

### Case Study #1:

A 14-year-old boy is being treated at a hospital for acute lymphoblastic leukemia. His treatment requires chemotherapy, as well as blood and platelet transfusions. Due to their drug abuse, his parents no longer have custody of him, so his aunt, a Jehovah's Witness, is his legal guardian. This boy shares his aunt's religious beliefs, which include a strict objection to receiving blood transfusions. His disease has progressed to the point that he is anemic and doctors fear he will die unless he receives a transfusion. His parents want him to receive the life-saving treatment, while his aunt does not. The state that the hospital is located in has mature minor laws, so a judge is called into the hospital to assess whether the boy is lucid enough to make decisions about his own medical care.

### Question for Case Study #1:

What should the judge decide and why? Is the law the best channel for obtaining a decision in this instance?

### Case Study #2:

African American athletes have medically been shown to be at the highest risk of sudden death, due to a genetic predisposition. New tests are able to detect whether a given individual is at risk of sudden death and thus can allow them to take precautionary measures. In the NBA, contracts for African American athletes have been affected by the results of these tests. Doctors may advise people at a high risk of sudden death to avoid extremely strenuous activities, like competitive basketball. However, irregular heart rhythms that cause sudden death are often correctable with timely defibrillation. Cardiac health, on the other hand, is negatively impacted by any serious event where the heart would lose function. The risk of suffering sudden cardiac death increases with age.

### Question for Case Study #2:

Should the NBA and/or the NCAA adopt mandatory testing for African American athletes to detect whether they are at a high risk of sudden death?

### Case Study #3:

A 33-year-old man arrived at the emergency department with a gunshot wound to his chest. Even though it tore through a part of his heart, surgeons were able to repair the damage with emergency open-heart surgery. Although they saved his life, his kidneys were badly damaged from the temporary lack of blood supply, he became blind for the same reason, and he was paralyzed from the waist down. His medical team stabilized him, improved his kidney function, and began plans to send him home on dialysis.

However, they soon found that the patient was in the country illegally and had originally lived in Mexico, although he had been in the United States for about half of his life. He had a history of drug abuse, was intermittently homeless, and was also unemployed. He had

two brothers and two children living in the area, but was estranged from all of his family.

When his doctors began to teach him how to go about caring for himself with his new handicaps, he was noncompliant. Some members of the team have discussed forcible repatriation.

Question for Case Study #3:

Should illegal immigrants receive different medical treatment than citizens? Should procedures change when dealing with emergency care versus rehabilitative care? How could restrictions be implemented in an ethical way?

#### Case Study #4:

A number of new tests have become available that can be used to detect diseases in children using preimplantation genetic diagnoses, prenatal screening, and newborn screening. These tests include some that detect diseases that currently have no cure or treatment available. Pregnant women and new mothers in society will have to decide whether they want to have these tests performed on their fetuses and infants. Knowing the results of these tests may influence their decisions to end their pregnancies or to change the lifestyles of their children, either with medications, special education programs, or other means of “correcting” the abnormalities. Many people in both the political realm and the medical field are concerned about the way that commonplace use of these tests could change how the next generation lives and their quality of life. Treatments that these infants receive now could have a plethora of unpredictable consequences on their futures and could greatly change family dynamics as well.

#### Questions for Case Study #4:

At what stage of fetal or infant development should these tests be regulated and what restrictions should be imposed at each level? Who, or what organization, should decide and enforce these regulations?

### Case Study #5:

A pharmaceutical company has been working on a new project for many years and is scheduled to release a new line of drugs. They would be available to the general public and within five years the patent would expire so that generic copies could be produced en masse and thus drive down the cost. Nearly everyone in the population would be able to afford these drugs at that point. This line of drugs would include ones that could enhance memory, boost intellect, and overall improve cognitive function in a variety of different ways. The side effects of the drugs are relatively minor and overall they have been shown to be safe for use in people over 16 years of age, producing mild but detectable brain changes in children under this age limit.

### Questions for Case Study #5:

As a western democratic government, do you restrict production and sale of these drugs?

As a western medical authority, do you restrict research and production of these drugs?

### Case Study #6:

In a number of countries, including the United States, stranger donation, which is the process of anonymously giving a kidney or part of a liver to a patient in need, has been formally organized into a regulated and life saving process. Because of this success, a group of global health experts has founded a new organization that will link the stranger donation networks in different countries to one another, effectively creating an international donations network. With more people interacting, they believe that more potential matches will be found. To help the program expand and benefit more people, the founders of the new program will offer moderate monetary incentives for people who successfully donate.

### Question for Case Study #6:

Is it morally permissible to offer monetary compensation for organ donation?

### Case Study #7:

In Afghanistan, the market for marijuana production is underdeveloped and has great potential to bring economic benefits to the country. In countries around the world, there is a legal market for marijuana, both as a recreational drug and for medical purposes.

Afghanistan currently produces and exports enough opium to account for about a quarter of its GDP, according a recent United Nations (UN) report. By replacing opium with marijuana, the Afghani economy could improve significantly and export a far less harmful drug. However, if this change were to be made, the Afghani farmers would need outside support, most likely from the UN. This necessitates that the UN condone marijuana production and sales, which, although better than supplying materials for creating heroin, still has serious public health implications.

Question for Case Study #7:

Should the UN encourage the production, commercial sale, and exportation of Afghani marijuana?

### Case Study #8:

In the year 2018, the H5N1 strain of flu, often known as avian influenza, undergoes a mutation so that it can pass readily from one human to another. This flu originates in a developing country where many people begin to fall ill very rapidly. Soon the World Health Organization (WHO) and health organizations across the globe are involved in controlling the outbreak and in attempting to understand the mechanics of the new virus and how to create a vaccine against it. However, the country in which the flu originates will not provide samples of the virus because they have not been guaranteed any sort of benefit sharing after they release this information. If a vaccine is formed, history has shown that only developed countries have been able to produce and purchase it in amounts sufficient to help their populations.

Question for Case Study #8:

Should the WHO force a developing country to share its virus samples even though they will probably not have access to the vaccines created from them? How can pharmaceutical companies and research institutions in the developed world patent discoveries related to the flu so that they can help people around the world, but still maintain benefits for themselves?

### Case Study #9:

An American-based global health organization founded a campaign to combat malaria in a small Sub-Saharan African country. They found that the easiest way to effectively prevent their target populations from being exposed to the disease was by providing them with mosquito nets. To distribute the nets more easily and quickly, the organization provided teams that were already stationed in the country with enough nets to give their patient populations a few nets per family. Since these teams were already distributing medications and healthcare to their patients, the nets were distributed for free and as an addition to the regular packages of basic health supplies that the teams give out at their clinics. The organization conducted a study a year after the nets were distributed and found that compliance with using them was very low and thus malaria infection rates were hardly impacted. After some additional analysis of the data, they determined the most probable cause for people not using the nets was the fact that they were free. Since the people receiving the nets did not have to pay for them, they valued them less and thus were less likely to use them. The organization then decided to charge a small fee for nets at their clinics during the following year. There was outcry among humanitarian organizations in the United States because such a fundamental health necessity was now only available at a price. This hurt the organization's public image and caused many of their supporters to question their actions.

### Question for Case Study #9:

Is it ethically reprehensible to charge money for mosquito netting when dealing with a poor target population, even though it would increase the effectiveness in combating malaria?

### Case Study #10:

The federal government in the United States has decided to take action regarding the obesity epidemic in the country. Their actions are going to be twofold; they will combat adult obesity by imposing a tax on all drinks with excessive sugar content (mainly soda and energy drinks) and combat obesity in children by encouraging all states to reform the food choices offered at their public schools. Supporters of this policy compare it to taxes on tobacco and on the gambling that is allowed in certain states, either in casinos or through the lottery. There also has been strong opposition to this policy because people feel that they should have a right to the cheapest food and drink available, regardless of its nutritional value.

### Question for Case Study #10:

Does the government have a right to act in controlling the health of its citizens? Should personal diet choices be influenced by such a small group of people? What if this plan is ineffective and causes unforeseen diet problems in the people it affects?

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