-vaginal fistula repairs would be harmful if the women were subjected to the risks of surgery without the possibility of successful repair. If there is a potential for successful repair, then the norm of beneficence becomes important. Beneficence requires that the potential benefits and risks of an intervention are appropriately balanced. While the urogynecologist is able to accurately determine the risks and benefits of post-hysterectomy vesico-vaginal fistula repairs, the obstetric vesico-vaginal fistula repairs do not have a well-defined risk-benefit profile. Therefore, he cannot confidently predict the likelihood of harm versus successful repair.

The norm of relationality, which states that relationships are important and should be respected, explains the women’s motivation for wanting operative intervention. The women’s relationships with their families
and communities have been disrupted because of the fistulae. The only way that the women will be able to return to these important relationships is if they have successful repairs.

The professional norm central to this case is competence. Medical professionals are expected to only perform procedures that they are competent to do. The urogynecologist is not confident that his training in the developed world has prepared him adequately for the type of fistula repair surgery that he has to perform on these women. At the same time, he is not in a position to refer the women to a more competent provider, as he would be able to do in the United States. Therefore, he must decide if he is competent enough to perform the operations.

The legal norm that would be applicable in this case, if it were in the United States, is the question of whether or not performing these interventions would constitute medical malpractice. Medical malpractice occurs when a physician fails to provide the quality of care required by the law and that failure results in injury to the patient (Furrow et al. 2001, 165). For a medical practitioner to be found guilty of medical malpractice, four elements must be proven: a duty was owed, the duty was breached, the breach caused an injury, and damages occurred. In this case, the surgeries are elective rather than emergent, so a duty is only owed to patients whom the urogynecologist accepts for operative intervention. The duty would be breached if the urogynecologist failed to comply with the accepted standard of care, which is not clearly defined. If patients sustain injury because of a breach in duty, then the urogynecologist would be liable for damages under the law in the United States. While the legal concern of medical malpractice can be an important factor in surgical decision making in the developed world, it is often ignored in international medicine because patients do not generally sue medical aid workers. However, medical aid workers should still consider whether their actions would constitute medical malpractice in their home countries as a guide for appropriate decision making.

**Limitations**

There are several limitations in this case. As already discussed, the medical aid workers have limited experience doing fistula repair operations on women with extensive scar tissue. In addition, the clinic where they are doing the operations has limited resources. Because the medical
aid workers did not realize that the operations would be so complex, they did not bring additional supplies to help with the repairs. Moreover, the group is in Ghana for only two weeks, meaning that its members will not be physically present to monitor the long-term outcomes of their interventions. This means that they will not be able to provide revisions if the fistula repairs break down.

The women are limited in their options for fistula repair. They cannot afford to pay for an operation, so they must rely on medical aid workers to provide them free of charge. Moreover, because they are outcasts from their communities and have no source of income, the women would not be able to afford to buy adult diapers even if they were readily available, so this is not a viable alternative to surgical repair.

**Analysis and Justification of Options**

The two options for the urogynecologist are to offer operative intervention or not to offer operative intervention. Either of these options is feasible, given the identified limitations, so the justification criteria can be used to determine whether one option should be chosen over the other.

The first step in justification is to determine whether the options will be effective in achieving the goal, which is to repair the women’s vesicovaginal fistulae. Operative intervention may be effective in achieving this goal, although the chance of a successful long-term repair is unknown. Not performing an operation will not be effective in repairing the fistulae. Therefore, only one of the two options has the potential to be effective in achieving the goal, but the likelihood of success is unknown.

The next step in justification is to determine if the benefits of the option outweigh its infringement on the identified norms and values. The option of operative intervention has the potential to infringe on the bioethical norms of nonmaleficence and beneficence. If the operative intervention is ineffective in achieving the goal of fistula repair, then it would infringe on the norm of nonmaleficence because it would subject patients to significant risks without any benefits. If operative intervention has a reasonable chance of being effective, then the stakeholders would have to determine whether or not this is consistent with the principle of beneficence. The operations have the potential benefit of correcting the fistulae and allowing the women to be reunited with their
families. However, the risks include failure to correct the fistulae, increased scarring so that future procedures are more complicated, infection, bleeding, and the risks of anesthesia. If the operations are significantly different from and more complex than those the urogynecologist has performed at home, then there may only be a small chance that the women will benefit, but an increased risk of harm resulting from operative intervention. If the operations are not significantly different and the urogynecologist judges that there is a high likelihood of success, then the benefits would likely outweigh the risks. In addition to potentially infringing on bioethical norms, the option of operative intervention may infringe on the professional norm of providing competent care because the medical aid workers have a limited scope of experience in obstetric vesico-vaginal fistula repairs. In addition, the medical aid workers might cross the legal boundary of medical malpractice if these procedures do not adhere to the standard of care and cause injury to patients.

The option of not doing the operations has the potential to infringe on the bioethical norms of beneficence and relationality. If the risk-benefit profile of the operations is acceptable, then not doing them fails to maximize the benefits and minimize harm to patients. In addition, because this option leaves the women with vesico-vaginal fistulae, they will not be able to return to their communities and families to re-form the relationships that have been severed by their condition. If the urogynecologist chooses this option because he is not comfortable performing the operations, then it is consistent with the professional norm of competence. In addition, this option would not infringe on the legal norm of medical malpractice, because the elective nature of these procedures means that the urogynecologist does not have a duty to perform operative interventions.

The next step in the justification of the options is to determine whether the options must necessarily infringe on identified norms and values. If operative intervention has an acceptable risk-benefit profile, a reasonable chance of success, and the medical aid workers are comfortable with their level of competence, then this option would not necessarily infringe on any of the norms and values. The option of not operating necessarily infringes on the norm of relationality in the sense that it does not have the potential to allow the women to return to their families and commu-
nities. However, if the likelihood of successful operative intervention is very low, they may be denied this opportunity either way.

The next step in justifying the options is to determine how to minimize infringement on the identified norms and values. Both options have the potential to infringe on the ethical norm of beneficence. The choice of operative intervention infringes on beneficence if the risks are significantly greater than the potential benefits. In order to minimize the risks of the procedures, the medical aid workers could decrease the number of operations that they plan to do, so as to spend more time doing each procedure. While not applicable in this case, medical aid workers planning surgical missions could communicate with previous volunteer groups or local medical personnel to determine what differences they should expect to encounter so as to prepare to manage these differences. The option of not doing the operations would infringe on beneficence if the benefits of the procedure outweigh the risks. If there is a question about the appropriate balance of risks and benefits, it would be important to ask the women about their willingness to accept these risks, given the low likelihood of success versus the alternative of not having the procedure done.

Finally, stakeholders should determine whether they are comfortable sharing their decision-making process with others. If the urogynecologist is realistic about the potential benefits, risks, and limitations of each option, he should be comfortable sharing his reasoning with others. In addition, after he has considered his position, it would be important to share his opinions with the other stakeholders, particularly other medical aid workers, local medical personnel, and some of the women, to determine whether or not they agree with his analysis, before he makes a final decision about whether to continue operating.

In this case, either option may be justified, depending upon the risks and benefits of the procedures and the competence of the medical aid workers. If the risks of the procedures are not significantly increased, the potential for benefit is acceptable, and there is a plan for transfer of care and appropriate follow-up with local medical personnel after the group leaves, then the urogynecologist would be justified in continuing to offer operative intervention. On the other hand, if the stakeholders determine that the risks are too significant and the potential for benefit is
too low, then the group should not continue doing the operations. While it is hard to travel to a developing country with the intention of providing meaningful interventions for desperately needy patients and then decide not to perform the intended procedures, it is important that medical aid workers consider this an option, especially with elective procedures, because providing substandard interventions can leave patients worse off.

**Case Commentary**

Even though medical aid workers have been extensively trained in the developed world, they may encounter patients with unfamiliar conditions or complications in developing countries. While medical aid workers may have a desire to intervene in these situations, they should assess their own limitations as well as the risks and potential benefits of the procedures that they are planning. It is especially hard to decide not to intervene when faced with desperate patients who have no alternative options. However, it is important that medical aid workers are aware that their interventions may leave patients worse off than they were before the intervention, and that they make decisions based on this consideration. Doing something is not always better than doing nothing during medical aid missions, especially when the intervention has the potential to result in significant harm to patients. It is important that medical aid workers do not adopt the attitude that any care is better than no care at all, and that they are able to exercise prudent decision-making, even when confronted with patients who have no other alternatives.

**Language Differences**

Language differences often contribute to misunderstandings about medical facts in international medicine (Cappello, Gainer, and Adkisson 1995; Ozao 2007; Sechriest and Lhewe 2008). Language barriers can lead to time-consuming patient visits and impede the collection of patient medical history (Albrecht 1992; Won et al. 2006). Moreover, poor translation may have serious effects on patient care. For example, one medical aid worker showed videotapes of interactions between medical aid workers and Haitian patients to a couple of Haitian doctors, who informed him that the translation was not good and they had misdiagnosed several patients as a result (Grindeland 2003). The following case
illustrates how ethical issues can arise in the setting of language barriers in international medicine.

**Case 1.2: Informed Consent for Tubal Ligation Surgery**

A young woman, her husband, and their two small children visit a gynecology clinic in Guatemala. Through an interpreter, the husband tells the medical aid worker that his wife wants to have tubal ligation surgery. The medical aid worker explains the procedure to the couple through the interpreter and asks if they have any questions. The husband says that he understands the explanation. To make sure that they appreciate the outcome of the procedure, the gynecologist asks the interpreter to make sure that they understand that the woman will not be able to have children as a result of this surgery. The husband tells the interpreter that they understand this, and the wife nods in agreement.

The gynecologist successfully performs the tubal ligation procedure. When the woman wakes up from the operation, the gynecologist speaks with her through a different interpreter. She tells the gynecologist that she is happy that the operation was successful because now she does not have to worry about having more children. She goes on to explain that only one of her breasts produces milk, and she does not have the money to buy the supplemental formula that would be needed if she had another child. It is clear from this explanation that the woman decided to have the procedure not because she did not want to have any more children, but because she did not think that she could afford to have another child and believed that this procedure was the only solution.

**Case Analysis**

In this case, while the medical aid worker sought informed consent from the couple for the tubal ligation, he did not explore the reasons why they wanted to have the procedure done or the alternative options that they may have had for achieving their goals. The use of the translator may have hindered the medical aid worker’s ability to explore the reasons for the procedure and the alternative options. However, had the medical worker taken additional time and used the assessment questions for identifying ethical issues, he would have elicited the couple’s understanding of the medical facts and presented them with alternative
options. This case analysis illustrates how the assessment questions can be used prophylactically when ethical issues are likely to occur, either to identify them early or prevent them altogether.

**Stakeholders**

The primary stakeholders in this case are the patient, her immediate family, and the medical aid worker. The translator is also a stakeholder. Other stakeholders may include the patient’s extended family, her religious community, and local medical personnel.

**Medical Facts**

The medical aid worker’s initial understanding of the medical facts is that the couple want the tubal ligation because they do not want more children. While the woman does not have a medical problem per se, she desires permanent sterility, and the medical aid worker is confident that tubal ligation will be effective in achieving this goal. The medical facts according to the couple tell a different story. The woman’s primary problem is that she cannot produce milk with one of her breasts. The effect that this problem has had on their lives is that they fear having another child because the woman would be unable to provide adequate nutrition for an infant and they cannot afford to supplement with formula. From the case, it is unclear whether or not she has tried anything to treat this problem, but if she has, nothing has been successful. She and her husband believe that her problem can be treated with a procedure for permanent sterility because they will not have to worry about having more children. If she does not have the tubal ligation, she risks having another child, which the couple will be unable to support. By exploring the couple’s understanding of the medical facts, the medical aid worker would have identified the woman’s reason for desiring a tubal ligation and been able to discuss alternative options. In addition, he could have discussed milk production with them.³

**Goals and Values**

Both the physician and the couple share the goal of making the woman sterile, although the couple’s reasons for wanting this is not just that they do not want more children—it is that they cannot afford to have more children. The couple value the ability to provide for their children and
believe that tubal ligation is the way in which they can ensure that they are able to do this.

**Norms**

The two bioethical norms important in this case are respect for autonomy and relationality. In developed countries, the process of informed consent is the primary way in which physicians respect the autonomy of patients in making decisions about medical care. It is not only an ethical imperative, but also a legal imperative in the United States (Berg and Appelbaum 2001). There are five components required to achieve full informed consent: competence, disclosure, understanding, voluntariness, and consent (Beauchamp and Childress 2001). In this case, the medical aid worker did not thoroughly explore the couple’s understanding of the medical facts during the informed-consent process. Because of this, he was unable to identify alternatives to the procedure that may have been more desirable to the couple or to discuss the benefits and risks of these alternatives.

The norm of relationality is central to the couple’s decision to seek a tubal ligation. The couple identify the obligation to provide for their children as important. They already have two children that they must provide for and are afraid that they will not be able to fulfill these obligations if they have another child, especially given the woman’s inability to produce milk with one of her breasts.

**Limitations**

Because the medical aid worker did not discuss alternatives to tubal ligation with the couple, specific limitations to other treatment options are not clear in this case. In general, alternative ways to achieve the goal of contraception include condoms, oral contraceptive pills, hormone injections, hormone patches, implantable devices, and intrauterine devices. In addition, vasectomy is an alternative option for permanent sterility. One of these alternatives might be available and more desirable for the couple. If the couple express an interest in a different form of contraception, the medical aid worker would have to determine if that option is available and practical given resource limitations and the couple’s ability to access available resources. For example, the couple may not be able to afford oral contraceptive pills, or the clinic may not have a stable supply
of them. Alternatively, trained medical personnel may not be readily available to remove or replace implantable devices.

**ANALYSIS AND JUSTIFICATION OF OPTIONS**

Because the medical aid worker did not discuss alternatives to tubal ligation in this case, it is not clear whether alternative forms of birth control are available or desirable. After the medical aid worker establishes the couple’s reasoning for seeking tubal ligation surgery, it is important to determine what options for contraception are available and discuss them with the couple. The couple may prefer a temporary method of birth control that will allow them to have children in the future. Alternatively, they may determine that the woman is actually producing enough milk for the infant, and decide that they do not want to use birth control because they want more children soon. The justification process for this case compares the potential options of tubal ligation, temporary contraceptive methods, and no contraception. Vasectomy is not discussed because it would be an alternative to tubal ligation as a permanent form of contraception. For the purpose of this analysis, it can be considered in the same discussion as tubal ligation.

The first step in justification is to determine the effectiveness of the option with respect to the goal. In this case, the medical aid worker and the couple must clarify the goal in order to determine the effectiveness of the options. If the couple does not want to have any more children, then tubal ligation would be the most effective option. If the couple wants to have the option of having children in the future, then a temporary form of birth control would be effective. If the couple wants to have more children soon, then not using contraception would be the most effective option.

The next steps in the justification process are to determine if infringement on values and norms is proportional, necessary, and minimized. To achieve proportionality, the benefits of the option must outweigh its infringement on values and norms. In giving the couple a choice between alternatives, the process will not infringe on the norm of autonomy identified as important by the medical aid worker, regardless of what option is chosen. However, infringement on norms and values may occur if the options are significantly limited. For example, if there are no temporary forms of contraception available (other than the rhythm method), then
the couple would have to choose between tubal ligation or natural birth control. Tubal ligation would infringe on their desire to have children in the future (if this is a desire of theirs), while natural birth control may lead to their having more children before they are ready, infringing on their obligations to their other children. Depending on the available options, some level of infringement on values or norms may be necessary. If infringement is necessary, the stakeholders should determine if it has been minimized, and if not, how it can be minimized.

The final step in justification is to determine whether the stakeholders would be comfortable sharing their decision-making process with others. If the medical aid worker and the couple have an open discussion about tubal ligation versus alternative options, they should be comfortable sharing this process with others.

CASE COMMENTARY

This case illustrates the importance of the process of obtaining informed consent for procedures (especially those with significant consequences) during medical aid work in developing countries. It also shows that a medical aid worker’s assumptions about a patient’s reasons for desiring a procedure may not be correct, so eliciting this reasoning is important for determining if alternative options are more desirable.

If the medical aid worker had used the assessment questions during the informed-consent process, he may have better understood the couple’s situation and provided them with alternative options. Not only are the assessment questions helpful in exploring ethical issues after they have arisen, but they also have the potential to prevent ethical problems from occurring or at least to identify ethical problems early in the patient encounter so that they can be addressed and minimized. While certain aspects of international medicine create barriers to informed consent (for example, language differences, cultural differences, time limitations), it is important that medical aid workers try to overcome or minimize these barriers in order to avoid situations like the one described in this case. Taking additional time to explore patients’ understanding of the medical facts, their values, and their goals for procedures will help ensure that these patients choose interventions that are consistent with their goals and values.
Communication Barriers

Even when medical aid workers can speak the same language as their patients, miscommunication may still occur. Often, medical terms cannot be translated into the local language, so medical aid workers have trouble accurately explaining medical problems or procedures to patients. When medical aid workers are able to use appropriate terms, low health literacy among patients can still lead to misunderstandings. The following case illustrates a situation in which a misunderstanding results in a tragic outcome, which is complicated by further misunderstanding.

Case 1.3: Fall from a Mango Tree

A twelve-year-old Somali boy presents to a clinic staffed by medical aid workers after falling from a mango tree. The trauma surgeon at the clinic, who has been in Somalia for nine months and can speak the Somali language, examines the boy and finds that he has a broken leg. She explains to the boy that he has a broken leg and that he will need to have it casted. The boy nods in understanding and allows her to cast his leg. Afterward, the surgeon tells him to come back to the clinic in ten days to have his leg evaluated again, or to come back to the clinic immediately if he is in significant pain.

Ten days later, the boy returns to the clinic in agony, accompanied by his mother. The surgeon removes the cast to find that the underlying tissue is dead and the boy’s leg has become infected. She tries to explain to the boy and his mother that the cast cut off the boy’s circulation and the tissue in his lower leg is now dead because of the lack of blood supply. The trauma surgeon believes that amputation is both necessary and urgent. She is concerned that, without amputation, the infection will get into his bloodstream, leading to sepsis and possible death. The mother thanks the medical aid worker for her help. She says that they are happy that the boy’s cast is off and that they do not want to have anything else done to the leg because the boy needs to go back to his job of picking mangoes to sell at the market. The trauma surgeon wonders if she can better explain the necessity of the procedure to the mother, and, if the mother continues to refuse, whether she would be justified in doing the procedure anyway.
CASE ANALYSIS

In this case, the medical aid worker has learned that while she is able to speak the language, she is unable to communicate effectively with the patient and his mother. Obviously the boy did not understand that he should have come back to the clinic earlier when he was in pain, or he was not aware of the consequences of waiting to return to the clinic. Now that he needs the amputation, the medical aid worker cannot seem to adequately explain this to the mother. In this case, the assessment questions will help the medical aid worker establish a baseline for what the patient and his mother understand. She can use this knowledge to help her communicate with the patient and his mother so as to improve their understanding of the situation. In addition, she can explore their goals and values so as to provide an intervention consistent with them.

Stakeholders

The boy, his mother, and the trauma surgeon are the primary stakeholders in this case. Additional important stakeholders are the rest of the boy’s family as well as the other medical aid workers at the clinic. In addition, the entire community may become involved in this case if the physician decides to act against the wishes of the mother.

Medical Facts

From the perspective of the trauma surgeon, the medical facts are straightforward. The boy has a necrotic, infected lower leg. His primary symptom is pain, and the leg is clearly infected, which could lead to sepsis and death. This medical problem resulted from the cast being too tight. Unfortunately, the only medically appropriate treatment in this case is amputation of the lower leg. Because the boy has suffered an ischemic injury and the leg is already infected, an attempt to medically manage the boy is a poor alternative to amputation, because the infection will undoubtedly spread, requiring a more extensive amputation in the future.

The mother’s understanding of the medical facts is less clear. She understands that the boy had a broken leg, which needed a cast, and that the cast has been removed. The effect that the problem has had on their lives is that the boy has been unable to pick mangoes. Now that the cast has been removed, the mother believes that the boy does not need
any further treatment and that he can return to picking mangoes. She does not realize that the cast itself actually caused an additional serious medical problem that needs to be addressed. She does not believe that treatment is necessary and thinks that the boy is now better because the cast has been removed.

**Goals and Values**

The goal of the trauma surgeon is to treat the boy’s infected leg so as to prevent him from progressing to life-threatening sepsis. She values correcting the complication that resulted from the cast being too tight. The goal of the patient and his mother is for the child to return to picking mangoes immediately. They value the boy’s ability to contribute to his family.

In addition to their personal values, the patient and his mother may have religious or cultural beliefs that do not allow for amputation. It is important for the trauma surgeon to consider this possibility and explore their beliefs so as to determine what amputation would mean to the boy and his family in a spiritual or religious sense. If this is an issue, the trauma surgeon might consider consulting with a religious leader to clarify what these beliefs mean and whether or not amputation is possible within their religious tradition.

**Norms**

The two bioethical norms important to the trauma surgeon are non-maleficence and beneficence. Because the boy has a high likelihood of progressing to sepsis, which could be lethal, it would be harmful to refrain from the amputation. In addition, there would be no benefit to waiting and watching the boy’s progress, because the natural history of this type of complication is that it will become worse and require a more extensive amputation. The treatment option that best maximizes the benefits and minimizes harm in the opinion of the trauma surgeon is an immediate amputation. This will lessen the risks of the infection spreading and requiring a more extensive amputation or causing potentially lethal sepsis.

The two bioethical norms important to the mother and boy in this case are relationality and respect for autonomy. The boy has an important relationship with his family, and his ability to contribute to his
family through his job of picking mangoes is a very important aspect of this relationship. In pediatric medicine, respect for autonomy is generally accomplished by allowing parents to consent to procedures and treatments for their children, along with allowing children who are of appropriate capacity to assent. In refusing to have the child’s foot amputated, the mother is asserting her right to make decisions regarding the medical care of her son. She does not think that the operation is necessary and is making a decision based on their need for him to return to picking mangoes.

The attitude of the trauma surgeon illustrates a phenomenon similar to that of surgical buy-in, in which the surgeon negotiates a commitment to postoperative care with patients before high-risk surgical procedures (Schwarze, Bradley, and Brasel 2011). While casting a leg is not a high-risk surgical procedure, it does have serious risks, as illustrated in this case. The trauma surgeon believes that she has a commitment to treat the boy’s necrotic leg because the complication is a direct result of casting. In deciding to cast the boy’s leg, the surgeon has committed herself to treating any complications resulting from this procedure.

The legal norm central to this case is the right of parents to make decisions regarding the care of their children. In the United States, parents are given a good deal of autonomy in making medical decisions for their children. However, there is legal precedent for superseding the decisions of parents in certain situations. Generally, when the child has a life-threatening condition and parents refuse the medically accepted standard of care, they can be found guilty of abuse or neglect, or homicide in the case of the child’s death (Cohen and Kemper 2005). If physicians in the United States believe that parents are making medical decisions that put the child’s life at risk, they can get a court order to allow them to treat the child without parental consent. In this case, it would be important for the trauma surgeon to determine whether or not there is a legal mechanism for proceeding with the amputation if the mother continues to refuse treatment.

**Limitations**

From the perspective of the trauma surgeon, time and medical resources are not limitations to being able to provide appropriate treatment for the boy. One limitation that the trauma surgeon should con-
sider is the state of the operating room. In general, operating rooms in developing countries are less sterile than in the developed world. If the operating room or the instruments that will be used are not adequately sterilized, the risk of postoperative infection is increased. Therefore, the boy may still be at significant risk of subsequent infection requiring further operations or inpatient intravenous antibiotic treatment even after a successful amputation. In addition, the postoperative care may not be the same as that available in developed countries. For example, the clinic may not have adequate antibiotics to treat postoperative infections when they occur, or it may not have an adequate supply of dressings, thereby limiting the number of dressing changes that can be done to keep the wound clean. These limitations may significantly change the risk-benefit profile of the amputation, making it less desirable even if it still seems necessary.

Because the mother refused the amputation, it is not clear whether the boy and his family have limitations that would affect their ability to go through with an operation. While the operation itself would not take a considerable amount of time, the boy’s recovery would require an inpatient stay, as well as physical therapy to teach him how to live with one leg and to provide him with a prosthetic leg if available. The family may not be able to afford this type of care and would have to rely on the clinic to provide it free of charge. In addition, the mother makes it clear that they need the boy to return to work, so they may not even be able to afford to have the boy out of work during the time it takes for him to recover. Unfortunately, even with the amputation, the boy will not return to his baseline state of health and may never be able to climb mango trees again.

**ANALYSIS AND JUSTIFICATION OF OPTIONS**

At this point in the case, the most appropriate option is to use the mother’s answers to the assessment questions to continue communication about the boy’s condition and his need for urgent surgical intervention. If possible, the medical aid worker should bring in local medical workers, translators, or community elders to help the mother understand the situation. Ideally, additional communication and negotiation will help the mother understand the medical facts and the need for intervention so that she will consent to the amputation. However, she may
continue to refuse intervention. If this is the case, the trauma surgeon is faced with a very challenging situation. She is left with the option of not doing the operation, putting the boy at risk of more extensive infection, sepsis, and even death, or of doing the operation against the wishes of the mother. The justification of these two options is explored in the following section.

The first step in justification is to determine whether the option will be effective in reaching the identified goals of the stakeholders. The goal of the trauma surgeon is to prevent the boy from developing more-serious complications from his infected, necrotic leg. The option of doing an operation has a greater likelihood of being successful with respect to this goal as compared with not doing an operation. However, if the operating room is in poor condition, the boy may still be at high risk of subsequent infection, requiring further operative interventions. The goal of the mother is for the boy to return to picking mangoes. Amputating the boy’s leg will seriously limit his ability to climb mango trees, so he may not be able to return to his work following the operation. Not doing the operation may allow the boy to return to work immediately, but he might be hindered by pain and limited use of the leg. In addition, he could become seriously ill and require a more extensive operation if one is not done immediately. Therefore, the option of doing an operation is more consistent with the goal of the trauma surgeon, while neither of the options has a high likelihood of achieving the mother’s specific goal of having the boy return to work immediately.

The next step in justification is to determine if the benefits of the option outweigh its infringement on identified norms and values. The option of doing the operation has the potential benefit of preventing further complications such as spread of the infection, sepsis, and death. It is most likely consistent with the norm of beneficence because the potential benefits should outweigh the risks of the surgery. This would not be the case if the state of the operating room significantly increases the risks of complications, especially postoperative infection, to the point that the operation itself has the same risks as not doing the operation. If the mother continues to refuse to consent to the operation, then this option infringes on respect for her autonomy as well as her right as a parent to make medical decisions regarding the care of her child. The option of not doing the operation has the benefit of allowing the boy to return to
work immediately (if he is physically able to, given the current state of his leg). It is also consistent with respect for the mother’s autonomy and her parental right to make decisions about the care of her child. However, it likely infringes on the norm of beneficence because there are no medical benefits to delaying operative intervention, unless the operation has the same risk-benefit profile as this option.

The next steps in the justification process are to determine if infringement on values and norms is necessary and minimized. Performing the operative intervention without the mother’s consent will infringe on her autonomy and her legal right to make decisions about her child’s care. If adequate explanations have been given to the mother, and additional stakeholders such as local medical personnel or community elders have been consulted and the mother still refuses, then it would be necessary to infringe on these norms in order to do the operation. Taking the time to better explain the situation, as well as bringing in local medical personnel and community elders, if possible and appropriate, would help ensure that infringement on these norms has been minimized. The option of not doing the operation necessarily infringes on the norm of beneficence if the risks of this option are significantly greater than the risks of the operation. If this option is chosen, the trauma surgeon can minimize infringement on beneficence by making plans to closely monitor the boy’s medical condition through regular visits to the clinic.

Finally, the stakeholders must determine whether or not they would be comfortable sharing their decision-making process with others in the community. If the trauma surgeon makes a strong effort to explain the necessity of operative intervention to the mother, bringing in other stakeholders for help, but the mother still refuses, then the surgeon would have to decide whether a unilateral decision to intervene is something that she would be comfortable sharing with others. If operative intervention is necessary, urgent, and has an acceptable risk-benefit profile, then she would likely be willing to make a unilateral decision. However, if the mother continues to refuse and they are able to compromise on close monitoring with the potential of doing an operation if the boy’s condition deteriorates in the future, then this might be a more reasonable option.

One important factor to keep in mind in this case is that the trauma surgeon is an outsider in the community. If she intervenes in a way con-
trary to the wishes of the mother, it could damage her reputation in the community and drive other community members away from seeking care in her clinic. Therefore, she must make sure that an operation is absolutely necessary and be willing to defend her actions publicly before proceeding without the mother’s consent.

**CASE COMMENTARY**

Even when medical aid workers speak the language of the patients they are serving, there are still significant barriers to communication. In this case, the mother does not seem to understand the severity of her son’s medical condition and refuses an intervention that the medical aid worker believes is both necessary and urgent. If the mother continues to refuse the operation after additional explanations, then the trauma surgeon has a challenging decision to make. While operative intervention is clearly the medically indicated choice, the trauma surgeon has to consider the effect that this choice will have on her relationship with the boy and his mother, as well as with the rest of the community. In addition, she would have to determine if she would be legally allowed to make a unilateral choice to intervene. Because of her position as an outsider, the trauma surgeon may have to compromise in this case and allow the boy to leave with close monitoring so that she can continue to work in the community and to intervene in the future if the boy’s medical condition worsens.

Because miscommunication can result in devastating outcomes in international medicine, medical aid workers should take steps to minimize the potential for communication barriers to adversely affect patient care. For example, patients who have the potential to develop complications soon after an intervention could be kept as inpatients for a couple of days for observation or scheduled for early follow-up, so as to identify problems early and remedy them before they cause irreversible damage. When medical aid workers cannot ensure that they are communicating clearly, it is important that they observe patients closely to help avoid complications.

**Different Medical Beliefs**

Patients in developing countries and the medical aid workers who serve them often have different understandings of diseases or medical
treatments. For example, many patients are not familiar with the germ theory of disease, so explanations regarding the purpose of antibiotics may not make sense to them. In addition, patients are often familiar with treatment regimens very different from those used in Western biomedicine. For example, patients may be accustomed to the application of herbs, splinting, and months of rest for broken femurs. In contrast, the Western standard of care for this problem is intramedullary nail fixation or traction (Sechriest and Lhowe 2008). Patients should be expected to have difficulty comprehending and accepting this radically different treatment modality. When medical aid workers and their patients have completely different understandings of medicine, the aid workers may have difficulty explaining why interventions are necessary or ensuring that patients understand their treatment plans. The following case presents one such situation, in which the medical aid worker is unsure about initiating pharmaceutical treatment in a patient who believes that his illness is the result of sorcery.

**Case 1.4: Sorcery and Tuberculosis**

A twenty-three-year-old man presents to a clinic in rural Haiti with a history of weight loss, fevers, night sweats, and a cough productive of bloody sputum. He has gotten so weak that he is unable to work in his fields. The medical aid worker clinically diagnoses him with tuberculosis and collects a sputum sample to send to the lab for confirmation and resistance testing. When the man is told that he has tuberculosis, he says that he is sure that his neighbor gave it to him through a curse. The medical aid worker explains to the man that there are medications available to treat tuberculosis, but they have to be taken every day for nine months in order to be effective. The clinic will provide him with these medications free of charge. The man agrees to take the medications but comments that what he really needs is for his neighbor to reverse the curse. The medical aid worker wonders whether it is appropriate to initiate this intense treatment regimen, given that the man does not understand the etiology of his disease or the purpose of the treatment, and if so, whether he should try to change the patient’s beliefs regarding the etiology of his condition.
CASE ANALYSIS

While rare in developed countries, tuberculosis (TB) is one of the most common infectious diseases worldwide. According to the World Health Organization (2003), over eight million people develop active TB each year, and two million of these people die from this disease. The developing world bears 95 percent of the global disease burden of TB, so medical aid workers in developing countries are likely to encounter patients with the condition. Because of different cultural constructions of illness, many of the patients whom medical aid workers encounter will have beliefs like those of the man in this case. The important question that medical aid workers should ask is if these beliefs will interfere with patients’ ability to adhere to treatment plans and if this interference will be harmful.

Stakeholders

The primary stakeholders in this case are the patient and the medical aid worker. In addition, all of the community members whom the patient has close contact with are stakeholders because they are at risk of acquiring tuberculosis.

Medical Facts

The medical aid worker and patient in this case are not in full agreement about the medical facts. The medical aid worker diagnoses the patient with tuberculosis because the man has a classic clinical presentation of weight loss, fevers, night sweats, and hemoptysis. The aid worker knows that tuberculosis is caused by a mycobacterium and that the only proven treatment is directly observed therapy, short course (DOTS) with a multidrug regimen (WHO 2003). If the patient has susceptible tuberculosis, then his prognosis is good with DOTS. If the patient has multidrug-resistant TB, then he may need to take different medications and will have a lower chance of recovery. However, if the patient is not treated, he is likely to get progressively worse and eventually die from tuberculosis. The patient’s perception of his disease is different from that of the medical aid worker. He is aware that he has tuberculosis and that it has hindered his ability to work. He believes that the source of his condition is a curse put on him by a neighbor. He has not done anything to treat his condition yet, but believes that in order to be cured he needs his neigh-
bor to reverse the curse. However, he is willing to try taking the medications as well. He has probably seen people die from TB and realizes that he could die if not treated.

**Goals and Values**

The medical aid worker and patient both want the patient to get better. In being concerned over the patient’s beliefs regarding the etiology of his disease, the medical aid worker probably values having patients understand their medical problems and the rationale behind treatment plans. The patient values being able to return to work.

**Norms**

The bioethical norms important in this case are nonmaleficence, beneficence, and autonomy. The medical aid worker must make sure that the intervention will not be exclusively harmful to the patient. Antibiotic treatment for tuberculosis can be harmful if patients do not take it consistently or stop taking it early, because this can lead to drug resistance and make future treatment more expensive and less successful. Therefore, the medical aid worker should do what he can to ensure that the patient will be able to adhere to the full duration of the treatment. If the patient is likely to adhere to treatment, then the norm of beneficence is important. Beneficence requires that the benefits of treatment outweigh the risks. For tuberculosis treatment, the DOTS regimen has proven to be very successful. While these medications do have some side effects, they significantly reduce the mortality rate of people infected with TB.

Respect for autonomy is the other important bioethical norm. Respect for autonomy allows patients to make choices regarding their medical care. It requires that physicians inform patients about treatment alternatives and ensure that they understand the consequence of their choices. The patient in this case is willing to take medications, even though he does not understand their mechanism with respect to the etiology of TB. Therefore, he does not fully comprehend the choice that he is making or the consequences of failing to adhere to the treatment plan. It is not clear whether the patient’s lack of understanding will affect his compliance with treatment.

The professional norm important in this case is the standard of care. DOTS is the worldwide standard of care for TB treatment and has been
made available for little or no cost in developing countries through donations to the World Health Organization as well as nonprofit organizations. If the physician refuses to provide the man with tuberculosis medications because of the man’s beliefs about the etiology of the disease, he would not be providing this patient with the standard of care. In addition to the professional norm of standard of care, the medical aid worker should consider whether or not denying the patient DOTS would be considered medical malpractice. As discussed in Case 1.1, medical malpractice occurs when a physician fails to provide the quality of care required by the law and that failure results in injury to the patient (Furrow et al. 2001, 165). In this case, the patient presents to the physician with active tuberculosis, and the standard of care is DOTS. If DOTS therapy is available, then the physician is legally required to offer this option to the patient. In the United States, if a physician did not offer DOTS to a patient who subsequently suffered injury (in the form of further morbidity or mortality), the physician would probably be liable for damages. While medical malpractice may not be a concern to the medical aid worker because of the legal environment in Haiti, he should consider this norm in his decision making.

**Limitations**

One limitation to providing treatment for tuberculosis is time. The treatment regimen is at least nine months long, and medical aid workers often do not serve for a long enough period to see treatment through to the end. It is therefore important for medical aid workers treating tuberculosis to ensure that the infrastructure is in place for their patients to continue receiving treatment even if the aid workers are no longer present. This is especially important in the treatment of TB, because disruptions in treatment regimens can lead to drug resistance and make future treatments more difficult and less successful (Yong Kim et al. 2005). Not only should the medical aid worker consider his own time limitations, but he should also consider the resource limitations of the clinic. If the clinic does not have a steady supply of tuberculosis drugs, then this could lead to interruptions in treatment regimens and drug resistance among patients.

Several limitations might affect the patient’s ability to adhere to DOTS treatment. First, the patient would have to be able to come to the clinic
every day in order to take his medications or have someone from the clinic visit his house daily to administer them. In addition, adequate nutrition is very important in recovery from tuberculosis, and because the patient cannot work, he may not have the means to get adequate food during his recovery. Also, because the patient is not working, he probably cannot afford to pay for medications, so he may have to rely on the clinic to provide free treatment.

**ANALYSIS AND JUSTIFICATION OF OPTIONS**

The two basic options that the medical aid worker has in this case are to start the patient on DOTS therapy or to refrain from starting DOTS. Because DOTS therapy is the standard of care, is consistent with the norms of beneficence and nonmaleficence, and has been agreed to by the patient, this option is more desirable than the alternative. Instead of focusing on whether or not the medical aid worker should begin DOTS, the justification process explores whether or not the medical aid worker should try to change the patient’s beliefs regarding the etiology of his disease.

The fist step in justification is to determine whether or not the option will be effective in achieving the identified goal. Both the patient and medical aid worker want the patient to get better, and DOTS therapy gives the patient the best chance of recovering. Intuitively, it would seem that making sure the man understands the etiology of his disease and the rationale for treatment would make him more likely to adhere to the treatment plan. If this is the case, then this option has a greater likelihood of efficacy.

The next step in justification is to determine if the benefits of the option outweigh infringement on the identified norms and values. Providing the man with medication is generally consistent with the norms of nonmaleficence and beneficence. In addition, because this option is the standard of care, the medical aid worker has both a professional and legal duty to provide the medications. The only case in which providing DOTS could be harmful is if the patient fails to complete a full course of treatment and develops drug-resistant tuberculosis. If educating the patient about TB increases the potential for compliance, as compared with merely giving the patient DOTS therapy, then this option has a better risk-benefit profile. If the options have the same potential for
noncompliance, then they are equal with respect to beneficence and non-maleficence.

It could be argued that ensuring the patient’s understanding of his disease is essential to make sure he is asserting a truly autonomous choice. However, there are many situations in which patients do not fully understand a treatment or procedure to which they are allowed to consent. For example, it is almost impossible to explain complex surgical procedures such as liver transplants to patients, because there are so many technical details. If physicians can get patients to understand the basic details of the transplant and the subsequent treatment plan, then they will accept patient consent. In this case, the medical aid worker must determine if giving the patient additional information regarding his medical condition will affect his treatment choice or his willingness to adhere to the treatment plan.

The next step in justification is to determine if infringement on the norms and values is necessary and minimized. Providing the man with medications does not necessarily infringe on any of the norms or values in this case. The medical aid worker could minimize the potential for noncompliance by making sure that enough medications are available and that the man can come to the clinic daily to receive them or that someone from the clinic can bring medications to the patient. If enhancing the patient’s understanding of his condition will help with compliance, then the option of further explanation is more consistent with beneficence and autonomy.

The final step in justification is to determine whether or not the stakeholders would be comfortable in sharing their decision-making process with others. If the medical aid worker provides the medications and does his best to ensure that the patient is able to adhere to the regimen, then he should be comfortable sharing this course of action with others.

**CASE COMMENTARY**

It seems intuitive to argue that incorrect etiologic beliefs about tuberculosis are a primary reason that patients in developing countries do not comply with their medications. However, an interesting study by Paul Farmer (1999) in Haiti’s Central Plateau examined the beliefs of one hundred tuberculosis patients regarding the etiology of their disease and their adherence to treatment regimens. All of these patients were offered
free and convenient care, and half of the patients were offered supplemental food and income in addition to care. The majority of patients in both groups believed that sorcery might have caused their illness. According to previous studies, these patients should have been less compliant with their treatment regimens. However, this study found that these beliefs did not affect compliance with therapy. What did predict compliance was whether or not patients had access to supplemental food and income. Rather than attempting to educate patients about the microbial etiology of disease, this study suggests that it is more effective to provide economic and nutritional support to encourage patients to adhere to medication regimens.

**Traditional Healers**

For several reasons many people in developing countries visit traditional healers when they need medical care. Traditional healers are often more easily accessible than medical clinics (Baskind and Birbeck 2005). Traditional healers are generally less expensive than medical clinics or hospitals (Ekortarl, Ndom, and Sacks 2007). Because traditional healers live with and know the people in their communities, they are often more trusted than medical aid workers who are outsiders (Clem and Green 1996). Traditional healers are aware of the cultural, social, and psychological context of disease within their communities, which allows them to design treatments that are consistent with cultural fears, superstitions, and beliefs (Baskind and Birbeck 2005; Ekortarl, Ndom, and Sacks 2007). Because people in developing countries often believe in supernatural etiologies for disease, they tend to seek care from traditional healers who are sensitive to these beliefs and offer treatments that are consistent with them (Baskind and Birbeck 2005; Dotchin, Msuya, and Walker 2007; Epstein 2007, 141; Osborne 2006). Traditional healers, with their focus on the psychosocial factors affecting illness, have a lot to offer patients (Fadiman 1997, 266).

While it is true that traditional healers can offer holistic interpretations of illness and treatments that are culturally constructed, these treatments are not always beneficial or even benign. For example, one traditional healing approach to snake bites in northern Ghana involves incantations and entrance into the spirit world, along with the application of some leaf ointment (Bishop 1986). This treatment may be margin-
ally effective, but is not beneficial in cases of especially venomous snakes for which antivenin treatment is necessary for survival. Even when the actual procedures performed by traditional healers are medically benign or marginally beneficial, they can still have serious effects on patients. Although traditional healers are often less expensive than hospital visits, repeated interventions can become costly for patients (Baskind and Birbeck 2005; Ekortarl, Ndom, and Sacks 2007). In addition, individuals often seek the care of traditional healers before seeking care from medical clinics or hospitals, resulting in treatment delays, which can have devastating consequences (Abbey 1971; Birbeck 2000; Dotchin, Msuya, and Walker 2007; Ekortarl, Ndom, and Sacks 2007; Fleet 2007; Holmes 1996). Chadney (2004) describes a situation in which a pregnant woman began to have complications at seven months gestation. Her husband brought her to two different traditional healers, the second of whom treated her with injections and herbs. During this treatment, the woman went into labor, and the traditional healer made an unsuccessful attempt to deliver the baby. At that point, the traditional healer sent her to seek medical care, but both she and the baby died before they arrived at the hospital.

The use of traditional healers has the potential to create or contribute to ethical problems in international medicine. Traditional healers have different conceptions of health and disease than medical aid workers and may influence patients’ understanding of these concepts. Beyond affecting the beliefs of patients, traditional healers may actually perform procedures that medical aid workers perceive as harmful. The following case describes a traditional healing practice that the medical aid worker believes has harmed a patient.

**Case 1.5: Bush Thoracotomies**

A patient with a fever, chest pain, cough, and shortness of breath goes to a hospital staffed by local doctors and medical aid workers in Papua New Guinea. Upon physical exam the medical aid worker sees that the man has a large purulent draining wound on his chest, consistent with an empyema. When asked about the cause of the empyema, the patient explains that he sought the help of a traditional healer in his village about two weeks earlier when he developed a persistent cough and sore throat. The healer informed him that he had pus in his chest that needed
to be drained. The healer performed a procedure in which he opened up
the patient’s thoracic cavity and stuffed a mixture of leaves, mud, and
cow dung into the pleural space. A couple of days later, the pus began to
drain, confirming the healer’s diagnosis.6

The medical aid worker, unsure about what to make of this situation,
asks one of the local doctors about this practice. The local doctor tells
him that traditional healers in surrounding areas commonly perform
this procedure, which they term a “bush thoracotomy.” The empyemas
caused by bush thoracotomies generally resolve on their own, although
some patients require antibiotics to treat resulting infections. In addi-
tion, there have been several deaths from bleeding and septicemia as a
result of this practice.

The medical aid worker asks the local doctor about what they have
done to stop bush thoracotomies, to which he responds: “We do not have
much contact with traditional healers. They practice up in the hills and
do not associate with this hospital. Our primary knowledge of their prac-
tices comes from patients who present to us with problems resulting
from their treatments.” The medical aid worker is concerned about the
continuation of this practice and other harmful procedures performed
by traditional healers. He asks the patient where the traditional healer
lives and decides to visit him the following day.

The medical aid worker goes to the house of the traditional healer
with a translator to discuss the practice of bush thoracotomies. He tells
the traditional healer about the patient who came in with the draining
empyema and describes his concerns about the medical effects of bush
thoracotomies, emphasizing that these procedures are incredibly harm-
ful to patients and ineffective in treating upper respiratory infections.
The traditional healer tells the medical aid worker that these procedures
are very successful in draining illness-causing pus from the pleural cavity
and that he does not think that the procedure is dangerous or harmful.
The traditional healer says that as long as patients come to him with
upper respiratory complaints, he will continue to use this procedure, as
it is the most effective way of treating them.

CASE ANALYSIS

In this case, the ethical issue that arises is whether or not the medical
aid worker should engage the traditional healer in a dialogue about what
he sees as a harmful practice, and if so, how this conversation should happen. The assessment of this case focuses on how the medical aid worker should approach communication and negotiation with the traditional healer. Rather than immediately judging the procedure performed by the traditional healer as harmful and therefore wrong, it is important that the medical aid worker reflect on his own biases and elicit the beliefs and values of the traditional healer. Both of these can be achieved using the assessment questions.

**Stakeholders**

There are several stakeholders in this case. The primary stakeholders are the medical aid worker, the patient, and the traditional healer. In addition, other medical aid workers, local medical personnel, other traditional healers, and the whole community have a stake in this case because it could positively or negatively affect the relationship among the different medical providers as well as between these providers and the patients they serve.

**Medical Facts**

It is clear that the medical aid worker and the traditional healer have different understandings of the medical facts. While the medical aid worker is concerned about the patient’s empyema but not about the upper respiratory infection, the traditional healer is concerned about the upper respiratory infection but believes that the empyema is a sign of healing. The empyema and purulent drainage from the patient’s pleural cavity signify to the medical aid worker that the procedure performed by the traditional healer was harmful, while these same signs are an indication to the traditional healer that his treatment is working. The traditional healer recognizes that his procedure caused the drainage but does not appreciate that the drainage is a sign of infection and a cause for concern. The problem that arises in this case is whether or not there is a way for the medical aid worker and traditional healer to agree upon the medical facts regarding the practice of bush thoracotomies.

**Goals and Values**

While there is significant disagreement about the medical facts in this case, the medical aid worker and the traditional healer agree that the goal
of their interventions is to cure patients’ medical problems. The common goal of healing may be able to open up a dialogue between the medical aid worker and the traditional healer about different healing practices, including bush thoracotomies. One value important to both the medical aid worker and the traditional healer is promoting the health of their patients. In this case, the medical aid worker and the traditional healer share common goals and values but disagree about how to achieve them.

**Norms**

Several bioethical norms are important in this case, including nonmaleficence, beneficence, relationality, and respect for autonomy. The most important norm for the medical aid worker is nonmaleficence. Because he perceives bush thoracotomies as dangerous, the medical aid worker believes that the traditional healer should discontinue the practice so as to avoid harming more patients. The traditional healer, on the other hand, believes that bush thoracotomies are beneficial procedures, which are consistent with his duty of beneficence. In addition, he recognizes that patients have a choice between traditional healers and the medical aid workers, so his services allow patients to assert autonomy in deciding where to receive their medical care.

The relationships between patients, traditional healers, and medical aid workers are important in this case. The traditional healer lives in the community and has been there for his entire life. He understands the beliefs and customs of community members and has gained their trust. He has a long-standing relationship with the community that will continue after the medical aid worker leaves. Because community members have established relationships with the traditional healer, they may trust him more than the medical aid worker, so it is important that the medical aid worker try to work with the traditional healer rather than undermine him.

The traditional healer and medical aid worker share the professional norm of providing patients with the standard of care. However, because they have significantly different training and understanding of diseases and their treatments, their standards of care are very different.

**Limitations**

The most significant limitation of the medical aid worker in this case is time. He will eventually have to leave the area, whereas the traditional
healer lives in the community permanently. As a visitor, the medical aid worker is less likely to have strong relationships with his patients, so it may be hard for him to convince them that the traditional healing practices are harmful.

ANALYSIS AND JUSTIFICATION OF OPTIONS

After his initial dialogue with the traditional healer, the medical aid worker has several options for how to proceed with trying to discourage bush thoracotomies. He could determine that the beliefs of the traditional healer are so incompatible with his own beliefs about the medical facts that he will not be able to reach an understanding with the traditional healer and should discourage community members from seeking bush thoracotomies. On the other hand, the medical aid worker could determine that the conversation is just the beginning of a dialogue, and that because he and the traditional healer share common goals, values, and professional norms, he may be able to convince the traditional healer that bush thoracotomies are harmful. It should be noted that neither of these options guarantees that bush thoracotomies will stop, but each option provides the next step that the medical aid worker could take in the direction of achieving this goal.

The first step in justifying the options is to determine whether the option is effective in reaching the identified goals of the stakeholders. The common goal of the medical aid worker and the traditional healer is promoting the health and well-being of the community. The specific goal of the medical aid worker in meeting with the traditional healer is to eliminate the practice of bush thoracotomies, which he believes is consistent with their shared goal. The traditional healer does not share the medical aid worker’s goal of eliminating the practice of bush thoracotomies because he does not think that they are harmful. The option of discouraging community members from seeking bush thoracotomies may achieve the medical aid worker’s goal of stopping bush thoracotomies. However, it might backfire in that community members may choose to continue seeking care from traditional healers and refrain from visiting medical aid workers. The other option of continuing the dialogue between the medical aid worker and the traditional healer encourages cooperation and may open up collaboration between these two parties, allowing them to provide care that is complementary. They may be able
to come to an understanding about what constitutes harm and benefit in medical care, and use this common understanding to assess practices such as bush thoracotomies.

The second step in justification is to determine whether the benefits of the option outweigh its infringement on the identified norms and values. If the option of discouraging bush thoracotomies is successful, then it ensures that community members are no longer harmed by this practice. However, this option risks losing the trust of community members, driving them toward seeking care from traditional healers rather than medical aid workers. The option of continuing dialogue also has the potential to eliminate bush thoracotomies. However, because traditional healers will likely continue to offer these procedures during the dialogue, it will infringe on the norms of beneficence and nonmaleficence during this time.

The third step in justification is to determine whether or not infringement is necessary to achieve the desired goal. The first option requires infringement on relationality because the medical aid worker would have to discourage community members from seeking care from their trusted traditional healers. The second option may eventually be consistent with all of the identified norms and values if it is successful in eliminating the practice of bush thoracotomies. However, it will necessarily infringe on the norms of nonmaleficence and beneficence as the dialogue proceeds.

The fourth step in justification is to determine whether or not the level of infringement has been minimized. Of the two options, continuing the dialogue infringes less on the identified values and norms. The more quickly that communication and negotiation can occur, the less infringement there will be on nonmaleficence and beneficence.

The final consideration in the justification of the options is whether or not the stakeholders would be comfortable sharing their decision-making process with others. The option of discouraging bush thoracotomies undermines the relationships between traditional healers and patients. The medical aid worker may not be comfortable sharing this decision with others, especially if no additional effort was made to communicate with traditional healers. The option of continuing dialogue is a more cooperative process. It could also bring other stakeholders, such as community members and local medical personnel, into the dialogue.
The medical aid worker and other stakeholders should be comfortable sharing this type of conversation with others.

Of the two options for how to proceed after the initial meeting, continued communication and negotiation with the traditional healer about the practice of bush thoracotomies is more likely to achieve both the shared goal of promoting health and well-being and the medical aid worker’s goal of eliminating bush thoracotomies. If the traditional healer is unwilling to engage in a dialogue about bush thoracotomies, as the second option requires, then the medical aid worker may decide that the only viable option is to discourage patients from seeking these procedures.

CASE COMMENTARY

Communication between medical aid workers and traditional healers is important in international medicine. In many developing countries, individuals commonly visit traditional healers before medical aid workers for various reasons (for example, beliefs about spiritual causes of disease, trust in traditional healers, convenience, availability). If the patients of medical aid workers commonly visit traditional healers, it is essential that the aid workers learn about traditional healing practices and the effect that they have on patients. If medical aid workers are able to engage in dialogue with traditional healers, they can learn about the cultural constructs of disease and healing practices consistent with medical beliefs. In addition, medical aid workers can teach traditional healers about Western medical theory and treatments. This type of dialogue has the potential to positively impact patient care by both parties.

While this case emphasizes the continuation of dialogue between the medical aid worker and the traditional healer, it does not require that the medical aid worker accept a traditional healing practice that he perceives as harmful. Although dialogue and negotiation are important in interactions with traditional healers, these approaches do not require that medical aid workers ultimately accept traditional healing practices as valid. While it may be argued that traditional healers have different standards of evidence, any healing practice that claims to have a particular outcome should be judged against that outcome. When a medical aid worker determines that a traditional healing procedure, such as a bush
thoracotomy, is harmful to patients, he should work toward eliminating it. Permitting this practice and other similarly dangerous practices to continue allows patients to be harmed by traditional healers, even if this harm is unintentional.

In attempting to eliminate harmful traditional healing practices, it is important for medical aid workers to realize that these practices are deeply rooted in society and that those who perform them often have high social status. It is unrealistic for a medical aid worker to think that he or she has the ability to change deeply embedded traditional healing practices in a couple of weeks or even a couple of months. However, it is realistic to begin a dialogue that may eventually lead to alterations in harmful traditional healing practices. By engaging traditional healers in conversations about their practices and emphasizing the joint obligations of medical aid workers and traditional healers to patients, medical aid workers will not only have the opportunity to alter harmful traditional healing practices, but also to learn about cultural constructions of illness and the treatments that support these beliefs.