TRUST IN & THE TRUSTWORTHINESS OF PUBLIC HEALTH AMONG ASIAN AMERICANS IN COLORADO

June Homdayjanakul, DrPH, MPH April 18, 2024





Disclaimer

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Outline

- Background/Context
- Research
 - Aims
 - Methods
 - Analyses
 - Findings
- Discussion
- Q/A



Background

- The growing mistrust and distrust of public health, accelerated by the COVID-19 pandemic, calls for further exploration of trust and trustworthiness of public health (MacKay et al., 2021).
- The Asian and Asian American (AA) community is complex and diasporic (Kim et al., 2021).
- The current practice of aggregating AA data hides the vast in-group historical, cultural, and social contexts that affect subgroups
- Disaggregated data on trust and trustworthiness in public health is needed to better inform public health practice

Community Context

- In Colorado (the territories of the Apache, Arapaho, Cheyenne, Pueblo, Shoshone, and Ute Peoples), the history of AAs goes back to 1869 when the first Chinese immigrant arrived in the state (Wei, 2016).
- In 1880, Denver's thriving Chinatown was destroyed in a deadly anti-Chinese race riot (Wei, 2016).
- Colorado was the location of one of the ten incarceration camps that the US government established to forcibly imprison people of Japanese descent from 1942-1945 (Shew & Kamp-Whittaker, 2012).



Funeral procession with marching band in the Chinese community circa 1875 in Denver, CO,, likely on Wazee Street. (History Colorado)



Camp Amache national park historic site signage, 2024. (The Hill)



Community Context

 Today, AAs make up 3.6% of the state population (over 180,000 people), with the majority residing in the Denver metropolitan area (US Census, 2020).



Mural by Hmong American artist Nayle Lor on the wall of Denver Fire Station 4 to commemorate the historic Chinatown



Grounding Terms

Trust

Belief that the actor will behave in one's best interest (Williamson and Bigman, 2018)

Trustworthiness

To behave voluntarily in a way not to take advantage of the trustor's vulnerable position when faced with a self-serving decision that conflicts with the trustor's objective. (Özer and Zheng, 2017)

Mistrust

Doubt or skepticism about the trustworthiness of the actor (Citrin and Stoker, 2018)

Distrust

Belief that the actor is untrustworthy (Citrin and Stoker, 2018)



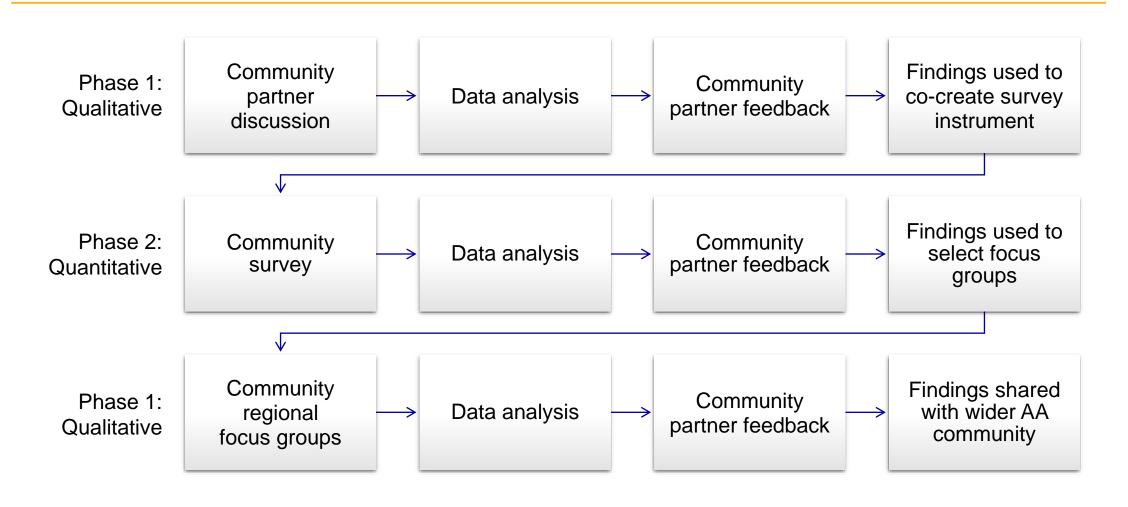
Research Aims

1 Explore the knowledge and attitudes towards public health among AAs as a whole and among subgroups

Establish the extent to which AAs as a whole and among subgroups view public health as trustworthy and identify the factors that affect trustworthiness

Identify trustworthy sources of public health information among AAs as a whole and among subgroups

Methods



Methods

Community Partner Discussion

- Sampling: Critical case
- Mode: Virtual discussion with community partners
- Language: English

Community Survey

- Sampling: Purposive, snowball
- Mode: Virtual and in-person for 20 days (Mar-Apr 2023)
- Languages: Burmese, Chinese (Simplified), English, Hindi, Nepali, Thai, Urdu, Vietnamese

Community Focus Groups

- Sampling: Purposive, snowball
- Mode: Virtual discussions with members of Asian regional groups (East, South, Southeast)
- Conducted six groups total (two per regional group)
- Language: English

Analyses

Community Partner Discussion

Constant Comparative Analysis

Community Survey

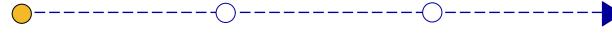
- Main variables of interest
 - DV: Mean trustworthiness (county, state, or CDC)
 - IVs: Ethnicity, gender, occupation, household income, education, age, county, immigration year, health insurance, perceived trustworthiness of community doctor
- Other analyses
 - Trustworthiness of county, state, and CDC levels of public health
 - Trustworthiness of public health information sources

Community Focus Groups

Constant Comparative Analysis



Community Partner Discussion



Key themes from the community partner discussion

Need for data disaggregation

Experience with practices from those outside of the AA community

Lack of prioritization and support from public health

Generational and cultural differences as critical factors that affect perception of public health



Community Partner Discussion



Quite frankly, I think COVID has caused tremendous damage to public health and our community's willingness to trust public health agencies. I do not believe that our local and state public health agencies have the resources, capacity, and expertise to build trust and relationship with the AANHPI community.

Community Partner "C"

Community survey results

East Asian regional group:

Chinese, Japanese, Korean, Taiwanese, or Chinese-Taiwanese 406 respondents

Community Survey

(307 online, 98 paper) across 26 ethnicities

South Asian regional group:

Bangladeshi, Bhutanese, Indian/Sikh, Nepali, or Pakistani

Southeast Asian regional group:

Burmese, Cambodian, Chin, Filipino, Hmong, Indonesian, Karen, Karenni, Laotian, Malaysian, Mon, Pa'O, Pwo Karen, Singaporean, Thai, or Vietnamese



Community Survey

	All subgroups combined	East Asian	Southeast Asian	South Asian
n (%)	405 (100)	123 (30.4)	214 (52.8)	68 (16.8)
Gender (n = 398)				
Female	251 (63.0)	87 (71.3)	128 (61.0)	36 (55.3)
Male	131 (33.0)	27 (22.1)	78 (37.1)	26 (40.0)
Other (Non-binary, prefer not to say, or don't know)	16 (4.0)			
Age (n = 405)				
18 to 29 years	81 (20.0)	17 (13.8)	48 (22.4)	16 (23.5)
30 to 39 years	143 (35.3)	47 (38.2)	68 (31.8)	28 (41.1)
30 to 49 years	86 (21.3)	18 (14.6)	59 (27.6)	9 (13.2)
50 to 59 years	50 (12.3)	14 (11.4)	26 (12.1)	10 (14.7)
60 years or older	45 (11.1)	27 (22.0)	13 (6.1)	16 (23.5)
Household income (n = 397)				
Less than \$40,000	90 (22.6)	10 (8.4)	61 (28.8)	19 (32.7)
\$40,000 to \$69,999	89 (22.4)	19 (16.0)	51 (24.1)	11 (19.0)
\$70,000 to \$99,999	73 (18.4)	30 (25.2)	32 (15.1)	11 (19.0)
\$100,000 to \$129,999	53 (13.4)	19 (16.0)	29 (13.6)	5 (8.6)
\$130,000 and higher	92 (23.2)	41 (34.4)	39 (18.4)	12 (20.7)



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	50 to 59 years 60 years or older	50 (12.3) 45 (11.1)	14 (11.4) 27 (22.0)	26 (12.1) 13 (6.1)	10 (14.7) 16 (23.5)
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Education (n = 398)								
Never attended school or only primary school	48 (12.1)	0 (0.0)	37 (17.6)	11 (16.7)				
Some high school or high school graduate/GED	39 (9.8)	6 (4.9)	24 (11.4)	9 (13.6)				
Some college/technical school (College 1 to 3 years)	73 (18.3)	14 (11.5)	48 (22.9)	11 (16.7)				
College graduate (College 4 years or more)	145 (36.4)	59 (48.4)	60 (28.6)	26 (39.4)				
Advanced degree (Master's degree or higher)	93 (23.4)	43 (35.2)	41 (19.5)	9 (13.6)				
Birthplace (n = 405)								
U.S.	190 (46.9)	89 (72.4)	81 (37.9)	20 (29.4)				
Outside of the U.S.	215 (53.1)	34 (27.6)	133 (62.1)	48 (70.6)				
Language other than English spoken at home (n = 400)								
Yes	271 (67.7)	52 (42.2)	159 (74.3)	60 (88.2)				
No	129 (32.2)	70 (56.9)	53 (24.7)	6 (8.8)				
Health insurance (n = 395)	Health insurance (n = 395)							
Medicaid or Medicare	111 (28.1)	29 (24.0)	55 (25.6)	27 (40.3)				
Private insurance (via employer, spouse, or self)	231 (58.4)	87 (71.9)	114 (55.0)	30 (44.8)				
No health insurance, Other	53 (13.4)	5 (4.1)	38 (18.4)	10 (14.9)				



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Community Survey





- Utilized a four-item trustworthiness scale derived from existing research on trust in public health authorities
- Five-point Likert scale (Strongly disagree to Strongly Agree)
- Response recoded and ranged 0-4





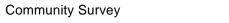
- Utilized a four-item trustworthiness scale derived from existing research on trust in public health authorities
- Five-point Likert scale (Strongly disagree to Strongly Agree)
- Response recoded and ranged 0-4
 - County (M = 2.32)
 - State (M = 2.41)
 - CDC (M = 2.34)





		County		State		CDC	
		n = 404,	p < .001	n = 404, j	p < .001	n = 400,	p = .002
Ethnicity	n (%)	М	SD	М	SD	М	SD
All subgroups combined	405 (100)	2.32	.62	2.41	.61	2.34	.68
a) Burmese	29 (7.16)	2.75	.41	2.98	.47	2.63	.49
b) Cambodian	26 (6.41)	1.87	.72	2.02	.80	1.96	.95





		County		State		CDC	
		n = 404,	p < .001	n = 404, j	p < .001	n = 400,	p = .002
Ethnicity	n (%)	М	SD	М	SD	М	SD
All subgroups combined	405 (100)	2.32	.62	2.41	.61	2.34	.68
i) Korean	27 (6.66)	1.93	.72	2.02	.70	2.01	.74
j) Mon	31 (7.65)	2.65	.34	2.76	.50	2.60	.59
k) Nepali	26 (6.41)	2.53	.43	2.51	.38	2.43	.37





Trustworthiness of Public Health Information Sources

List of sources was based on NYC COVID-19 survey with AAs, then reviewed and edited by community partners





Trustworthiness of Public Health Information Sources

List of sources was based on NYC COVID-19 survey with AAs, then reviewed and edited by community partners

- Community religious leader
- Community-based organization
- Doctor from outside of the community
- Doctor from within the community
- Ethnic media (community-specific news sources)
- Family member
- Friend
- Local police department
- Mainstream media
- Public health authority (state, local, or federal)
- Social media





Trustworthiness of Public Health Information Sources

The most trustworthy sources of public health information across all subgroups were:





Trustworthiness of Public Health Information Sources

The most trustworthy sources of public health information across all subgroups were:

Doctor from within the community (M = 2.81)





Trustworthiness of Public Health Information Sources

The most trustworthy sources of public health information across all subgroups were:

- Doctor from within the community (M = 2.81)
- Family member (M = 2.68)





Trustworthiness of Public Health Information Sources

The most trustworthy sources of public health information across all subgroups were:

- Doctor from within the community (M = 2.81)
- Family member (M = 2.68)
- Public health authority (M = 2.55)

Trustworthiness of Public Health Information Sources

		Ran	k of Public Health Information Sour	ces
Ethnicity	n (%)	1	2	3
Burmese	29 (7.16)	Family member M = 3.48	Doctor within community M = 3.00	Community religious leader M = 2.75
Cambodian	26 (6.41)	Doctor within community M = 2.73	Friend M = 2.50	Family member M = 2.26
Chinese (except Taiwanese)	31 (7.65)	Family member M = 2.80	Doctor within community M = 2.70	Public health authority M = 2.61
Filipino	31 (7.65)	Doctor within community M = 2.74	Family member M = 2.71	Public health authority M = 2.45
Hmong	10 (2.46)	Family member M = 2.60	Doctor within community M = 2.40	Friend M = 2.30
Indian (<i>n</i> = 21) Sikh (<i>n</i> = 8)	29 (7.16)	Doctor within community M = 2.68	Doctor outside community M = 2.48	Public health authority M = 2.44
Japanese	55 (13.58)	Doctor within community M = 3.01	Public health authority M = 2.94	Doctor outside community M = 2.61
Karen (n = 3) Karenni (n = 4) Pa'O (n = 1) Pwo Karen (n = 3)	11 (2.71)	Family member M = 3.27	Public health authority M = 2.90	Community-based org M = 2.72
Korean	27 (6.66)	Family member M = 2.74	Friend M = 2.70	Doctor within community M = 2.66
Mon	31 (7.65)	Community religious leader M = 3.06	Family member M = 2.93	Doctor within community M = 2.83
Nepali	26 (6.41)	Family member M = 3.26	Doctor within community M = 2.96	Friend M = 2.88
Taiwanese (n = 8) Chinese-Taiwanese (n = 2)	10 (2.46)	Doctor within community M = 3.20	Doctor outside com Public health auth Family membe	ority (M = 3.00)
Thai	31 (7.65)	Family member M = 2.74	Doctor within community M = 2.58	Public health authority M = 2.54
Vietnamese	28 (6.91)	Doctor within community M = 2.96	Doctor outside community M = 2.59	Public health authority M = 2.57
Other South Asian Bangladeshi (n = 2) Bhutanese (n = 9) Pakistani (n = 2)	13 (3.20)	Doctor within community M = 3.15	Family member M = 3.00	Social media M = 2.83
Other Southeast Asian Chin (n = 2) Indonesian (n = 3) Laotian (n = 8) Malaysian (n = 3) Singaporean (n = 1)	17 (4.19)	Family member M = 2.64	Doctor within community M = 2.47	Friend M = 2.35



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Filipino	31 (7.65)	Doctor within community M = 2.74	Family member M = 2.71	Public health authority M = 2.45
Hmong	10 (2.46)	Family member M = 2.60	Doctor within community M = 2.40	Friend M = 2.30
Indian (n = 21) Sikh (n = 8)	29 (7.16)	Doctor within community M = 2.68	Doctor outside community M = 2.48	Public health authority M = 2.44
Japanese	55 (13.58)	Doctor within community M = 3.01	Public health authority M = 2.94	Doctor outside community M = 2.61
Karen (n = 3) Karenni (n = 4) Pa'O (n = 1) Pwo Karen (n = 3)	11 (2.71)	Family member M = 3.27	Public health authority M = 2.90	Community-based org M = 2.72
Korean	27 (6.66)	Family member M = 2.74	Friend M = 2.70	Doctor within community M = 2.66
Mon	31 (7.65)	Community religious leader M = 3.06	Family member M = 2.93	Doctor within community M = 2.83
Nepali	26 (6.41)	Family member M = 3.26	Doctor within community M = 2.96	Friend M = 2.88
Taiwanese (n = 8) Chinese-Taiwanese (n = 2)	10 (2.46)	Doctor within community M = 3.20	Doctor outside community (M = 3.00) Public health authority (M = 3.00) Family member (M = 3.00)	
Thai	31 (7.65)	Family member M = 2.74	Doctor within community M = 2.58	Public health authority M = 2.54
Vietnamese	28 (6.91)	Doctor within community M = 2.96	Doctor outside community M = 2.59	Public health authority M = 2.57
Other South Asian Bangladeshi (n = 2) Bhutanese (n = 9) Pakistani (n = 2)	13 (3.20)	Doctor within community M = 3.15	Family member M = 3.00	Social media M = 2.83
Other Southeast Asian Chin (n = 2) Indonesian (n = 3) Laotian (n = 8) Malaysian (n = 3) Singaporean (n = 1)	17 (4.19)	Family member M = 2.64	Doctor within community M = 2.47	Friend M = 2.35



		Rank of Public Health Information Sources		
Ethnicity	n (%)	1	2	3
Burmese	29 (7.16)	Family member M = 3.48	Doctor within community M = 3.00	Community religious leader M = 2.75
Cambodian	26 (6.41)	Doctor within community M = 2.73	Friend M = 2.50	Family member M = 2.26
Chinese (except Taiwanese)	31 (7.65)	Family member M = 2.80	Doctor within community M = 2.70	Public health authority M = 2.61
Filipino	31 (7.65)	Doctor within community M = 2.74	Family member M = 2.71	Public health authority M = 2.45
Hmong	10 (2.46)	Family member M = 2.60	Doctor within community M = 2.40	Friend M = 2.30
Indian (n = 21) Sikh (n = 8)	29 (7.16)	Doctor within community M = 2.68	Doctor outside community M = 2.48	Public health authority M = 2.44
Japanese	55 (13.58)	Doctor within community M = 3.01	Public health authority M = 2.94	Doctor outside community M = 2.61
Karen (n = 3) Karenni (n = 4) Pa'O (n = 1) Pwo Karen (n = 3)	11 (2.71)	Family member M = 3.27	Public health authority M = 2.90	Community-based org M = 2.72
Korean	27 (6.66)	Family member M = 2.74	Friend M = 2.70	Doctor within community M = 2.66
Mon	31 (7.65)	Community religious leader M = 3.06	Family member M = 2.93	Doctor within community M = 2.83
Nepali	26 (6.41)	Family member M = 3.26	Doctor within community M = 2.96	Friend M = 2.88
Taiwanese (n = 8) Chinese-Taiwanese (n = 2)	10 (2.46)	Doctor within community M = 3.20	Doctor outside community (M = 3.00) Public health authority (M = 3.00) Family member (M = 3.00)	
Thai	31 (7.65)	Family member M = 2.74	Doctor within community M = 2.58	Public health authority M = 2.54
Vietnamese	28 (6.91)	Doctor within community M = 2.96	Doctor outside community M = 2.59	Public health authority M = 2.57
Other South Asian Bangladeshi (n = 2) Bhutanese (n = 9) Pakistani (n = 2)	13 (3.20)	Doctor within community M = 3.15	Family member M = 3.00	Social media M = 2.83
Other Southeast Asian Chin (n = 2) Indonesian (n = 3) Laotian (n = 8) Malaysian (n = 3) Singaporean (n = 1)	17 (4.19)	Family member M = 2.64	Doctor within community M = 2.47	Friend M = 2.35



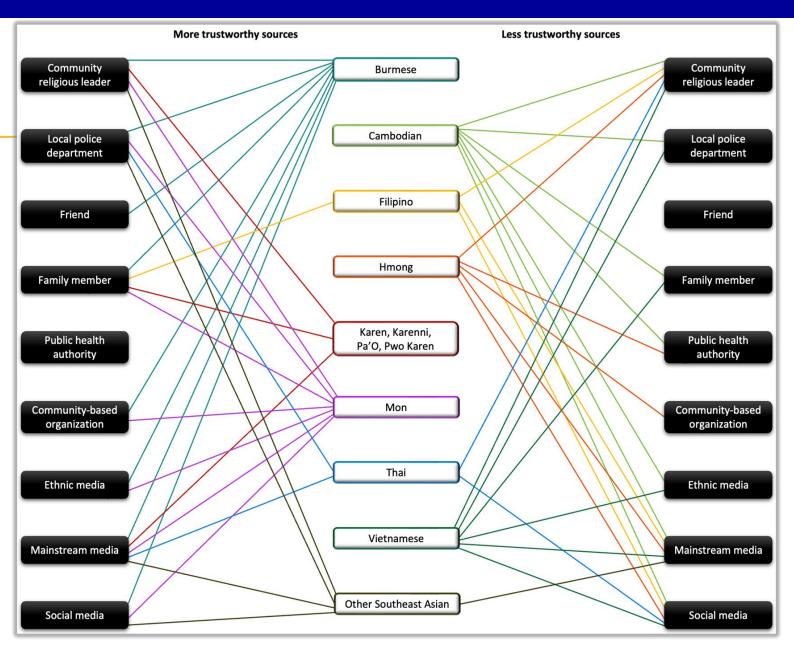




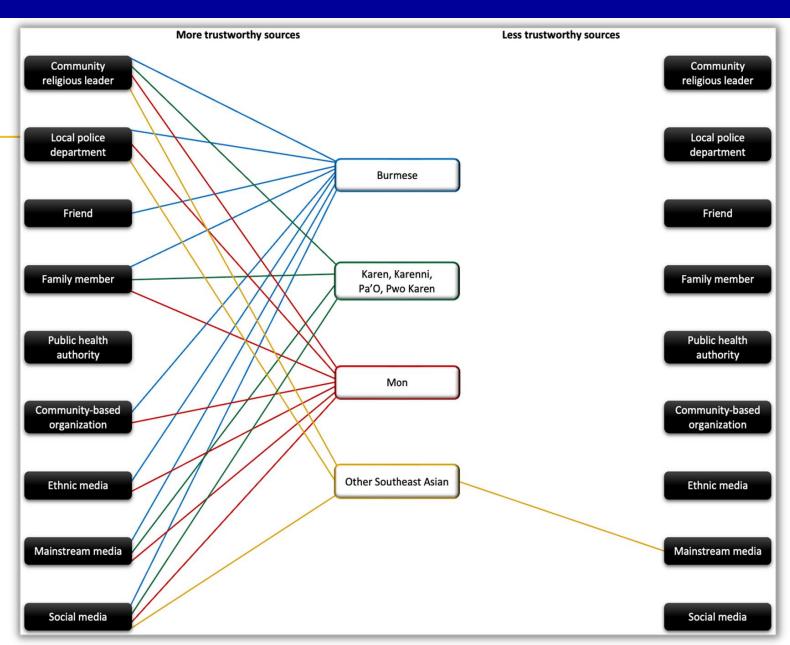
Trustworthiness of Public Health Information Sources

Further analyses looked at significant differences across ethnic subgroup

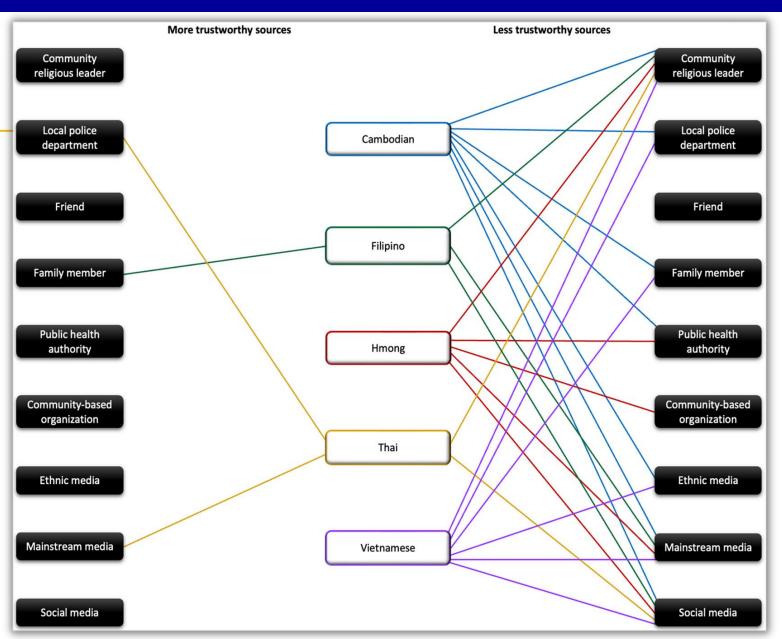






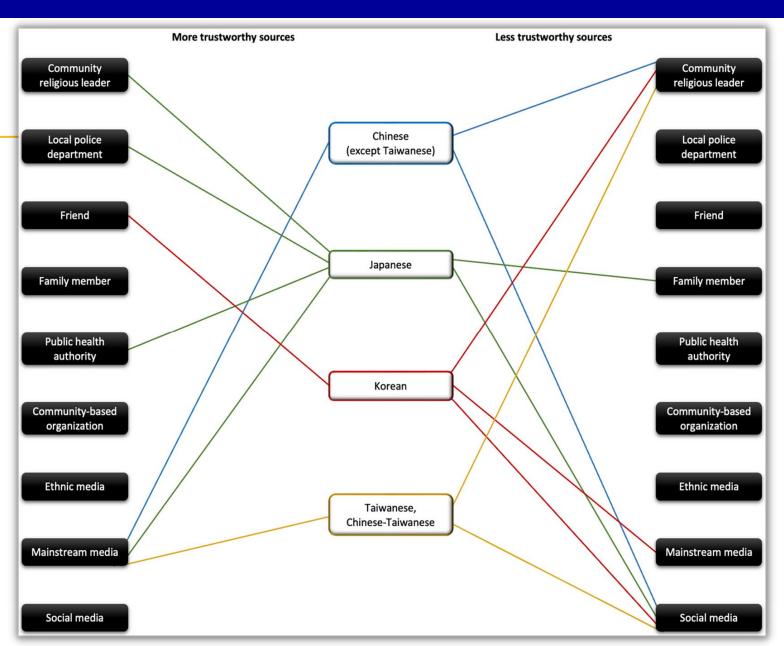






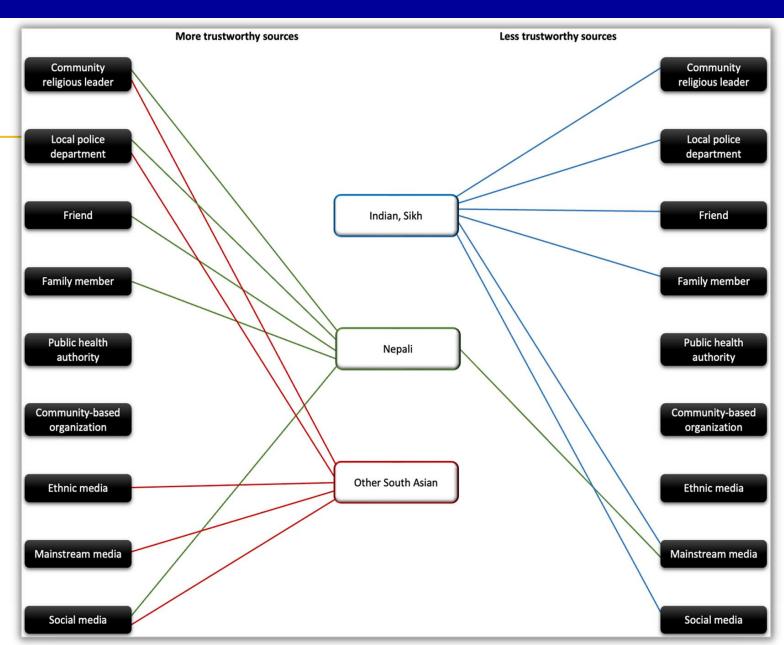
Trustworthiness of Public Health Information Sources, Across Longer Established Southeast Asian Subgroups





Trustworthiness of Public Health Information Sources, Across East Asian Subgroups







Community Focus Groups

Regional focus group -- cross-cutting themes



Community Focus Groups

Regional focus group -- cross-cutting themes

- Assertion of agency
- Lack of transparency
- Political influence
- Competence and capacity
- Sociocultural and historical context
- Cultural salience and access
- Inauthentic community partnership



Community Focus Groups

"For me, the trust comes only when you know there's an evidence-based thing around it. Because if you Google, you can get a lot of information, but you don't always get the information that you need, like what will do what and how it will prevent things. If I could do my own research first, I would definitely have more trust in it than just simply being told, 'Go get vaccinated'."

- South Asian Focus Group Participant on importance of agency in decision-making

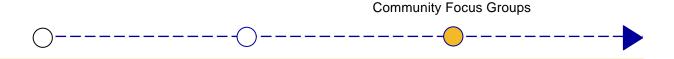


Community Focus Groups

"It really does play into wanting to fit this model minority myth because it's wanting to fit in, in America, and not draw attention to you after the [Japanese incarceration] camps. Needing to find safety and community after the camps and doing everything you're told, it's just a huge trauma response that has been passed down to younger generations around what is right or wrong to do in terms of following the rules... I think there's just more fear still within that generation, about speaking out and drawing attention to us in negative ways. In terms of how people responded [to the COVID mask guidance], I think people were very much, 'we're gonna follow the rules, we're gonna mask'."

- East Asian Focus Group Participant on impact of sociocultural and historical context





East Asian group-specific themes

- Core themes from this group included wanting to look for information themselves and decide which sources are trustworthy through online research.
- Participants acknowledged the inconsistent or limited information from public health authorities during the height of the COVID-19 pandemic but were notably more compassionate towards public health authorities compared to other regional groups.



Community Focus Groups

"I know that there's information out there that I don't have, that the public health officials do have. As an individual, I don't think I'm getting the fullest answer that I could get, but I understand that from a public health perspective, you can't be sharing everything with the public. So, yeah, it makes them a little less trustworthy because I would like all the information and I know they're not sharing that, but at the end of the day I still trust what they choose to share because I understand why they did it."

- East Asian Focus Group Participant





South Asian group-specific themes

- Core themes from this subgroup included trusting other South Asian doctors for health information, and differences in how younger and older generations seek public health information.
- Doctors as trustworthy and default sources of public health information was a
 prominent theme, but only because many of them were also family members or trusted
 family friends who were already part of the community.



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Community Focus Groups

I've seen it based on generation. For younger folks, they often find our local health doctor and some different types of media more trustworthy—social media had an impact during COVID-19 as well as what was going on the TV news. Whereas for the older generation, it was based on their friends and what they were saying, what their WhatsApp groups said, what the local religious leaders were saying, and what the leadership at the temples or the cultural centers are saying. They're more focused on friends, their circle, and through word of mouth.

- South Asian Focus Group Participant





Southeast Asian group-specific themes

• Core themes that emerged from the Southeast Asian subgroup included generational differences about ethnic media reliance for health information and feeling personal responsibility as an English-speaker to source, verify, and pass on accurate public health information to their family members who may face language barriers.



Community Focus Groups

I felt like I had to read and screen and translate [the public health information], to show my parents studies and try to help change the narrative they're listening to. I'm telling them to just stop watching that, but they don't listen to me. They listen to a lot of different Asian or Vietnamese news stations on TV and YouTubers instead, or even our community pastor who doesn't give accurate information. There's a lot of misinformation, depending on how it's curated to specific audiences.

- Southeast Asian Focus Group Participant



Key Takeaways

- Findings reaffirm the importance of data disaggregation to more accurately capture differing needs among ethnic subgroups
- Trusted messengers and trustworthy sources of public health information differ across ethnic communities – there is no one-size fits all
- Trust in and the trustworthiness of public health intertwined with sociocultural and historical context
- Public health messaging is seen as authoritative and not culturally salient



Strengths and Challenges

Strengths

- Significance of research
- Mixed methods design
- Community-engaged approach, positionality
- Survey languages
- Space for community counter stories

Challenges

- Resources and capacity need for NH & PI data
- Focus group languages
- Generalizability



Discussion

Findings suggest the following to increase trustworthiness of public health:

- Develop authentic, consistent, and reciprocal relationships with communities
- Increase language access in health care and public health communication, and focus on cultural salience
- Be transparent with what's known, what isn't, and avoid politicization
- Prioritize agency in health decision-making



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Thank you!