

Liberty and Public Health: An Active Learning Module

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Module Instructions

Introduction

This packet contains an ethics module intended for use in classes where students are learning about infectivity of pathogens. The more students know about the mechanisms of infectivity of pathogens, the more effective the module will be. That being said, the module can be modified for students with only a minimal understanding of how pathogens infect hosts. We believe this module will be particularly effective in microbiology and public health classes.

The core of this packet is an active learning exercise that asks students to reflect on interventions for combating infective diseases. The exercise requires students to weight values that are often in competition. The policy that nets the greatest public health gain may come at a significant cost to liberty. Students will come to see that there is an inherent moral ambiguity in public health policy. We can't make public health decisions without also making a moral judgment about when restricting liberty is justified.

Learning Objectives for this Module:

After completing this module, students will be able to:

1. Compare and contrast moral values associated with public health and liberty;
2. Demonstrate how epidemiological characteristics of various infectious diseases call for different policy recommendations;
3. Demonstrate how adjusting the weights of moral values can result in different policy recommendations for the same infectious disease;
4. Recommend when the use of a coercive measure is justified.

The Exercise

Students are provided with the following information about three unnamed pathogens:

- The reproductive number
- Transmission method

- Symptoms

Students are also provided with several policy options:

- Public health campaign
- Mask mandate
- Quarantining the sick
- Voluntary stay-at-home
- Mandatory lockdown

For each pathogen, students are tasked with considering how enacting the listed public health policies will benefit “the greater good” and how doing so will affect personal liberty. Students are then asked to provide a policy recommendation: does the benefit to the greater good outweigh the cost to liberty? Tables are provided to make it easier for students to jot down their assessments.

In completing this assignment, students will be required to use their understanding of how pathogens spread in conjunction with their moral judgment to make policy recommendations. They will come to see that there is no way to make public health policy recommendations without invoking moral judgment. Further, students will come to realize that people with the same scientific knowledge, but who weight the relevant values differently, may arrive at different policy recommendations.

We think this exercise is best done in groups, so students can engage in conversation and try to reach consensus.

Supporting Resources

We have provided several resources to support this exercise. The use of these supporting resources is optional. Most students will be able to complete the exercise using just their intuitive moral understanding. But some instructors may wish to have students dig a bit deeper. To this end we have provided the following resources

- Bibliography with recommended assigned readings, further readings, and YouTube videos
- PowerPoint slide decks

There are several ways that an instructor could use these supporting resources. The instructor could assign the readings and the YouTube videos to be read and watched prior to class. The students could use the PowerPoint slides as a kind of outline to help them study. Alternatively, the instructor could do their own lecture, making use of the PowerPoint slides (and editing them as they see fit). The recommended “further readings” can of course be used by the instructor to learn more about the subject in preparation for the activity, but they could also be

used as recommended readings for a student research project on the topic. It should be noted that many of the further readings are theoretical in nature.

Modifications of the Activity

The worksheet activity, described above, could be modified in several ways:

1. To use less class time, give each group only one pathogen to analyze. Have a student from each group report their findings. It is recommended that not every group receive the same pathogen. After every group has shared, engage in class-wide discussion. Do students agree or disagree with how other groups analyzed their pathogens?
2. There are reflection questions included at the end of the worksheet activity. These questions are optional to assign. They can be assigned either as an in-class written activity, a take-home written activity, or to be used as discussion prompts for class-wide discussion.
3. Instructors may, if they wish, adjust the reproductive number, transmission methods, and symptoms of the pathogens on the worksheet. For example, instructors may wish to use characteristics of pathogens actually studied in class.
4. Instructors could, if they wish, assign the worksheet as a take-home activity. Students would then bring the completed activity into class for discussion.
5. For online courses, instructors could post a pathogen and the policy options as a discussion prompt, and have students provide an analysis as their discussion board post. Students can then respond to other analyses – do they agree with the student’s suggestion?

Recommendations for feedback

Some students will invariably ask what the “right” answers are to the worksheet and reflection questions. We recommend drawing students’ attention to the inherent ambiguity in weighing value judgments. How does one go about comparing the importance of “the greater good” to the importance of “personal liberty?”

Consider asking students for examples of policies that restrict personal liberty which many people believe to be justified. Here are some examples:

- Seat belt and helmet laws
- Speed limits
- Drug prohibition laws
- Food safety laws
- Laws restricting smoking in public places

What do these kinds of prohibitions have in common? Generally, prohibitions on liberty are considered justified in order to prevent behaviors that harm the public. Insofar as individuals

can cause harm to the public by spreading an infectious pathogen, perhaps we are justified in restricting the liberty of individuals who are infected with certain pathogens.

That being said, we don't generally restrict all liberties that may harm others. For example, drivers are permitted to drive quite fast on the freeway (75 mph in some parts of Texas!) despite the fact that driving fast inevitably leads to more deaths than driving slowly.

In the US, we value liberty of speech and hold that restrictions of speech by the state are generally never justified except in extreme circumstances, such as when inciting a riot. But even absent these extreme circumstances, we generally permit people, as a matter of law, to say horrible things that cause people great pain.

So, just because a liberty may cause harm to the public does not mean we prohibit it. In the case of speed limits, it is thought that the economic gains of the higher speed limits outweigh the deaths that will inevitably result. In the case of freedom of speech, it is generally thought that the state choosing which speech to prohibit would cause more harm than good.

What about infectious diseases? One of the most coercive measures public health officials can take in trying to curb the spread of disease is to enact a mandatory stay-at-home order. While this strategy could be adopted to combat almost any infectious disease, it is generally only used in extreme circumstances. A mandatory stay-at-home order is among the most extreme ways of restricting liberty. It is tantamount to home imprisonment for everyone in the jurisdiction. Further, such "lock downs" can have devastating economic consequences.

When it comes to public health policies, we want to get as much public health "bang" to our cost-to-liberty "buck". If we can ever achieve the same public health gain with less cost to liberty, we should do so. But when does a public health benefit justify a restriction on liberty? Unfortunately, there is no magic formula we can use to answer this question. The only tool we have in our toolkit for this is our moral judgment.