

Vaccine Hesitancy in Rural and Medically Underserved Ohio Communities - A Qualitative Study

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INTRODUCTION

- Vaccines have a significant effect on the primary prevention of infectious diseases.
- Hesitancy towards the uptake of the COVID-19 vaccines has been prevalent in areas of Ohio.
- A qualitative research study was conducted to garner the perspectives of these communities.
- Perspectives that are elicited from this study served as the basis to design interventions to improve vaccination rates in these areas.

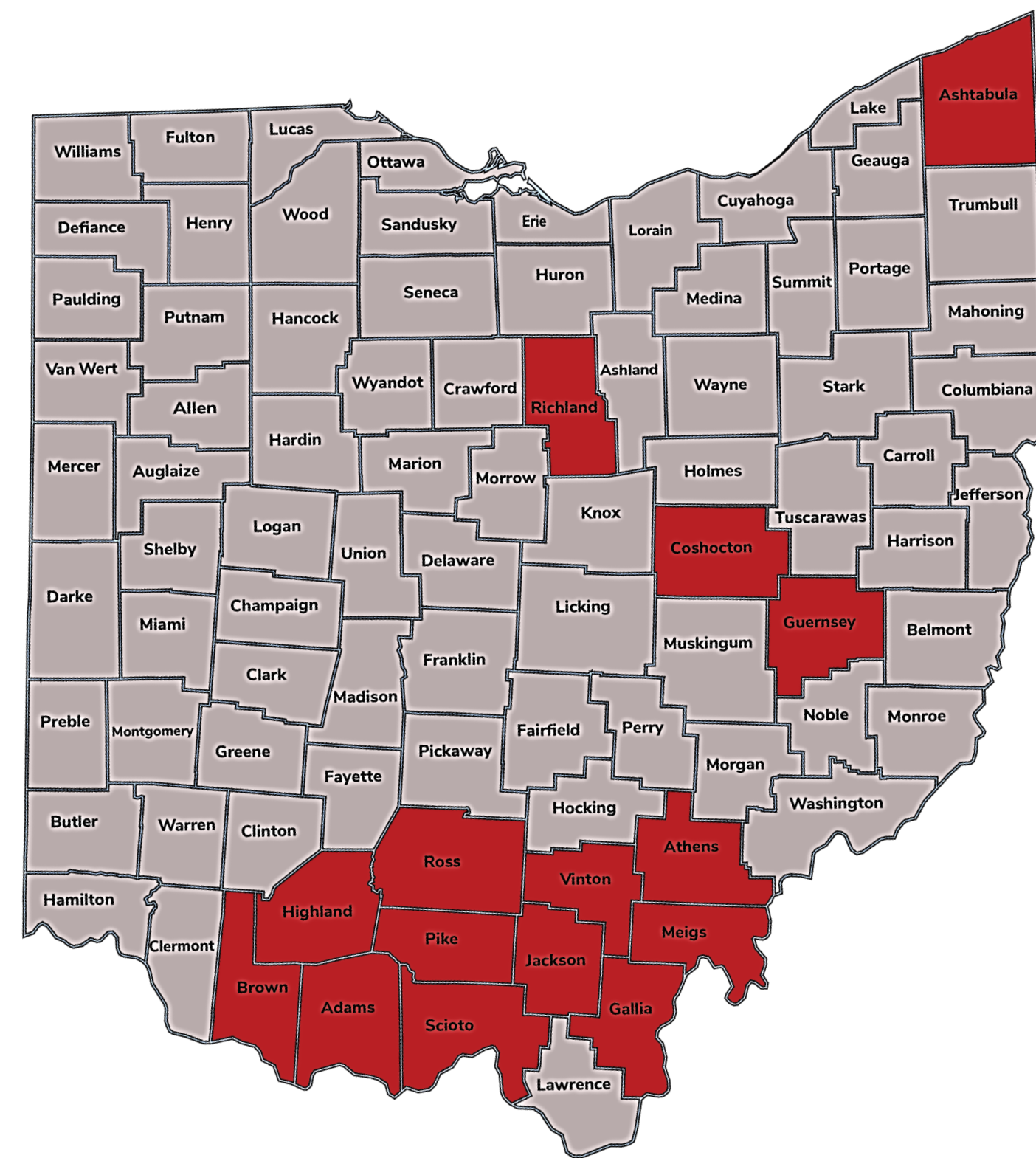


FIGURE 1: Map depicting targeted counties in rural Ohio

RESEARCH QUESTIONS

- What factors over the past year contributed to vaccination hesitancy in the adult population in rural Ohio?
- Have the opinions of Ohio residents on vaccines changed either positively or negatively throughout the COVID-19 pandemic?

METHODS

Recruitment

- Informants were recruited from selected counties in rural Ohio (see Figure 1),
- Counties are in the top 50% of pandemic and social vulnerability indices.
- These individuals were recruited by email through state and local partners in representative counties.
- Three representative groups were included: vaccinated, unvaccinated, and vaccinated medical professionals.

Interviews/

- Interviews were conducted virtually over video conferencing software by trained staff.
- A total of seven interviews were completed with the following individuals: three vaccinated, two unvaccinated, and two vaccinated, medical professionals.



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COVID-19 Vaccine Research Study

We want to hear from you!

Join us to provide your feedback on the COVID-19 vaccine and reasons you might be comfortable or hesitant to receive the vaccine. Individual key informant interviews will be held via Zoom. Please note, you will need a private location with reliable internet access to participate.

We are seeking English-speaking adults, ages 18 and older, in your county to speak with us about your experiences related to the vaccine and related mandates during the pandemic. Key informant interviews are expected to last around one hour, and you will receive a \$15 (where) gift card for your participation. We have a limited number of interview openings in your county. Please register at the link below, and you will be contacted to set up an interview time, if selected. Contact: Amy Meehan, meehan.89@osu.edu, with any questions.

FIGURE 2: Portion of flyer utilized to recruit participants for study.

METHODS (CONT.)

Coding

- The following codes were developed via an inductive approach based on informant responses.
- Coding of transcripts completed by two study investigators, with session completed after coding completion to reconcile coding discrepancies.



FIGURE 3: Developed codes based on participant responses. *code consisted of both positive and negative directionality

RESULTS

Vaccinated Medical Professionals

- **Misinformation**
 - "People thought it was going to change their DNA. That was a big one."
- **Political**
 - "I do believe there is a big political divide. ..I think that affected a lot of people about not getting the vaccine..."

Vaccinated

- **Political**
 - "...if you could go through and ask how this person voted in the last election, and whether they got the vaccine or not. There would be a high correlation between voting..."
- **Social Determinants**
 - "I know they did go out into the communities and do some mobile health unit shots and things like that. But I would say that that is probably transportation is one of the biggest (barriers)."

Unvaccinated

- **Negative Interpersonal Influence**
 - "...talking to my mom made more of an impact, just because it was, you know, one on one talking with a person versus reading online. So I mean, I would say to influenced a little bit, but really talking to my mom made more of a difference than doing my own research."
- **Autonomy**
 - "I think it's a personal decision, and you know we don't have any business criticizing each other. You know we need to just listen to each other and have compassion."

FIGURE 4: Top three codes by group with exemplar quotes.

DISCUSSION

- Identified factors for vaccination hesitancy vary widely between each interviewed group. Several themes emerged:
 - Medical professionals felt that perceptions of vaccines were changing, but other groups did not.
 - Positive attitudes about vaccines in general; concerns about COVID-19 vaccine safety
 - Political influences were of concern for vaccinated individuals, not of the unvaccinated group.
 - Interpersonal influences are influential in vaccine uptake.
 - Unvaccinated individuals highly value autonomy.
 - Social determinants (education, access to vaccines) and political influences are discussed as being influential by vaccinated people.
- **Limitations**
 - Representativeness of participants of respective communities.
 - Changing perceptions over the course of the pandemic.

CONCLUSIONS

- Perceptions regarding vaccine use are evolving in the wake of the COVID-19 pandemic.
- Further study in diverse communities is indicated.

ACKNOWLEDGEMENTS

Thanks to the EXCITE: Vaccinate with Confidence project, funded by CDC and USDA-NIFA, and The Ohio State University Extension system for their support of this work. Thanks to Drs. Tasleem Padamsee, Andy Wapner, and Myriam Shaw Ojeda for their support.