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Community Health Workers' COVID-19 Vaccine Status and Concerns for Client Welfare in Appalachia

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Community Health Workers' COVID-19 Vaccine Status and Concerns for Client Welfare in Appalachia

Appalachian Student Research Forum 2023

Olivia A. "Sully" Sullivan, EMT, MPH



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Acknowledgments & Disclosures

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- Co-Author: Amy Wahlquist, MS^{1,2}
- Acknowledgments: Sydney Howard, MS⁴

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1 East Tennessee State University, College of Public Health

2 ETSU Center for Rural Health Research

3 ETSU Addiction Science Center

4 University of Kentucky, College of Medicine Center of Excellence in Rural Health



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Background

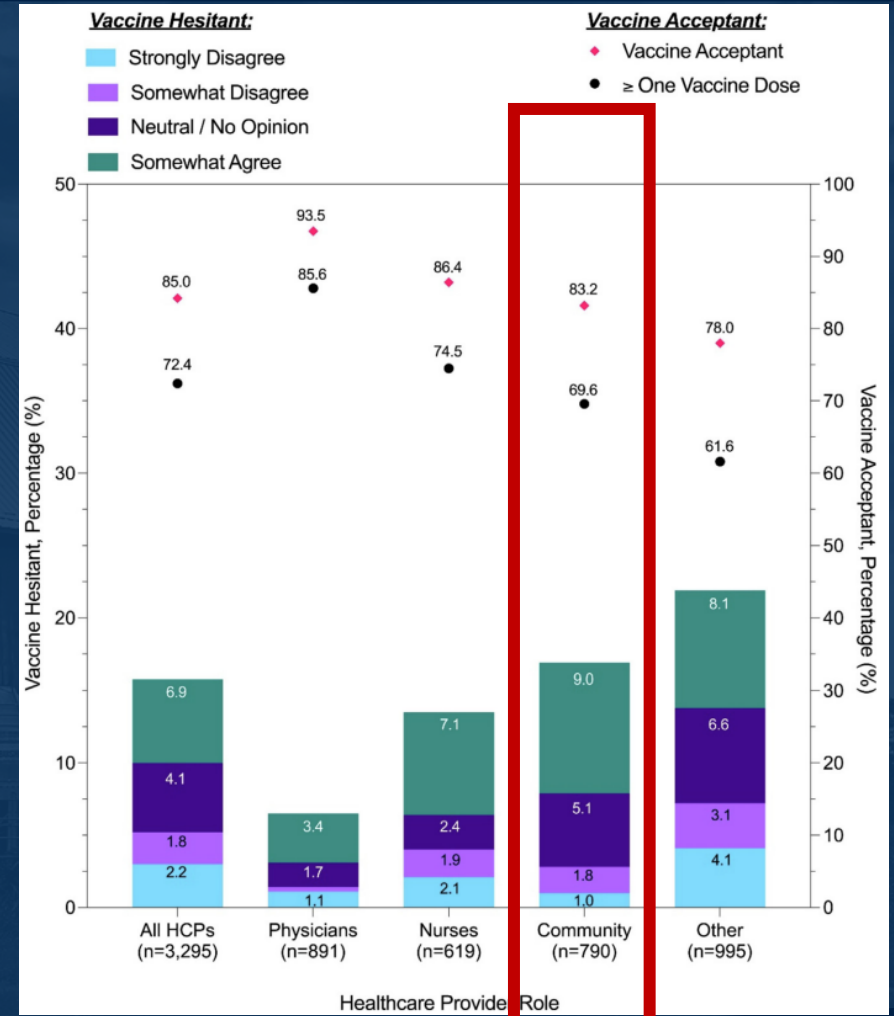
- Roles of community health workers (CHWs)¹
 - Healthcare – community liaison
 - Health education and promotion
 - Health equity
- Most needed in historically-marginalized communities ²
- Crucial in COVID-19 pandemic ³



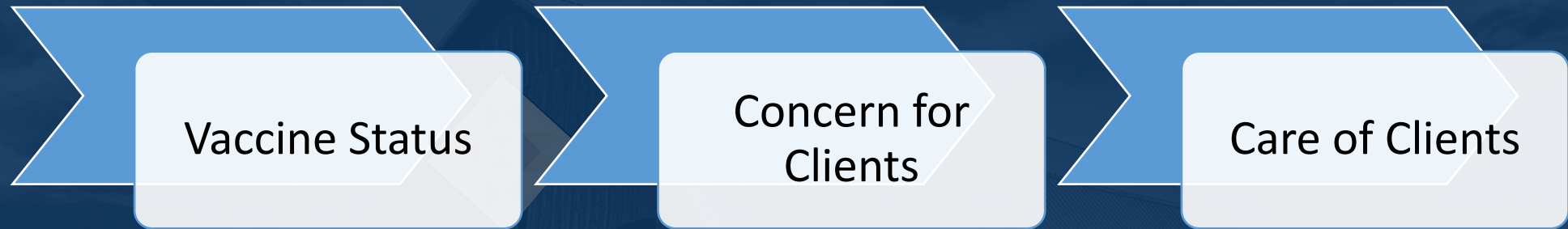
Background (cont.)

- Low CHW COVID-19 vaccine uptake compared to other healthcare workers (Fig. 1)⁴
- Vaccinated healthcare workers more likely to recommend scheduled vaccinations⁵

Figure 1. Vaccine hesitancy by healthcare provider role. Modified from existing source.⁴



Purpose



Is COVID-19 vaccination status ultimately associated with care provided to clients during the ongoing COVID-19 pandemic?



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Hypothesis

“Do you have concerns about the welfare of certain clients now that COVID-19 restrictions are lifting/have been lifted?”

Hypothesis: CHWs with at least one dose of the COVID-19 vaccine will be significantly more likely to be concerned for the welfare of clients.



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Data & Analysis

- Secondary data
 - TN & KY (Fig. 2)
 - 10/2021-12/2021
- Analytic sample (n=71)
 - CHW
 - Answered vaccine status

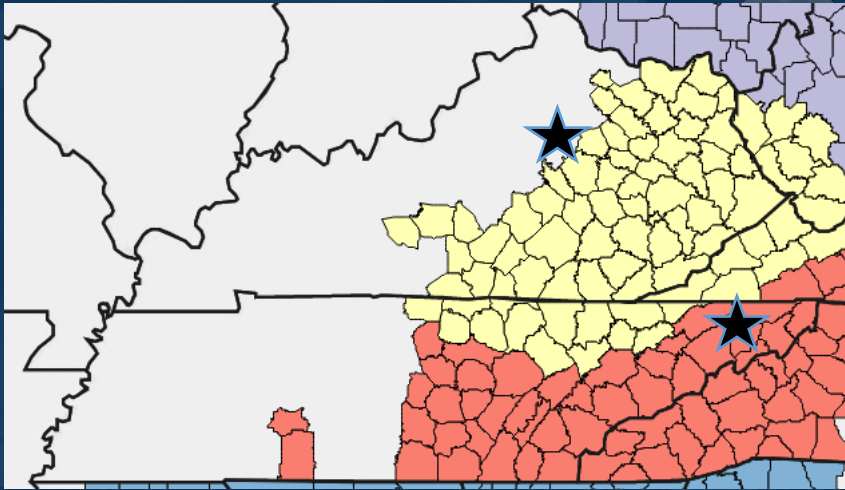


Figure 2. Approximate locations of survey samples from Central and South-Central Appalachian sub-regions. Modified from existing source.⁶

- Fisher's Exact Test
 - Small sample
 - Bivariate analysis
- Question of interest
 - Binary yes/no



Results

- 86% of CHWs received at least one dose of COVID-19 vaccine
- **No difference** between groups in reporting client needs changing in COVID-19 pandemic
 - 86% of vaccinated CHWs vs. 70% of unvaccinated CHWs
 - p-value: 0.19



Results (cont.)

- Vaccinated CHWs **more** likely to have concerns than unvaccinated CHWs
 - 82% of vaccinated CHWs vs. 40% of unvaccinated CHWs
 - p-value: 0.010
- Vaccinated CHWs **less** likely to think reopening safe than unvaccinated CHWs
 - 55% of vaccinated CHWs vs. 90% of unvaccinated CHWs
 - p-value: 0.043



Discussion

- Relatively high COVID-19 vaccine uptake among CHWs
 - Previous study: 70% in June 2021 in 23 countries⁴
 - Possibly higher now
- Vaccination status possibly associated with concern for clients in Appalachia
- Potential solution: continuing education for CHWs on COVID-19 vaccine
- Unanswered: is concern linked to care?



Discussion (cont.)

- Limitations

- Timing
- Secondary data
 - Question wording
 - Respondent follow-up
 - Response/non-response bias
- Sample
 - Bivariate only
 - Small
 - Homogenous

- Future Directions

- Next round of survey
- Concern → care delivery
- Evaluation of CHW education strategies



References

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2. Ballard, M., Bancroft, E., Nesbit, J., Johnson, A., Holeman, I., Foth, J., ... & Palazuelos, D. (2020). Prioritising the role of community health workers in the COVID-19 response. *BMJ global health, 5*(6), e002550.
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Thank You!

Questions?

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