

An Intervention to Vaccinate Hard to Reach Populations Against COVID-19

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This report describes an innovative COVID-19 vaccine outreach program for hard-to-reach populations, conducted in collaboration between USF Anthropology, USF Health, and a variety of community partners in the Tampa Bay Area.

Abstract

This report describes an innovative health intervention which demonstrates that the structural health inequalities exacerbated by the COVID-19 pandemic can be confronted through outreach programs based on an understanding of the cultural/structural issues relevant for refugee/immigrant/farmworker populations. But our perspective recognizes that such interventions must be finely tuned to not reproduce inequalities between/within communities that are vulnerable due to different intersectional issues such as language, education, immigration status, familial and community resources, and knowledge and trust in the medical system.

The intervention discussed here built on trusted relationships to effectively create a COVID-19 vaccination program that met the needs of participants from over 15 different cultural backgrounds. We believe the strengths and success of this innovative intervention in vaccinating/boosting nearly 200 individuals from refugee/immigrant/farmworker populations are due to a design based in applied medical anthropology. It incorporated interpersonal trust and local level community involvement to reassure participants. We suggest specific approaches, as well as a theoretical framework, for use in projects of this type.

Keywords (COVID-19 vaccinations, refugees, farmworkers, applied medical anthropology)

Introduction

This report describes an innovative health intervention which demonstrates that the structural health inequalities exacerbated by the COVID-19 pandemic can be confronted through outreach programs based on an understanding of the cultural/structural issues relevant for refugee/immigrant/farmworker populations. While minority populations were hard hit by the COVID-19 pandemic¹⁻², as COVID-19 vaccines became available, disparities in vaccine access and uptake also developed between mainstream American and the refugee/immigrant/farmworker populations with which many of the authors have been involved³. In April 2021, local refugee service providers were concerned that refugees were not getting vaccinated, and proposals were made for social media outreach and needs assessments. The authors advocated for a more direct approach.

Anthropology faculty worked with university medical providers to volunteer their time to provide Covid immunizations for refugees/immigrants/farmworkers in three settings: home visits, at community centers, and community events. Our goal was to provide vaccines to these populations, determine why they wanted vaccines, and why they took part in this intervention. Immunizations were given as part of the university medical center's community outreach; thus, no IRB was required for that part of the project. As an evaluation, IRB approval was not determined to be required for the brief interview conducted with participants following their second immunization.

The Program

The urban area of west central Florida in which we worked has large numbers of immigrants, asylees, and refugees, from a variety of ethnic backgrounds, including Cuban,

Haitian, Venezuelan, Congolese/Rwandan, and Syrian. The southern and eastern rural parts of the area produce tomatoes, citrus, and strawberries, and employ migrant workers of Mexican Indigenous/Central American backgrounds. Challenges for these populations include lack of English ability, which hinders access to good paying jobs, trapping many in poverty level living conditions. And both lack of English and poverty create structural issues which include lack of access to healthcare. For 2021, the highest total vaccination rates for the main country in which we worked were 59%.⁴

We used approaches from anthropology to design and expand this program. The Anthropology faculty began with their extensive contacts among local refugee service providers and farmworker populations, as they had conducted studies of the needs of these populations.⁵⁻¹³ We focused on networking to community organizations and having them conduct the actual outreach to the people they served. As such, all contacts with community members were made by people they already knew—friends, refugee case workers, religious figures, ESL or migrant education workers, and/or social media/personal outreach from an organization of which they were members. On the day of the event, the trusted community contacts attended to welcome those who came to be vaccinated. Multiple team members spoke either Swahili, French, Spanish, and Arabic, and had a background in community health outreach. Initially, one anthropologist, one community organizer, and one physician provided the services. The university-based volunteers expanded quickly, eventually including eight physicians, medical students, nurses, and other graduate and undergraduate students. To date the project has included seven community organizations: Casa Venezuela, Casa Cuba, Radiant Hands, Gulf Coast Family Services, Pinellas County Schools ESOL, and Hillsborough County Public Schools Migrant

Education Program, and has used their events/community centers for vaccination events. Home visits to those lacking transportation have also been conducted. As of January 2022, the intervention had vaccinated 114 refugees/immigrants/farmworkers (2 immunizations each for both adults and children) and provided 63 boosters, in three types of settings: homes, community centers, and community events.

Home Visits: American Relief for World Refugees and Migrants (AR4WRM), a local community based non-profit organization run by an African asylee, provided contact with the local Congolese refugees they serve, and home visits were made to those refugees' households, as well as to one of a Haitian family, another of Eritrean refugees (who were initially contacted about the opportunity by their caseworker), and one to a Syrian family. These home visits led to immunization of 21 individuals.

At Community Centers: Outreach to Spanish speaking refugees and immigrants resulted from collaborations with local organizations serving those populations, Casa Venezuela (Venezuelan House) and Casa Cuba (Cuban House). We were invited to use the backyard of the Casa Cuba community center for several vaccination events which ultimately included Latin Americans, South Asians, Sudanese, and Egyptians (the priest of the local Coptic Church announced the event in church). At events held at Casa Cuba, we immunized 28 individuals.

Collaboration with Radiant Hands, the local community organization serving Syrian refugees/other Arabic speaking populations, resulted in an invitation to provide immunizations at their community office. Again, all recruitment and contact with those to be served came initially from people in the organization they knew, and in the languages

they spoke. The day of the event, we also provided private areas for women to expose their upper arms to receive their vaccinations. Those efforts reached 35 Syrians and one Congolese refugee.

We continued to make our program known through the larger community of refugee service providers, through the local Refugee Task Force. These efforts resulted in an invitation to conduct an event for ESL/Adult Education students. Students were notified of this opportunity by their teachers, and the program identified a local community location for the event. Immunizations were administered to 13 Latin American and Russian adult students, and two homeless individuals.

At Community Events: The final event of 2021 was for farmworkers. This connection was made by responding to a Refugee Task Force email about a county wide meeting for people providing services to Spanish speaking populations. The County Public Schools Migrant Education program invited the team to give immunizations at their Migrant Festival. This was also the first-time immunizations were provided for children—we immunized 11 children and 6 adults. Overall, vaccination events of 4-12/2021 reached 114 people, with only 4 individuals who did not return for the 2nd immunization, and 8 farmworkers still pending for 2nd immunizations.

As boosters became recommended, they were offered in these same three settings. We checked vaccination cards to be sure that each person was eligible for a booster. As of Dec. 2021, 63 boosters had been provided (15 to health care providers/ESOL/other teachers, and a homebound elder [100 years old]), 21 to immigrants [Latin Americans/Congolese/Rwandans], and 27 to farmworkers/migrant education staff).

Qualitative Evaluation of Participants' Opinions of the Intervention

Several short open-ended questions comprised the evaluation of the intervention, which was conducted after people received their second dose. These were in the form of very brief open-ended interviews conducted in the language preferred by the respondent (English, Spanish, Swahili, Arabic). Questions were developed by the team, with a focus on providing information we felt necessary to improve our program, while not asking delicate questions or identifying information, as we suspected some who attended our events were undocumented. Questions included basic demographic information (age, gender, country of birth), reasons for choosing this location to be vaccinated, and whether they would have gotten vaccinated if we were not doing the intervention. The instrument was translated and back translated into the four languages by members of the team and community members who were bilingual in English and each of these languages. Bilingual team members conducted the interviews and recorded the answers in English. Participants over 12 responded themselves (those 12-18 consented, and their parents did so as well); parents answered for those under 12. Of the 114 vaccinated, 60 evaluations were completed. Those who did not participate in the evaluation included 4 who did not return for their 2nd shot, 8 farmworkers still pending for 2nd shots, and 32 Syrians for whom another team administered their second shots. Demographic questions were classified by age, gender, and country of birth, while for the open-ended questions, themes in the responses served as the basis for classification (Table 2). These classifications were discussed and agreed upon by members of the team.

Table 1 is an overview of demographic information of those who participated in the evaluation. Fifteen national backgrounds were represented, with greater percentages from Venezuela, the US, Mexico, Rwanda, and Cuba. Mean age was 36 years.

Table One: The Evaluation Sample

Mean Age	Age Range	Gender	
36	8--85	Male - 26	Female - 34
Country of Origin		(N =60)	
Venezuela		10	17%
United States		9	15%
Mexico		9	15%
Rwanda		7	12%
Cuba		5	8%
Colombia		4	7%
Democratic Republic of Congo		3	5%
Central African Republic		3	5%
Egypt		2	3%
Russia		2	3%
Eritrea		2	3%
India		1	2%
Syria		1	2%
Haiti		1	2%
Sudan		1	2%
Language of Interview			
Spanish		31	52%
English		18	30%
Swahili		10	6%
Arabic		1	2%

Table Two: Why did you get a vaccine?

Code	Count	Percentage
Community organization/friend/church outreach or recommendation, in my community/comfortable place	47	46%
It's good to get vaccinated, to take care of self/protect others	25	25%
Easy – no appointment/no waiting/no need for transportation/no need for papers	22	22%
Family had serious case of COVID/Doctor recommendation	2	2%

Table 2 addresses why participants chose our program. The key reason was that it was trusted:

“My daughter saw a post in a group chat for Casa Venezuela...so I knew this was legit.” (F Venezuela 60)

“It was at Casa Cuba—we are Cuban.” (M Cuba 84)

“There was a post on a WhatsApp group message of Venezuelans and I thought it was a non-busy place to get it.” (F Venezuela 40)

“It was put on by my group—adult education.” (F US--African American 39)

“Here is where we get support--from the Migrant Education Program.” (F Mexican 36)

“I trusted this only because the church said so.” (M Egypt 45)

“I know the vaccine is at the supermarket, but I wanted to do it with other Congolese.” (F DRC 38)

Many were also generally in favor of getting vaccinated:

“We are in America now. Being in America, it is good to get the vaccines.” (F Rwanda 39)

“Better to be cautious than to be sorry.” (F Cuba 59)

“To protect myself and save the lives of other people.” (F Venezuela 53)

“So I can go back to school the gym, and other places without having to worry about getting infected.” (M India 15)

“You put things on a scale, on one side you have the long-term effect that could result if I have a reaction to the vaccine. But on the other hand, the virus is imminent and sudden and it could kill me right away.” (M Venezuela 57).

Ease was also of importance:

“It was the only place that didn’t require papers.” (M Venezuela 23)

“We don’t have a car.” (M Rwanda 42)

“You came to our house and gave us the vaccine. I love it. A friend we trust told us about it.” (M Central African Republic 29)

“I didn’t want to go out there and stand on line for a couple of hours to get vaccinated.” (M Central African Republic 19)

“There were no available appointments.” (F Mexican 36)

And in some cases, the decision was made by the parents:

“My mom said, go wash your hands and face and you will get your vaccine.” (F Rwanda 12)

Our last question was, if we weren’t doing this, would you have gotten vaccinated elsewhere. Thirty-two (53%) said yes, while 28 (47%) said no. Fifty-three percent (10) of those who said no were not sure where to go, and 16% (3) did not have a car.

Thirty-two per cent (6) had been unsure about being vaccinated:

“I wouldn’t have sought out a place. I was teetering.” (F US-African American 39)

“I talked to other people and they said, ‘not yet’.” (M Haiti 71)

Others who had been unsure were influenced by adults:

“My boyfriend’s mother forced me to do it. I also heard there have been a lot of trials without knowing long-term effects. It’s kind of like cigarettes; people didn’t know it would kill them 50 years down the road so we don’t know about the vaccine.” (F US—Cuban descent 19)

“My mom made me do it, so I would have had to find somewhere else. I personally would have never gotten because Trump said ‘no’.” (M US—Cuban descent 17)

Discussion

Some participants were drawn to our program because they were unsure where to go for a vaccination or lacked transportation, issues which must be addressed by any COVID-19 vaccination program. However, trust was the most important reason this intervention has

been successful. Our findings and successes corroborate those in the literature; a study of pandemic preparedness in 177 countries found that higher levels of government and interpersonal trust were associated with higher COVID-19 vaccine uptake¹⁴. Our team composition of anthropologists, medical providers and community organizers is supported by studies that stress that pandemic and public health interventions in general require scientific and social scientific approaches¹⁵⁻¹⁶. Other literature points out that the issues are not only medical, but also social¹⁷. “Humans are not as simple as viruses. They have personal histories, opinions, wants and needs”¹⁸. The intervention discussed here built on trusted relationships to effectively create a COVID-19 vaccination program that met the needs of participants from over 15 different cultural backgrounds.

However, this project has had a number of challenges, including several related to our use of the 2 dose Pfizer vaccine, which in 2021 expired 5-6 hours after it was mixed and had to be kept at a specific cool temperature. This limited the length of community events, especially when held outdoors in a warm climate. For community events that were not on a day on which there was a vaccine clinic at the university to which leftover doses could be returned and used, unused doses were wasted.

Follow-up for the second shot was also an issue in some settings. For home visits and community center events, the community organizers pre-registered people for the first shot, and then reached out to remind them to come for their second doses. We checked vaccination cards to be sure that everyone who presented for a second shot was eligible. However, at the migrant community event, registration for the first dose was not possible, and follow-up of those people for the second dose was harder. This was also related to the

mobility of this population. Due to timing issues, we have not yet followed up for boosters with those we gave first and second shots.

Another challenge may have been the political climate in Florida, as residents may have heard conflicting information about vaccine safety/efficacy. A final issue is that this project is completely unfunded--everyone on the team is a volunteer (faculty member/student/health care provider/community organizer). This means that during covid surges, and/or exam periods, etc., team members have less availability. Clearly, it is imperative to roll out funded programs based on this model.

Conclusions

We believe the strengths and success of this innovative intervention in vaccinating/boosting nearly 200 individuals from refugee/immigrant/farmworker populations are due to a design based in applied medical anthropology. It incorporated interpersonal trust and local level community involvement to reassure participants. We specifically recommend that interventions of this type:

1. Set up a collaboration between community organizers, health care providers, and anthropological experts on the cultural backgrounds of the refugee/immigrant/farmworker populations involved.
2. Reach out to communities using community contacts individuals already trust.
3. Provide vaccine through community organizations at their community centers/events and/or at individual's homes.
4. Use appropriate interpreters, and trusted/convenient locations.

Our success shows that while structural health inequalities are very real, innovative and appropriate outreach interventions can be designed to effectively address these issues.

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