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Difficulties of Trust: Embedded Community Health Workers and COVID-19 Vaccination

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ABSTRACT

The authors recount the ways in which a COVID-19 vaccination campaign that explicitly embraced strengths-based community engagement moved further away from implicitly deficit-based data and assessment strategies. The conceptual framework was developed over several years in explicit confrontation with difficulties in implementation of various earlier projects, and the vaccination campaign was an important but not final step. The paper explains the driving philosophical commitments of the project and its expanding commitment to a vision of embedded community health workers (CHWs) as the mechanism for creating visibility into the dynamics of communities as they develop in terms of their own strengths and confront barriers to better health outcomes. This paper is written from the perspective of the management team and describes how the CHWs were supported and how they facilitated engagement with community members as a precursor to the vaccination decision. Some examples of CHW interactions within their communities are provided, as still preliminary steps toward a fully strengths-based approach to community data, but the authors recognize serious shortcomings in the highly individualized approach to data collection and interpretation, especially as researchers will require more sophisticated ways to model community dynamics at larger scales.

Introduction: Situation, Context, and Background.

Soon after the onset of the COVID-19 pandemic, it became common to speak of widespread misinformation creating confusion and mistrust in the public health response. Many healthcare professionals blamed social media and low health literacy among diverse populations. American public health institutions took limited steps in building trust back up and facilitating transparent communication with the public.[1,2] Seeing the need for better communication, several funders had been attracted to the idea that trust in local "public health messengers" would translate into higher vaccination rates, especially in medically underserved communities with a history of reasons to distrust the medical community.[3,4,5] The inequitable access to vaccine distribution explained the early differences without referencing distrust,[6] but our team was also convinced that trust would have to be an essential element of any equitable vaccination drive. The team embraced a structural approach to vaccination outreach, avoiding the individualistic biases of health information campaigns that correctly identify the need for cultural competence and humility but incorrectly believe that individual rectitude solves structural problems.[7] The intuition was that there is a further data problem, because focus on individual interactions and potential interventions that target a "single thread in the web of causation" obscures the problem of how context determines the possibilities communities face in the search for better health outcomes.[8]

The current writing is explicitly from the standpoint of management, which underscores the difficulty of capturing the nuance of the community health workers' (CHWs') work without asking the CHWs to adopt that standpoint. The CHWs were asked to think of their work as developing organically and to record and reflect on each activity and interaction but discouraged from adopting any particular schema for classification. The current writing is a report on that process as it emerged and not a search for a correct description of potential best practices.

The challenge of public messaging campaigns is similar and instructive. Because we focus on the success or failure of the message, expressed in terms of the understanding and response from a given audience, we frame the exchange as a deficit to be addressed through the dispensation of expertise. The implicit power of the speaker is sometimes hidden behind a warm and welcoming face, and mitigated by the absence of any compulsive force, but it still embodies a relative privilege emanating from the owner of the information and the expertise. Contesting this implicit deficit framing cannot be accomplished by opposition, nor by staking a competing claim to expertise or privilege. Rather, embedding the message within a context where the response from the audience matters, and is owned by the recipient as their context and their response, constitutes the essence of a strengths-based framing of the messaging.

By understanding the reception of a message as a moment of strength through effective contextualization, where the barriers to receiving and acting upon a message are actively understood from the recipients' engaged decision-making through setting priorities and navigating pathways, one can frame the success or failure of the message in terms of the community strengths. The CHW team was tasked with care coordination, which stems from the same strengths-based framing in terms of capacity and context and means helping community members find effective (context aware) pathways for better outcomes across the range of social determinants. The strength required to convert a message into an individual pathway is not abstract; it can be supported by CHWs who are acting with an appropriate strengths-based and structural approach without becoming deficit-based.[9] However, that strength is undermined by messaging and interventions that assume everyone has the same strengths and opportunities, or that strength is exercised through an isolated decision about believing a message or not, being convinced or not.[10] The contextualization in terms of paths grounds the strengths-based approach in real situations with specific goals, barriers, and navigation strategies, which makes the larger turn to asset-based framing of community engagement possible.[11] The current paper highlights the difficulties, from the perspective of management, of making that difference visible, meaningful, and appropriately valued.

In partnership with a local nonprofit in May 2021, we received funding from a national philanthropic fund to increase COVID-19 education and vaccine uptake in several diverse underserved communities through the Houston area. Our project was from May 2021-August 2022, during which time CHWs conducted outreach, education, and story collection in their communities. As the pandemic response unfolded, we saw that CHWs could be effective in overcoming the barriers to vaccination by contextualizing vaccination decisions within the broader context of individual and family health decisions and facilitating access to the vaccines as part of a grounded process of care coordination. Trust was still the issue, but it wasn't simply about effective messaging. The structures that made action possible and likely, beyond but including those that helped ensure the conveyance of information, were concretely manifest in the constraints on decisions people felt during vaccine decisions. The structural understanding of constrained pathways provided a better target for intervention by embracing a strengths-based approach to data, including the assessment of public health outreach and education activities.

Trust depends on CHWs having appropriately empowered and embedded in meaningful relationships with communities beyond a single issue or educational campaign.[12,13] Data was collected through extensive feedback sessions with the CHWs, augmented by the systematic collection of CHW stories about experiences with community members who were deciding about vaccination. The data includes stories collected by the CHWs from community members, the insights of CHWs shared during feedback meetings with managers, and the number of vaccinations CHWs had directly facilitated, whether it was through helping people schedule vaccine appointments or organizing events that delivered vaccinations.

The authors wish to acknowledge the contributions of many people to this work, but also to underscore the difficulty of producing a single narrative or interpretive schema. Other papers are planned, with multiple authors, that will capture various aspects of the efforts, without hiding the disagreements. For example, some of the partners were explicitly not convinced at the time that it was worth the extra time spent on care coordination, while others supported that work but opposed any attempt to systematically account for its value. Yet others, perhaps more importantly, saw the efforts as either insufficiently sharp in their opposition to the healthcare system or as too oppositional. In concert with our overall approach, we welcomed collaboration without insisting on agreement. This resonates with the strengths-based data approach because the focus on constraints allows project partners themselves to embrace multiple individual reasons for setting common goals. The framing in terms of paths allows the understanding of the data to emerge in terms of shared structural constraints and barriers instead of focusing on the characterization of individuals in terms of assessed strengths and weaknesses.

Concretely, the work involved open and continuing research into appropriate metrics for health and social services navigation and coordination, best management practices for an empowered CHW workforce, and most effective training and implementation tools for CHWs and affiliated health and social service workers and hosting organizations.

Systemic Inequality and Lack of Trust

In discussing mistrust in public health systems, we must also discuss the underlying systemic and racial inequalities that shape public health policies. African-American and Latinx populations continue to face lower quality of healthcare with minimal improvement in disparities. Lack of healthcare facilities in low-income communities that are predominantly minority continue to fuel these disparities.[14,15]

During the further course of the pandemic, the earlier blame cast on misinformation and lack of health literacy among minority communities soon dissipated in favor of a more structural understanding.[16] Much of the remaining difference in vaccinations, as of May 2021, was clearly due to residual difficulties with inequity in access and not hesitancy based in ignorance.[17] It also became clear that much of the inequity in access echoed other problems with health and services access in Black and Latinx communities, both in our locality and regionally.[18]

Deaths disproportionately affected populations of color throughout the United States; Texas saw disproportionally more deaths in Black and Hispanic populations.[19] Those communities saw fewer COVID-19 test sites, masks were not easily accessible, and vaccinations were not equitably distributed.[18]

COVID-19 brought the many inequities facing low-income communities to the surface largely due to those inequities becoming worse through unemployment and worsening food/housing insecurity. Recognized for their role in addressing social determinants of health, community health workers (CHW) were poised to step in to support individuals living through social, economic, and medical inequities and individuals navigating the health and social service systems.[13] The assumption was that a strengths-based messaging that emphasized cooperation, dialogue, and responsive care for the whole individual would make possible the desired increase in the number of vaccinations without provoking backlash and long-term mistrust. The challenge was overcoming the mismatch between a public health description of health inequities shared among experts and the effective response to individual lack of access addressed through pragmatic navigation and diligence in the face of various local barriers. Beginning from the navigation is the key to strengths-based data.

The Activities

In partnership with a local nonprofit in May, 2021, we received funding from a national philanthropic fund to increase COVID-19 education and vaccine uptake in underserved communities through the Houston area. From May, 2021 to June, 2022, an average of 15 community health workers were deployed through several communities in Houston and its surrounding areas. These communities included Pasadena/Galena Park, Alief/Gulfton, and Sunnyside, all of which had been adversely and disproportionately affected by the pandemic. The CHWs worked in areas they either came from or knew very well. Through that timeframe, CHWs helped facilitate 1,081 vaccines through organizing community events and implementing individual education, story collection, and care coordination.

Story collection was a mechanism for beginning conversations with community members in public spaces. These stories provided the CHWs with a way to ask what was important to the community members and to also describe in detail reasons behind their hesitancy. The team of CHWs was asked to approach clients holistically and not to focus the conversation on only COVID-19. CHWs asked questions to better understand what was important to the client, were responsive to the immediate needs of the client and followed up by sharing any local resources, including COVID-19 education/vaccine information. The CHWs decided not to focus only on COVID-19, as community members were concerned about multiple health/social issues and CHWs needed time to build trust with the community members.

The data collection was centered on the narratives CHWs elicited from community members about their situation, their goals, and the barriers they faced. Collecting the stories was meant to build trust, and as much as possible the CHWs avoided acting like case managers or researchers. The data analysis happened after the meetings, as CHWs recorded the story in a format that highlighted the sense of goals and barriers and then tracked the progress as CHWs sought to aid in the search for economic stability, childcare, and education, as well as meeting more immediate needs around food and housing. After initial meetings, CHWs would follow up as needed, usually multiple times, and always eliciting more detail about the narratives. These stories were then analyzed by a different team through a grounded theory approach using qualitative coding to identify perceptions

around vaccine hesitancy, reasons for obtaining vaccinations, and how each were embedded in the broader values and priorities of the community. Data were analyzed under oversight of the university's Institutional Review Board, and analyses were shared and refined with the local nonprofit and the CHWs.

This data analysis and sharing practice was incorporated in feedback loops that were held on a weekly and later biweekly basis with the CHWs. These feedback loops allowed CHWs to share challenges and successes and incorporate peer support mechanisms at the CHWs level. They also allowed the management team to incorporate just-in-time training techniques to further build capacity for the CHWs. Through these just-in-time trainings, CHWs received further support on overcoming hesitancy while in the field through motivational interviewing techniques and strengths-based communication strategies. CHWs also received further trainings on accessing resources in the community such as rental assistance, food insecurity, employment assistance, diaper assistance, and medical assistance. The trainings became part of the data generating practice and the setting encouraged all team members to be honest about challenges as well as successes.

CHWs are often deployed to address social determinants of health in the community,[13,19] and the CHWs felt it was imperative that they be able to respond effectively to both immediate needs and long-term goals shaped by those determinants. Focusing only on COVID-19 education and vaccine information felt like a betrayal of the community priorities. The CHWs believed that although COVID-19 was an important health issue and agreed about the need for vaccination, they saw themselves as having a mission to be responsive to the priorities and needs of the community. This can at times be contrary to the priorities of grant funders that expect discrete outcomes within the timelines of the funding cycle.[21]

As the CHWs built trust and relationships in their communities, they were able to establish vaccine distribution events in locations that are easily accessible to their communities, including churches and schools. A partnering local nonprofit that employed CHWs also had a monthly household supply distribution event that welcomed more than 1,000 families. These events included COVID-19 vaccinations through a partnership with a local non-franchise pharmacy. Leading up to these monthly distribution events, the CHWs would raise awareness and at the event they would talk to people waiting in line about COVID-19 prevention, collect stories regarding hesitancies or reasons to get vaccinated, and let people know that there were vaccines being distributed at the event. In two instances during the project, local government provided financial incentives for vaccination. We were able to offer incentives at two events outside the usual household supplies distributions, in two different historically marginalized communities. Through this cumulative outreach effort, CHWs were able to facilitate 1,081 vaccines and generate 467 individual stories from their communities.

Results: Building Visibility from the Ground Up

Story collection, CHW COVID-19 education, and vaccine distribution took place between May 2021-June 2022. Through this time, CHWs were responsible for networking with community-based organizations, churches, and other community stakeholders. Management helped them think about goals and processes but did not assign tasks. The CHWs were given the decision-making freedom usually reserved for management and encouraged to think creatively about the situations. Their asset maps were regularly updated so they could be used for later projects that also focused on those communities and the maps constituted a core part of our data-generating practice.

For many of the individuals the CHWs worked with, COVID-19 was a pervasive concern but not a prioritized issue, as it always ranked behind immediate sustenance and continuing concerns about their financial and spiritual or mental health. A well-resourced individual arrays their options before them and makes rational decisions based on the best available information and an assessment of their long-term interests. As access to resources diminishes, including access to a sense of mental capacity to deal with problems, daily life becomes a process of navigating through constrained situations, where isolated decisions may no longer look rational to an outside observer. Working together to uncover pathways that enable that sense of personal capacity then allows the CHW to emphasize longer-term outcomes and to encourage higher prioritization for COVID-19 vaccination.

Community health workers were tasked with always sharing education regarding COVID-19 at every site they visited but always within the larger framing of helping people navigate their current challenges. The CHWs chose which sites to visit, including restaurants, shops, laundromats, churches, and schools. CHWs tracked the number of individuals they contacted, and they kept notes on the places visited and what occurred during that visit, including the number of individuals encountered. Each day that outreach was performed, CHWs also collected stories. These stories repeatedly showed why COVID-19 vaccinations were not a high priority for many individuals, even when they were open to being vaccinated.

To collect these stories, CHWs spent thousands of cumulative hours in the field to be visible and accessible for navigation services as well as health education. CHWs could facilitate access to vaccines as part of a larger process of care coordination and outreach, so that the decision about vaccination wasn't an isolated judgement but part of a series of actions that make sense as part of the whole of the individual's life. By the end of the project, each hub had visited at least 100 sites within their communities with one hub having visited close to 350 sites. The CHWs educated a total of 23,801 individuals throughout the project. A large portion of the individuals educated each month came from the household supply distribution lines from the local nonprofit. CHWs also leveraged their access to household supplies such as hand sanitizers to create focused COVID-19 education events.

The stories were difficult to categorize, including the basic question of whether they counted as a success or failure for the CHW trust-building model. For example, one CHW recounted her encounter with an individual who had just seen a flyer.

> Mr. __ was the first person to call me after my CHW partner and I posted the hub event flyers in his apartment complex. He said that he already has the vaccine, but that he is trying to get his relatives and neighbors to get vaccinated. He told me that some of the younger people tell him they don't want to get vaccinated because they don't want to turn into zombies! He told me that one of his neighbors who isn't vaccinated against COVID became very ill. Mr. __ called me because he is in need of rental assistance. The next day I called him and told him about Harris County Emergency Rental Assistance, and about [local non-profit]. I also told him to go ask his landlord in the leasing office to see if he can be enrolled into the rental assistance program. He told me that he remembered going to the office and being put on some list. He said he did get on the rental assistance list for his complex and that he will go ask the manager what happened. I told him about our event, but he had already seen our flyer. He said he will try to make it to the event for the household supplies, but that he is already vaccinated. He apologized to me and said he was sorry for bothering me. I told him it's no bother, and that if he ever needs any more resources to call me again. Before hanging up, Mr. ___ said he was interested in getting his [local healthcare assistance program card], and I gave him the contact for [local CBO]. He did mention that he wants to get the booster. I will give him a call back once I have that information for him.

The community member was specifically interested in resources related to rent and healthcare access. It was common for people who didn't want to be bothered to claim to have already been vaccinated, and we did not try to confirm his status. The CHW had COVID 19 information that the community member claimed to value for his family but was approached because of social resource needs. The interaction is important to understand because it precedes the dynamic of decision-making. The CHWs discussed these problems openly in response to having shared this story, and over time focused their activities on better ways of becoming visible to the communities as a holistic resource for navigation and coordination.

CHWs needed to be visible but not in a single leap. With this in mind, CHWs chose to spend significant time at local organization events to listen more closely to the community needs and better understand how to situate themselves to be seen as addressing those needs. The CHWs did not create the opportunity but helped shape the goals for a health fair that wasn't only about the vaccinations. For example,

> I had my first meeting as part of the Community Advisory Board for [local high school]. This allows me to have access to all of the schools that feed into [local high school] and to access the community needs through the eyes of the educators that serve. Mental health is a prominent issue across the school district as well as food insecurities, access to uniforms and transportation issues which leads to poor attendance. Covid cases in younger kids is also a major concern. The goal is to set up another health fair which would include tables for families to sign up for mental health assistance, immunizations, parenting classes and have [local farm] come and provide information as well as fresh produce to participants.

As they focused on the task of creating visibility, CHWs created their own community events which would include resources and vaccinations while also attending community events held by other organizations to meet community members or network with other organizations. By joining the local community advisory board for the high school, the CHW positioned herself to be responsive to needs that schools cannot support but often encounter. Embedded CHWs can be better situated to build community responsiveness through resource linkages. Events were held at apartment complexes and churches to be as close as possible to community members. Even late in the vaccination drive, when events would have only a handful of new shots administered, the CHW events could be successful because of their location and offerings.

> Our first event of the year at [local public housing complex] was a success, we had about 90-96 attendees to arrive throughout our event and 20 persons (adults and children) to be vaccinated with 5 receiving their first dose. Residents and community attendees had the opportunity to hear about upcoming events, gain information about care coordination, receive COVID-19 &/or the Flu vaccination, signup for free hotspots from [local government program], plus all the kids made healthy trail mix snacks while their parents collected information from vendors and every attendee receive[d] hot meals to take home.

Tying together vaccination access with local resources that helped individuals overcome other challenges, like the digital divide, provided a more strength-based support process from the CHWs. As the CHW pointed out here:

> We have found resources for rental assistance, gotten a client off the street and into an apartment with services, provided household supplies to several elderly clients that cannot attend the monthly distribution, helped clients replace ID, social security cards and both certificates, provide blankets to folks affected by the winter weather and continue to provide information on covid and directing families to clinics to get the vaccine.

COVID 19 revealed to the majority of the population the many already existing inequities in low-income communities. The CHWs functioned as advocates in their communities by being responsive to the disparities in

COVID-19 vaccine distribution, "the [local pharmacy] has a very limited supply of the covid vaccine. I watched them turn away 5 folks one Saturday who went to receive the vaccine. I inserted myself and helped those folks set up appointments at other pharmacies."

CHWs derived success in their outreach activities through being visible in their communities and coordinating care and health education within the context of the community they served. After each workday, CHWs logged stories and included the number of people that they educated. During the project, 23,801 individuals were educated regarding COVID 19 vaccines. This education was done through informal conversations at places like laundromats, community centers, churches, school activities, and health fairs. CHWs used this time to refer people to local places that offered vaccinations or help them schedule a vaccination. In total, CHWs were able to help schedule 273 vaccinations for community members, which is a little better than 1 in 10 contacts.

Some of the CHWs took it on themselves to innovate, as one explained:

> My daughter received the first dose of the Covid vaccine. So we put a short video of her explaining why she got the vaccine and how she felt afterward. From that post, we had four families ask where she got the vaccine. All four families have now gotten their kids vaccinated. It's not groundbreaking but it makes me very proud of her and that's four families that were on the fence that are now vaccinated.

CHWs are visible to their communities and can be productive health educators. However, CHWs should not stop at education. The education needs to be tied into the context of the individual and be responsive to the needs of the individual. As one of the CHWs explained:

> I've worked with this client for three months. He was a solid no for the covid vaccine due to misinformation from family members and friends and mistrust of the government. We have continued to work together on other issues relating to his health, lack of insurance and lack of income. He has made tremendous strides in these areas. He said that because I did not try to force him to get the vaccine but instead provided him with the answers to any of his questions and because I had guided him through the other things his is working on, he received the vaccine at the Sunnyside event. He said it's better to be safe than sorry when it comes to Covid.

What success CHWs gained was because they were willing and able to be responsive to needs related to nonmedical drivers of health. The ability to be responsive hinged on the CHW also feeling like they had built enough trust with community members, as another story excerpt shows:

> I asked [community member] if she was vaccinated against COVID 19. She told me that she is not vaccinated yet and asked me if pregnant ladies could get vaccinated. I told her yes, they can. I explained to her about the antibodies that the mother passes on to her unborn child, and how being vaccinated is the best way to protect both the baby and the mother. I also told her that pregnant women who aren't vaccinated are at a greater risk of getting very ill and being hospitalized compared to vaccinated pregnant women. I know that today was the first time [community member] and I spoke, and I still haven't gained her trust, I'm practically a stranger to her (even though she got my contact from [other community member]). I will keep talking to [community member] about getting the vaccine.

Their visibility also came from creating events that were accessible to community members that often had difficulty accessing the traditional healthcare system. One CHW recounted her experience with a man who had physical access difficulties:

> This gentleman is wheelchair bound and had taken the bus twice Saturday to [a chain pharmacy] to receive the Covid booster. The first time he went, he had not made an appointment and was turned away. He then booked the appointment and went back to [the chain pharmacy] where he was denied the vaccine again as he did not have his Covid vaccine card with him. He was on his way home, angry, but saw the happenings at the church for the event. He stopped by. We talked and I explained what was going on and mentioned we also had vaccines and booster available. He promptly went in and received his booster.

The CHW was able to coordinate a vaccination event at a local church which proved vital to overcoming challenges posed by formal resources, like the pharmacy not vaccinating the gentleman in a wheelchair who wanted the booster but due to bureaucratic reasons was turned away from his pharmacy. This church where the vaccination distribution occurred was also by a bus stop which was key to providing access to community members.

CHWs were consistently partnering with existing local organizations to do health fairs and distribute food and supplies to community members. One CHW compiled a list of vaccine sites to help a local clinic in its referrals, which she saw as a way to make the relationship deeper. CHWs were consistently on the lookout for new organizations within their communities so they also had a place to refer community members to, especially for urgent needs like food. CHWs armed themselves with resource information so they could be seen as effective partners in addressing the needs:

> I spoke to [local community member] for a long time. It turns out she is a CHW as well… She was so informative and she explained what the [local CBO] does. They provide many services such as food distribution, they have health fairs, they have school supply drives, and they provide health and education classes for the community. They help people fill out forms in person in the office for people to apply for resources. They also provide Covid vaccines for a few hours a day, to the first 50 people (on certain days) …. I had never heard of this place, and it sounds like such a good place to

> volunteer, and now I have a great place to refer people for resources.

The CHWs pushed to improve contacts with the CBO and provided bilateral resource referral at the frontline, without going through an official contract at the top levels of either organization.

> The ladies [at a local clinic] were very happy to have met us, and they now felt good about having new resources to provide the ladies who come to their clinic. We also left some flyers in their office with our contact information for the clients there who are in need of additional resources. This was a very great contact/resource, and the very next day I informed about 10 of my clients about this place.

From the standpoint of the funders, the quantity and quality of the vaccine events were primary results and a large part of the perceived success of the project was due to the innovative processes implemented by the CHWs. Management was told that the reports were often highlighted for the non-profit funders' national board because of its perceived success in achieving both the results in vaccinations and equity. For their part, the CHWs moved deliberately toward an approach based on visibility and accessibility: being embedded in the community and meeting people where they are. They saw that the trust they had by virtue of their identity as community members would be quickly undercut if they were seen as fronting for the system. CHWs were trained to be process-oriented rather than only outcome-oriented, so they had time to build trust with community members. This orientation toward process can run contrary to the expectations of grant funders who want to see as many outcomes as possible produced within a short period of time. CHWs functioned as embedded advocates and health educators with independence and flexibility in choosing the focus and style of their work. This freedom in implementation can also run contrary to how frontline health professionals are typically treated, since the expectation is that hourly workers clock in at the office and the manager ensures that discrete tasks were performed when expected. During this project, CHWs clocked in electronically from their community and only came to the office during the weekly feedback loop meetings. The expectation was that they spent their time working in the community building and creating linkages through outreach and resource/care coordination.

Prior to each event, CHWs recruited for two weeks to build awareness for the event. CHWs canvassed apartment complexes, local neighborhoods, and community centers. Each event provided participants with household supplies. Individuals received household supplies regardless of vaccination status or willingness to vaccinate. At each event, CHWs provided COVID-19 related education in addition to sharing information regarding local resources and their care coordination services. At the suggestion of the CHWs, the events that were directly located in the CHWs' community had food and music. The events that also had financial incentives available were the events that had the most vaccinations. Stories collected at these events showed that several individuals chose to be vaccinated primarily because of the $100 incentive offered through a partnership with the local government.

Discussion

The authors understand that some readers will find this presentation frustrating. Academics are taught to think of the appropriate process for reporting the results in terms of summation across categories for the affected populations and efficacy measures for interventions. An argument against that structure of presentation touches on the difficulty of measuring trust. The process of creating trust is grounded in a dialogue that emerges as a new congruence between perspectives. One should not insist on the translation of every utterance into an expert perspective, but equally it's not simply a matter of more accurately capturing the community perspective. What one can do, however, is frame the importance of the dialogue as the place where trust emerges and point to the ways in which the activities in the community supported that framing against the constant demands of interpretability. People who work together in diverse settings – across different cultures, languages, access to resources, and expectations of being heard and seen – know that part of the process is allowing things to stay unresolved. A statement that expresses doubt or other sorts of hesitancy is a response to a context and focusing on the response obscures the work on changing the context. The authors attempted to both explain the importance of that difficulty and to demonstrate the work being done in terms of stories collected and the developing response across the team. That the authors speak from an explicitly managerial perspective is not to debase the other perspectives but to insist on the weaknesses of that position and to show how community change

Conclusions

The team built visibility and trust through their activities in the community. Their situatedness had to have a purpose that was larger than just the vaccines for people to be willing to transfer their trust in the CHW to trust in the vaccine. That transfer of trust wasn't always successful, but the CHW stories point to the ways that people on the fence about the vaccine could be convinced.

Other programs in the same city used local CHWs but spent much less time with each community member and little or no time with encompassing trust-building activities. This was by design and optimized vaccinations based on how well each CHW could leverage existing levels of trust because of the outward signs of a shared identity. Some people who could have been convinced if more time had been spent with them were likely never vaccinated, but there is no way to quantify how many.

It may well be that the most cost-efficient way to increase vaccines would have been to provide more sites earlier and to be more consistent in the external messaging. The stories from the CHWs who were taking the process of building trust as the starting point, however, demonstrates that many of the access questions, as well as the distrust in the vaccine, could be resolved by embedded CHWs tasked with creating better conditions for people to get vaccinated and feel comfortable about that decision.

Limitations

Many of the limitations of this work would be eliminated if implemented at a larger scale and over a longer time period. The underlying assumption of the work with CHWs is that greater trust in the healthcare and public services sector would lead to better health outcomes, including more efficient use of resources. The work at scale would require mechanisms for valuing and supporting the dialogues without resolution into a single perspective. The team is exploring ways that large language models represent dialogue and multiple perspective, with the hope that some pathways to larger scale studies can be implemented.

The most important limitation recognized by the authors is that the described project doesn't fulfil the expectations of research activity as the production of generalizable knowledge. As should be clear from above, the authors do not see this fact as a dead end but rather as an invitation to recontextualize the context of community engagement and the production of knowledge. If the framing of a dialogue is accomplished through setting priorities for shared activities, then the work of community engagement precedes and frames the production of generalizable knowledge. That knowledge can still be produced, but within a different framing of what matters. The authors recognize as a limitation of the current work that it cannot prove what that framing should be, although they can point to its saliency for building trust.

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