

SWIHDR's Student Brown Bag Seminar:

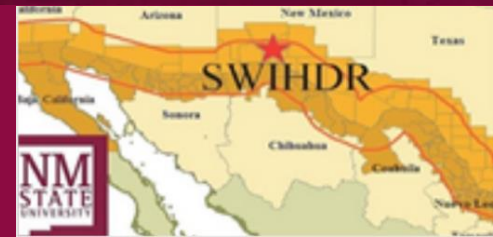
My Thesis Prospectus: Vaccination Intentions among NMSU Students

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COVID-19 Pandemic

- As of February 10, 2021:

- Globally

- Cases \approx 107.1 million
 - Deaths \approx 2.3 million

- Within the United States

- Cases \approx 27.2 million
 - Deaths \approx 469,883

(Johns Hopkins Coronavirus Resource Center, 2021)

- Impacts: world economies, medical facilities, physical and psychological wellbeing, disproportionately affects certain groups of people (Wong, 2020)

Background

- In Response to the global pandemic
 - National restrictions
 - Increasing surveillance systems
 - Implementing non-pharmaceutical preventive measures (Wong, 2020; Chen, Strych, Hotez, & Bottazzi, 2020)
- Despite these measures, COVID-19 has produced serious disease burden
- To end the current pandemic- a potent vaccine would be the most effective approach

Background

- The Problem
 - Increase in vaccine refusal/ hesitancy
 - Decline in general vaccination rates – in recent times
(McDonald, 2015; Quinn et al., 2019)

Issue of Interest



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Vaccination intentions

- Intentions to Vaccinate against COVID-19
 - Existing literature reports that vaccine intention are multiple and complex
 - Previous research on adult behavioral intention to vaccinate
 - Included reports and research on vaccine intentions among adults
 - Participants were selected from a nationwide online surveys
 - Most of the studies were conducted before a vaccine was publicly available
 - The adults in these studies were not from an academic institution



Vaccination intentions

- Intentions to Vaccinate against COVID-19
 - Findings from previous studies
 - Four cross-sectional internet surveys carried out in April and May 2020 found that **58% to 69%** of adults intended to get vaccinated against COVID-19, with greater proportions reported in April compared May (Reiter, Pennell, & Katz, 2020; Fisher et al., 2020; Malik et al., 2020; Head et al., 2020).
 - Another longitudinal study from April 1 to December 8 analyzed bi-weekly surveys to describe changes over time and across demographic subgroups in the public's likelihood of getting the COVID-19 vaccine. The study reported a decline from **74%** in early April to **56%** in early December (Szilagyi et al., 2021).

Vaccination intentions

- Intentions to Vaccinate against COVID-19

- Findings from previous studies

- Sociodemographic factors played a role in vaccine intentions
 - Age, race and ethnicity, geographic location, educational attainment
 - Individual factors – Personal health beliefs and perceived threat of disease
 - Perceived threats = higher intention
 - Social conscience (Individual altruism) = higher intention to vaccinate
 - Reasons for vaccine refusal centered around personal concern for self, trust and practices.
 - Intention changes over time, history (of disease/vaccine), political affiliation

(Reiter, Pennell, & Katz, 2020; Fisher et al., 2020; Malik et al., 2020; Head et al., 2020; Szilagyi et al., 2021; Ruiz et al., 2021).



Vaccination intentions

- COVID-19 - Unanswered Questions
 - Little is known about intentions to vaccinate against COVID-19 among University students in the border region or the factors that influence their decision
 - Will the proportion of people willing to be vaccinated drop as COVID-19 cases are dropping nationwide?
 - Will higher education among young adults equate to higher intention to be vaccinated?

Vaccination intentions

- COVID-19 - What this study seeks to address
 - Student's vaccination intentions
 - Determinants of these vaccination intentions



Justification

- Why is it important?
 - Two vaccines have been ratified and recommended for preventing COVID-19
 - Students make up a significant proportion of the school population
 - Student's intention to vaccinate is important because it helps us understand the risk of transmission of COVID-19 as the university prepares to transition to traditional learning.
 - Provides informed estimations of future vaccine uptake
 - Helpful in identifying strategies to improve future vaccination acceptance

Research Questions



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Research Questions

- **Research Question 1:** What are the COVID-19 vaccine behavioral intentions among students attending NMSU main campus?
- **Research Question 2:** What factors are associated with the COVID-19 vaccine behavioral intentions of students attending NMSU main campus?



Methodology



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Study Setting

- New Mexico State University
 - Located in Las cruces
 - Student population size Fall 2020: 14,227
 - Average age (overall): 25
 - Ethnicity:
 - Two or more races (2.3%), American Indian/Alaskan native (2.3%), Asian (1.3%)
 - Black or African American (2.6%), Native Hawaiian or Other Pacific Islander (0.2%)
 - Hispanic (57.7%), White (27%), Race and Ethnicity Unknown (1.2%)
 - Nonresident alien (5.4%)



Sample Population

- Graduate and undergraduate students
 - Students in all colleges



Recruitment

- Online survey instrument - Qualtrics
- An email invitation will be distributed across NMSU student listserv for the various colleges and departments on campus.
- Eligibility criteria – students enrolled in NMSU who are 18 years and above
- The email invitation will contain a link to the online informed consent form
- After eligible students agree to the consent form, they will proceed to the study questions

Instrument/Measures

- Questions will be adapted from previous surveys (Ruiz & Bell, 2021 and Head et al., 2020)
- Behavioral intention question – Primary outcome measure
- Psychographic questions
 - General knowledge about vaccines
 - Vaccine conspiracy belief scale
 - Threat appraisal
 - Medical preexisting conditions
 - Preferred source of news
 - Social conscience (individual altruism)
- Demographic questions – To include department in nmsu

Statistical Analysis

- Descriptive statistics – will be used to characterize the sample and study variables
- Crosstabulations – will be used to assess associations between demographic variables and vaccination intention
- Binary logistic regression could be conducted to determine predictors of high and low vaccination intention
- Multiple linear regression could also be conducted to determine significant independent predictors of intention to vaccinate.

Potential Impacts



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Potential Impacts

- Inform nmsu authorities the vaccination intention among students which will help them prepare for safe return to traditional course on campus
- Possibly reveal target areas where intervention on vaccine hesitancy is needed
- Inform future programs and interventions on vaccination intentions among student population.

Next steps...



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Things to do

- Present thesis prospectus to the committee
- Work on thesis proposal
- Submit thesis proposal to IRB and obtain approval
- Collect data and set-up/conduct data analyses
- Write results and discussion sections and finalize thesis manuscript
- Hold thesis defense



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