Forum 6: Humanistic Health and the History of Vaccine Hesitancy: Lessons from Then and Now

Casey Kayser  
*University of Arkansas, Fayetteville*

Kaitlyn Akel  
*University of Michigan-Ann Arbor*

Follow this and additional works at: [https://scholarworks.uark.edu/hnrcvac](https://scholarworks.uark.edu/hnrcvac)

Part of the Community Health and Preventive Medicine Commons, History of Science, Technology, and Medicine Commons, Influenza Virus Vaccines Commons, and the Public Health Education and Promotion Commons

Citation  

This Video is brought to you for free and open access by the Honors College Teaching and Learning at ScholarWorks@UARK. It has been accepted for inclusion in Vaccine Course by an authorized administrator of ScholarWorks@UARK. For more information, please contact scholar@uark.edu.
Vaccine Hesitancy

Historical Lessons and Public Health Significance

Kaitlyn Akel, MPH

May 15, 2021 @ 10am CST

kbakel@umich.edu | akelkaitlynb@gmail.com
Today’s Outline

- Introductions
- Lessons from the past
- Public health significance
- COVID-19 vaccine hesitancy
Introductions: who are you?

Please (if you’d like) put in the chat:

- Where you’re attending class from
- Your pronouns
- 1-2 things that you’re hoping to get from today’s session

Additionally (if you’d like), please complete this brief survey.
- We’ll talk more about this later in this session.

About me:

- I’m attending class from Ann Arbor, MI
- I use she/her pronouns
- I’m hoping to learn more about medical humanities and from our class discussion
Lessons from the Past

Part I:

Spoiler: this is not our first rodeo!
Life before the 20th century (1795-1899)

Vaccines were few and far between –
- Smallpox, est. 1796 in England
- Rabies, est. 1885 in France

A lot happens in this period re: anti-vaccinationism
- Organization – via anti-vaccination leagues
- Dissent from different classes – scientists, workers, aristocrats
- Legislation that considered this movement’s voice

Important to note that these notions and groups are differential in different countries – France v. England
Key themes

1. Should vaccination be a choice?
2. Are vaccines even effective?
3. Are they safe?
4. Who is deemed trustworthy to distribute that information?

“History doesn’t repeat itself but it often rhymes.” – Mark Twain
Part II:
Public Health Significance
Vaccine Hesitancy (VH)

“The delay in acceptance or refusal of vaccination despite availability of vaccination services. Vaccine hesitancy is complex and context specific, varying across time, place, and vaccines. It is influenced by factors such as complacency, convenience and confidence.” (MacDonald et al., 2015)

Currently, VH is considered one of the top 10 threats to global health – even before the pandemic. (WHO, 2019)
What does this look like?

(MacDonald et al., 2015)
Benefits of Vaccination

- Personal protection from illness
- Community protection from illness, i.e., herd immunity
- Cost effective
- Prevents anywhere from mild to severe disease
- Contributes to improved quality of life
Community impact of VH/Refusal

Localized outbreaks of vaccine-preventable disease (VPD) despite high coverage nationally

- Measles (Masters et al., 2020)

Limited knowledge of treatments for VPDs

- Rubella

Strain on healthcare infrastructure

- Influenza & COVID-19
Part III:
COVID-19 Vaccine Hesitancy
Mathieu et al, 2021

Cumulative number of COVID-19 doses administered *as of April 7, 2021
Contributions to COVID-19 Vaccine Hesitancy

Let’s brainstorm! What do y’all think?

• Manufacture timeline
• Blatantly false information, e.g., microchips
• Rumors
• Mistrust in political figures or public health professionals
• The “threat” of mandates
Vaccine rumors are NOT new

- Infertility from measles, tetanus, polio vaccines
- Dengue vaccine controversy in the Philippines
- Measles, mumps, rubella vaccine & autism

All of these (among others) have had drastic impact on community and global health.
So, what of COVID-19?

Ways in which we study this:

- Descriptive studies – who is willing to take the jab?
- Interventions – how can we get more people to take the jab?
- Analytical studies – why are there differences in decision-making processes? What are determinants of uptake?
How do we measure this?

Quantitatively – hypothesis testing

- The use of scales and surveys (such as the one I shared earlier)
- Surveillance for vaccine uptake – we do this nationally as the rollout’s started

Qualitatively – hypothesis generating

- Informational interviews
- Focus groups
Where do we go from here?

Things to keep in mind:

- Vaccine uptake, therefore, herd immunity, is a *local* metric – most public health guidance should follow suit
  - Recent guidance on masking in vaccinated populations
- Pursuit of science is a learning process
- Global collaboration on vaccination efforts is ESSENTIAL
Thank you!

Contact me w/ questions, comments, or concerns!

kbakel@umich.edu OR akelkaitlynb@gmail.com

Take a brief, 3-minute break.