

Lesson Overview

How many days are needed to teach this lesson?	1-2 days
Grade Level(s)	10-12
Subject(s)	Social Studies
Lesson Summary	In this lesson, students learn about cervical cancer in India as a problem and a system with many causal factors, including those associated with specific cultural and geographic contexts
Standards	<u>Illinois State Social Science Standards</u> SS.9-12.IS.11. Use interdisciplinary lenses to identify local, regional, or natural, or global concerns and anticipate the outcome possible solutions might have on all impacted communities, including marginalized communities SS.9-12.IS.12. Analyze existing structures, systems, and methodologies to determine what types of interventions or informed action will lead to increased equity, inclusion, and community and civic good.
Focus Pulitzer Center news story/stories	"Ignorance and Apathy: Why One Indian Woman Dies of Cervical Cancer Every Seven Minutes," by Swagata Yadavar for <i>Behan Box</i>
Content Advisory	References are made to sexually transmitted diseases.
Notes on Context	This lesson is valuable in virtually any high school because it centers on understanding issues as systems.

Lesson Plan

Essential Question

- What does it mean for an issue or problem to be systemic?
- How does context contribute to global health issues?

Focus Pulitzer Center News Story/Stories

[“Ignorance and Apathy: Why One Indian Woman Dies of Cervical Cancer Every Seven Minutes,”](#) by Swagata Yadavar for *Behan Box*

Introducing the Lesson

Although the word “systemic” has become commonplace in our language and may even be used by students in classroom contexts, beyond simple definitions, it is unclear whether students truly understand what the term means or how to understand issues systemically.

After first considering the obvious cause of cervical cancer in India (i.e., the HPV virus), students learn to identify the numerous factors that create high rates of cervical cancer in India, consider how these factors are produced and maintained, and consider which of these factors need to be addressed to mitigate the high incidence of cervical cancer in India.

Warm-up/Opening

1. Using the handout [[.pdf](#)][[.docx](#)], have students read a passage from the article that has had the name of the specific illness removed. Students should analyze the text independently first.

Preview of text in the handout

I met many _____ patients from rural India at the GCRI, mostly between the ages of 40 and 60. About 80% of them were diagnosed when they were _____. Jassuben is one of them.

The 30-year-old from a farming family in Amreli, 270 km from Ahmedabad, sat with her back against the wall in Parekh’s cabin alongside her husband. She has _____ and the prognosis is poor. She was diagnosed two years ago and treated, but by February this year, the _____ had spread. She will soon be initiated into palliative care.

2. Display the full passage and ask students to read it and answer the following questions in teams:
 - a. Based only on what you see in this passage, what is Jassuben’s medical diagnosis?
 - b. Based on the passage, what is the likely outcome of Jassuben’s illness?
 - c. List the evidence you used to support your answer.
 - d. Based on the passage, what caused Jassuben’s illness?
3. After the above discussion, have students read the complete passage.

The Complete Passage:

I met many cervical cancer patients from rural India at the GCRI, mostly between the ages of 40 and 60. About 80% of them were diagnosed when they were at stage 3. Jassuben is one of them.

The 30-year-old from a farming family in Amreli, 270 km from Ahmedabad, sat with her back against the wall in Parekh's cabin alongside her husband. She has stage-3 C cervical cancer, and the prognosis is poor. She was diagnosed two years ago and treated, but by February this year, the cancer had spread. She will soon be initiated into palliative care.

4. Lead a whole-class discussion on students' answers to the questions in the handout. Use the questions below to lead the discussion:
 - a. How many of you were able to guess the right answer or ended up somewhat close to the right answer?
 - b. If you figured out what the illness was or identified a related disease, what clues helped you? If you didn't figure it out, why did you choose the illness you chose?
 - c. Since the first passage did not contain the name of the illness, what did you pay attention to in the first passage that helped you reach a conclusion about the cause?
 - d. Are the causes you identified in the first passage causes of cervical cancer? Why or why not?
 - e. Reviewing the passage again, what factors seem to have contributed to Jassuben's cervical cancer diagnosis?

In this lesson, our goal is to work to think deeply not just about the causes of cervical cancer in India, but to approach global problems as complex systems with many causal factors.

A handout containing this section can be found [HERE](#) [[.pdf](#)][[.docx](#)].

Preparing to Engage with the Focus Resource(s)

Explain to students that every seven minutes, a woman in India dies from cervical cancer, and though HPV is the virus that causes cervical cancer, sadly, addressing cervical cancer is not as easy as giving each Indian female an HPV immunization. This is because issues like cervical cancer are not just problems; they are systems set in cultural contexts with a myriad of factors that maintain the problem and prevent the issue from being addressed. To address problems like cervical cancer, it is often necessary to look beyond technical solutions and beyond our own cultural lens and instead work to understand the broader context in which an issue like cervical cancer exists. Only when we fully understand a problem and all of the factors that contribute to and maintain it is it possible to consider the best possible solution or path ahead.

Exploring the Resource(s)

Answer the following questions as you read [Ignorance and Apathy: Why One Indian Woman Dies of Cervical Cancer Every Seven Minutes](#). This copy of the article is the source in its entirety. This copy of the article [[.pdf](#)][[.docx](#)] has been divided into sections so the assignment can be divided among the class.

1. List or highlight and briefly describe each factor that contributes to the high rates of cervical cancer in India.
2. Is HPV the cause of Jassuben's illness? Why or why not?
3. What role do (in)justice and (in)equity play in Jassuben's illness?
4. In the U.S., approximately 11 women die of cervical cancer *per day*. Why do you believe the rates of

cervical cancer are so different? (Note: Adjusting for population, this would be roughly 44 per day or 11 every six hours. Students will likely note India's higher population. However, 25% of cervical cancer cases occur in India, even though India accounts for approximately 17.8% of the world's population.

A handout containing the initial debriefing questions for the opening passage and the above questions can be accessed [HERE](#) [[.pdf](#)][[.docx](#)].

Processing the Resource(s)

Working with a team:

1. Map the relationship between the causal factors you and your team have identified.
2. Systemic issues are issues that affect the entire system and are often upheld and maintained by the political, economic, social, and cultural factors embedded in the system. Is cervical cancer in India a systemic problem? Why or why not?
3. Prepare a one-minute presentation that presents your map and answers to the above question.

Performance Tasks

Performance Tasks:

Answer the following questions in a reflective essay:

1. What does it mean to say that "problems are systems?"
2. How has your understanding of cervical cancer changed by reading the article and considering it as the result of a system rather than only the result of a pathogen like HPV?
3. Propose what a solution would need to accomplish to address the high rate of cervical cancer in India.

Extension:

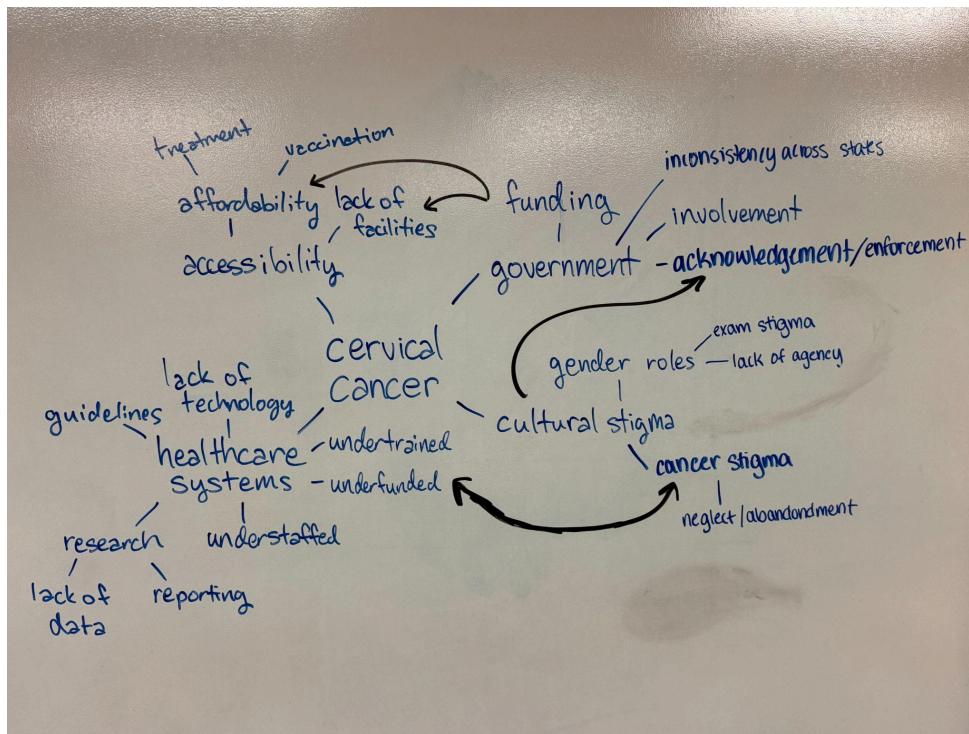
Students choose a new article from the Global Health Reporting Round-up handout [[.pdf](#)][[.docx](#)]. Students should be able to name the problem discussed in the article and explain how it is a system. Instruct students to use these questions to guide the exploration:

1. What problem or issue does the source discuss?
2. List and describe each of the factors that contribute to the problem.
3. Explain how these factors relate to one another or draw a concept map to illustrate the relationship.
4. Which of these factors is most important to address in order to address the problem as a whole?
Defend your answer

Assessment

Provide students with detailed, written feedback and offer the opportunity for revision.

Teacher Reflection



Tell us about you, your students, and your community.

One of the courses I teach is called *Illinois, Global Scholar, Capstone*. This course is for juniors and seniors. Each student must develop a question related to a global issue that is actionable, conduct comprehensive research on the issue, create an artifact to effect change, seek input from experts, and then deploy the artifact. A crucial aspect of conducting this research is understanding problems as systems. This means that they must understand the array of factors that contribute to a particular issue. For this reason, the article provided an outstanding example of a problem that has manufacturers nested in a complex system.

Tell us about your lesson.

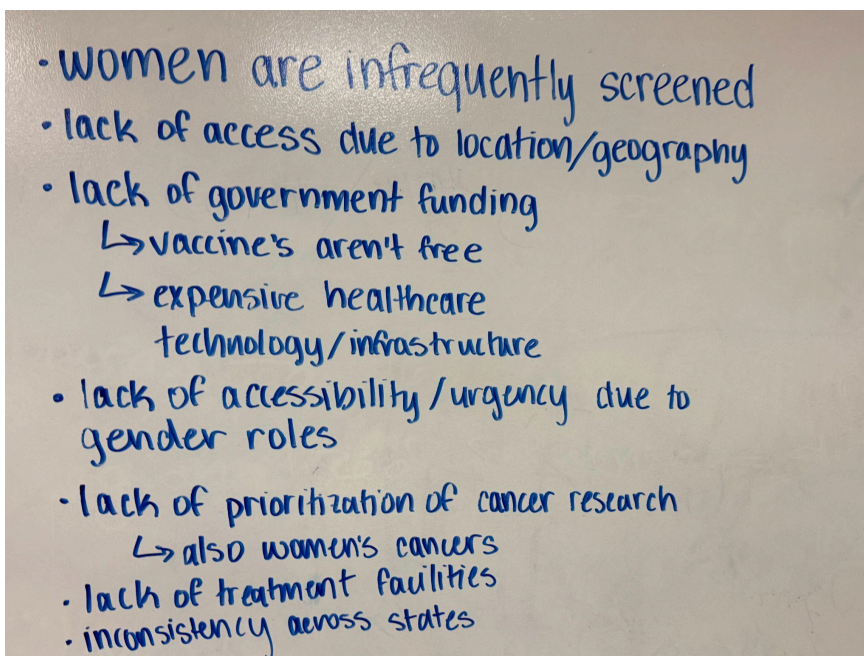
I chose this article to help students understand in a very short period of time the complexity of a global health issue, and how that issue could be profoundly different based on context. The focus of this particular lesson was cervical cancer, and it has dozens of factors within its context: India. The cervical cancer is essentially preventable. Vaccine access, significant gender bias, lack of healthcare infrastructure, failed political will, and a myriad of other factors contribute to a net failure in the world's highest rate of cervical cancer. Students assume that the reason has to do only with factors such as poverty, but that is not the case as India does not like the resources, but rather the attention and desire to address the issue. This was extremely valuable to my students because it helped them see not only how complex and layered a problem can be, but how this complexity makes the problem persist.

Tell us about what your students learned while engaging with the lesson

As stated, students learn not only about cervical cancer but also about the complexity of the context in which cervical cancer exists. There is a stark contrast between the incidence of cervical cancer and deaths due to cervical cancer in the United States in comparison to India, and contrary to popular belief, this has little to do with

poverty and much to do with a system, rooted in patriarchy, and an unwillingness to prioritize women's health issues. One student said, "I think it's a really interesting problem because lots of the issues are embedded in pre-existing systems. The government is male-dominated, and it's already in the existing system that you'll have to change and integrate things into, and there's also the cultural stuff like women have a fear of abandonment, which is a much harder thing to tackle because it's built into culture.... It's not just an outward issue that you can fix."

Following up this lesson with an opportunity to speak and interact with the author added a layer of knowledge and understanding as the journalist described how difficult it was even to get basic facts on cervical cancer, get interviews in hospitals, or even find someone who was suffering from cervical cancer. There is widespread social denial and stigma against not just screening, but the cancer itself.



Tell us about what you learned by creating and teaching this lesson.

One of the most important things I've learned is that students had virtually no awareness of what cervical cancer was, let alone that it was caused by HPV. Despite the wide availability of the vaccine in the United States, it seemed highly unlikely that students themselves had been vaccinated or knew of the dangers of HPV or cervical cancer.

To their credit, students did understand and naturally gravitate towards understanding problems and systems, and I'm guessing this led to insights into the issues they themselves were wrestling with in class, with various global issues.

That said, I suspect in the beginning, if I

had asked them why the rates were so high, they would say very general things like poverty or lack of awareness, but these types of answers actually reveal biases towards India rather than an understanding of India as a cultural system. I want educators to know how valuable it is to understand problems in this way, and that doing so is a skill that can be developed in a fairly short period of time. Additionally, I'd like teachers to know that even though the focus of this lesson in terms of content is cervical cancer, what it really does is develop a skill that can be used to address any global issue, as it provides a new perspective on how to understand global issues within a specific cultural context.



Students discuss cervical cancer in India with journalist Swagata Yadavar. Photo by Seth Brady, 2024.

About Seth Brady:

Seth Brady is a social studies teacher from Naperville Central High School. This lesson reached 75 students in Illinois.

***All photos were taken by Teacher Fellow, Seth Brady, for documentation purposes.*