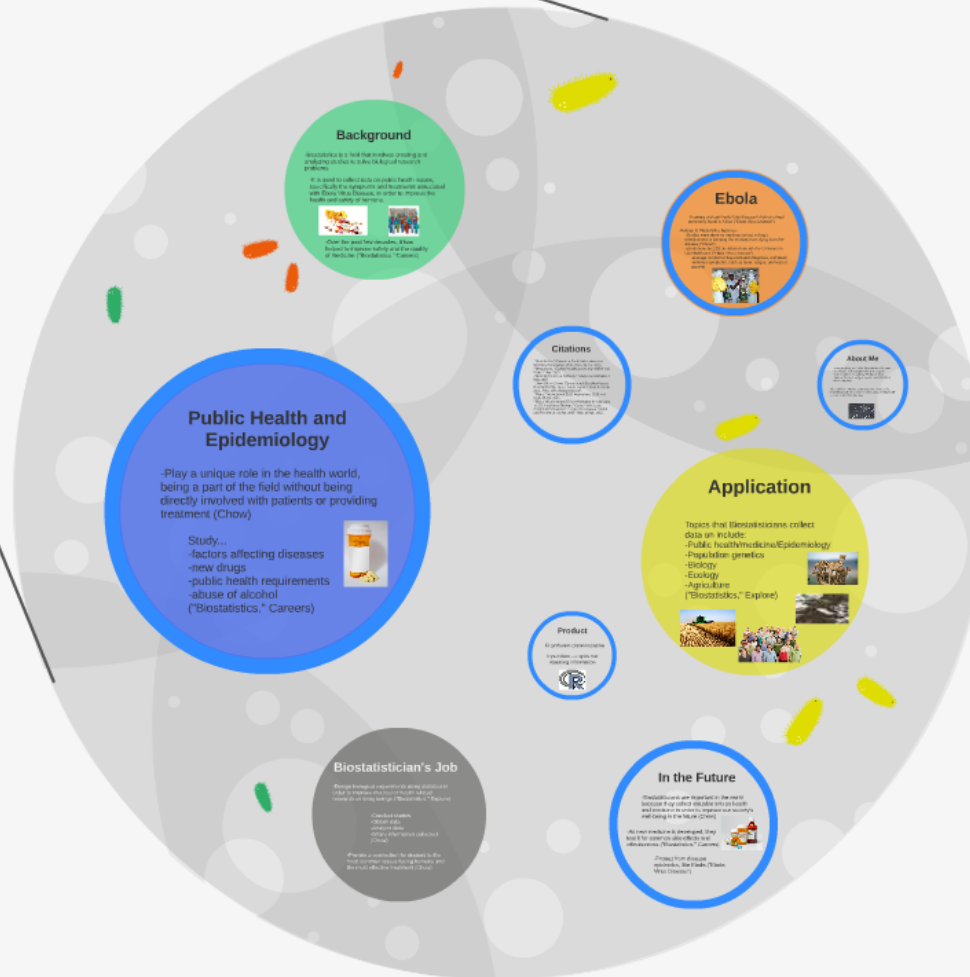
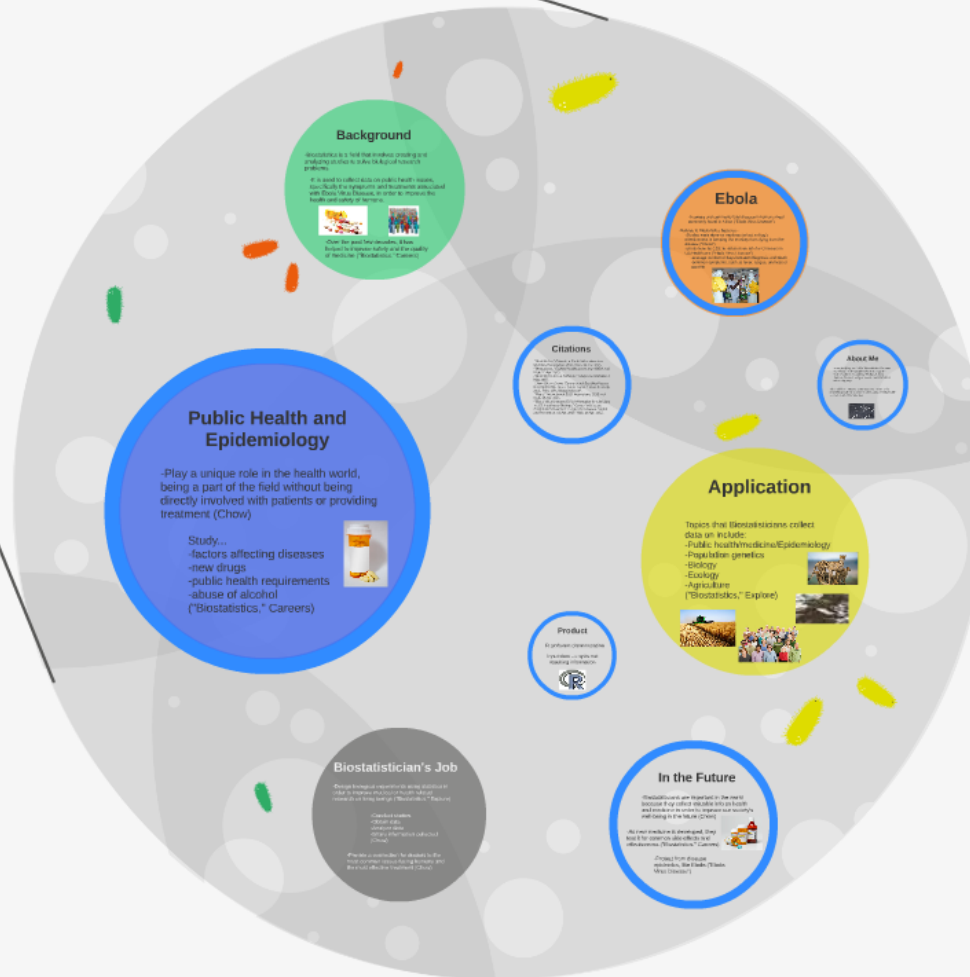


# Biostatistics Assignment Harvard Case Solution & Analysis



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# Background

-Biostatistics is a field that involves creating and analyzing studies to solve biological research problems.

-It is used to collect data on public health issues, specifically the symptoms and treatments associated with Ebola Virus Disease, in order to improve the health and safety of humans.



-Over the past few decades, it has helped to improve safety and the quality of medicine ("Biostatistics," Careers)

# Biostatistician's Job

-Design biological experiments using statistics in order to improve medical or health related research on living beings ("Biostatistics," Explore)

- Conduct studies
- Obtain data
- Analyze data
- Share information collected (Chow)

-Provide a connection for doctors to the most common issues facing humans and the most effective treatment (Chow)

# Application

Topics that Biostatisticians collect data on include:

- Public health/medicine/Epidemiology
  - Population genetics
  - Biology
  - Ecology
  - Agriculture
- ("Biostatistics," Explore)



# Public Health and Epidemiology

-Play a unique role in the health world, being a part of the field without being directly involved with patients or providing treatment (Chow)

Study...

- factors affecting diseases
  - new drugs
  - public health requirements
  - abuse of alcohol
- ("Biostatistics," Careers)



# Ebola

-A severe and commonly fatal disease in humans most commonly found in Africa ("Ebola Virus Disease")

-Relates to Biostatistics because...

-Studies were done on monkeys to test a drug's effectiveness in keeping the monkey from dying from the disease ("Ebola")

-Study done by CDC to obtain more info for Clinicians in US Healthcare ("Ebola Virus Disease")

-average number of days between diagnosis and death

-common symptoms, such as fever, fatigue, and loss of appetite





# In the Future

-Biostatisticians are important in the world because they collect valuable info on health and medicine in order to improve our society's well-being in the future (Chow)

-As new medicine is developed, they test it for common side effects and effectiveness ("Biostatistics," Careers)



-Protect from disease epidemics, like Ebola ("Ebola Virus Disease")