Malaria and COVID-19: Creating a Vaccine Outreach Program

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Background

- For my capstone project I am working to contribute to the development of a vaccine for Plasmodium vivax (PV) malaria.
- The overall goal is to identify antibodies which block PV invasion into red blood cells.
- PV is the most geographically widespread form of malaria, putting over 2.5 billion people at risk of infection.
- From this vantage point I created a COVID-19 vaccine outreach program.

Deliverables

- 1. Op Ed published in the Cleveland Plain Dealer
- 2. Educational flyer advocating for the COVID-19 vaccine

Population

PV:
- 80-90% of all PV occurs in the tropical regions of the Middle East, Asia, and Western Pacific
- Other 10-20% occur in Central and South America.
- Children, pregnant women, rural communities, and migrant workers are most vulnerable

COVID-19:
- SARS-CoV-2 virus has caused a global pandemic.
- In the United States individuals at higher risk for serious complications due to COVID-19 include: minorities, pregnant women, elderly individuals, people with chronic medical conditions

Learning Objectives

1. Effectively develop health communication for COVID-19 vaccine
2. Understand the public health impacts of both a PV and COVID-19 vaccine
3. Effectively advocate for minorities in Cuyahoga County to get COVID-19 vaccine

Lessons Learned

1. How to effectively communicate concerns and needs of a vulnerable population
2. How to develop health education materials
3. The impact of my own voice as a professional and minority

Public Health Impact of Vaccines

- Health: - Eradication of disease - Reduced morbidity & mortality - Herd immunity - Reduced Antibiotic Resistance
- Social: - Health equity - Social integration - Social mobility
- Economic: - Health cost savings - Reduced government spending - Productivity gains

Resources


