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A Community-Based, Grassroots Intervention for Covid-19 Vaccination in the Black Population

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Abstract

Background: The Coronavirus disease (COVID-19) pandemic remains an ongoing public health threat, with higher rates of COVID-19 morbidity and mortality seen in populations of color. While COVID-19 vaccines have shown efficacy in preventing severe symptoms with infection, there is still vaccine hesitancy in Black communities.

Methods: Following a needs assessment during the COVID-19 pandemic, a Black-owned community-based, non-profit organization engaged in community outreach to enhance vaccination in the Black community and other underserved populations. In a focus group discussion, the four personnel in the organization at the time, described their organizational efforts. Transcript from the audio-recorded focus group was analyzed for themes associated with strategies, success, challenges and lessons learned.

Results: Program activities utilized a one-on-one approach, prioritized relationship-building, and sought for collaboration. Outreach strategies included community education through various media, enhancing access to information and the vaccines, and establishing support through navigator/advocacy roles. Challenges encountered were associated with the rapidly evolving landscape of the pandemic, accessibility, and vaccine hesitancy and resistance. Personnel learned to focus more efforts on those hesitant versus resistant. These community-based efforts were successful in mobilizing members of the Black community as well as those from other marginalized groups for COVID vaccinations.

Conclusion: The pre-existing relationships, racial concordance and embeddedness of the outreach personnel in the community, along with partnerships with healthcare systems in the locality were key factors to the success of this grassroots outreach intervention to enhance COVID-19 vaccination in the Black and other underserved groups.

Keywords: Black/African-American; COVID-19 vaccination; Community-based intervention; Community outreach; Vaccine hesitancy

Introduction

Globally, the coronavirus disease (COVID-19) pandemic remains an ongoing public health threat. Older adults, and people with severe underlying medical conditions like diabetes, lung or heart disease are at higher risk for developing more serious complications from COVID-19 infection [1]. Populations of color, including Black/African Americans, have experienced higher rates of morbidity and mortality from COVID-19 compared to whites [2,3]. As at mid-2021, approximately 50,000 Black Americans, and 70,000 Hispanic Americans had died from the virus [3]. There are concerns that ethnic minorities and migrants in the United States may have inadequate access to COVID-19 vaccines [4]. COVID-19 mRNA vaccines are known to be highly effective in preventing deaths associated with COVID-19 [5]. So far, four COVID-19 vaccines have been approved by the United States Food and Drug Administration (FDA) including: Pfizer-BioNTech, Moderna, Novavax, and Johnson & Johnson's Janssen [6,7]. Staying up to date with vaccination has proved effective in minimizing the risk of severe illness, hospitalization, and death from the virus; with 'up to date' being defined as a person completing a COVID-19 vaccine primary series, and receiving the most recent booster dose recommended [6]. In spite of the availability of vaccines, some persons have taken a stance of either delaying (postponing), or refusing vaccination altogether [8]. The World Health Organization identified "the reluctance or refusal to vaccinate despite availability of vaccines" as one of the 10 threats to global health in 2019 [9]. From the instance that the vaccines were granted Emergency Use Authorization (EUA) on a fast-track approval, there were wide-spread concerns and hesitancy among the American public regarding COVID-19 vaccine uptake, but recent studies have shown that COVID-19 vaccine hesitancy is actually higher among Blacks or African Americans than other ethnic groups [10]; with a greater proportion being observed in younger Blacks Vaccine hesitancy is also reported to be greater among rural [11], compared with urban young adults [12]. Reasons proffered for vaccine hesitancy among Black ethnic minorities are complex and multi-faceted, but commonly reported reasons relate to concerns about the speed of development, and potential harm from vaccine ingredients. Other reasons have been documented, including: mistrust arising from government's involvement, safety concerns, concerns about side-effects, questions about effectiveness, and past experienc-

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es of discrimination [4,13-15]. A common factor for vaccine hesitancy has been identified as lack of adequate information, or spread of misinformation-for example, that the vaccine is dangerous, and is more harmful than getting COVID-19 [16]. One study investigated vaccine willingness, and using a Multidimensional Vaccine Hesitancy Scale (MVHS), documented further reasons for hesitancy as: Fear of physical pain, perceptions of having a healthy status, forgetfulness, and influence of religious beliefs [17]. In a bid to help convert vaccines into vaccinations, certain grass-root interventions have been made in African-American and Latino populations. One study, aimed at addressing vaccine hesitancy, and countering vaccine misinformation among young Black adults, incorporated storytelling with the aid of cartoons and instant messaging as a community-based digital health intervention [18]. Generally however, most community-based efforts have commonly utilized educational and communication interventions [19]. In this regard, some studies have identified key collaborators for inspiring COVID-19 vaccine confidence in African-American and Latino persons, and these persons or groups representing trusted voices within the community, have been helpful in increasing COVID-19 vaccine confidence. Such trusted voices have been reported to include: Local or community-based organizations, professional medical organizations (e.g. the Black Medical Association), government health systems, diplomatic offices (e.g. National Consulates); healthcare and academic systems like the Historically Black Colleges and Universities [20,21]. There have also been success reports involving the use of neighborhood, or sports events. Equally effective has been the recruitment of faith-based organizations, like churches and mosques [22]. In addition, barber shops and hair salons have also served as useful avenues for reaching the Black community [23]. The CDC has recently outlined strategies for community leaders to use as guidance for building COVID-19 vaccine demand in different settings, and includes tips for how to build trust, address misinformation, tailor messages and materials, including reaching people where they live, work, learn, pray, play, and gather [24]. Apart from strategies earlier mentioned, the CDC has recommended some additional ones, including: Training community members to be vaccine ambassadors, offering vaccination as a default option during patient visits, sending messages to remind patients of recommended or upcoming treatment, having face-to-face or phone interviews with patients, giving financial incentives, organizing school-located vaccination, home delivered vaccination, having personal physicians recommending vaccination, combating misinformation through social media, and instituting vaccination policies [25]. In spite of good incentives and policies however, and even with widespread vaccine availability, vaccine hesitancy may remain a major threat to the goal of nation-wide vaccination19 and vaccine willingness requires continual promotion at the community level. This report is a detailed description of grass-root efforts by a community-based organization to promote vaccination among a Black/African-American community and other underserved populations. It highlights key strategies for outreach, including efforts made towards addressing vaccine hesitancy, and actually getting people to the endpoint of COVID-19 vaccination.

Methods

The community-based organization

The efforts described emanated from an academic-community partnership to conduct a needs assessment of a Black/African American community [26]. Findings were used to inform programming by the community partner, a Community-based Organization (CBO) that develops and implements community-led programs that positively impact community health and well-being through community-based social impact strategies. At the time of the programming detailed in this report, the CBO had a director and three personnel who all participated in community outreach towards addressing COVID-related needs, and particularly vaccinations.

The personnel

The four personnel who coordinated the community outreach efforts were 3 females and one male, and included the founder/executive director of the organization, associate executive director and two community outreach consultants. All the personnel were Black/African American, and had at least a high school education, with two having post graduate degrees in physiotherapy and public health, respectively.

Data collection

The academic partner conducted a Focus Group Discussion (FGD) with the four CBO personnel. The FGD guide had questions focused on the strategies, successes, lessons learned, challenges and recommendations. The FGD which lasted for approximately 72 minutes was audio-recorded with consent from the participants, and transcribed verbatim. The academic partner conducted a thematic analysis to identify the themes associated with each area of focus as determined a priori. The findings were presented to the participants to confirm that the report as presented was an accurate representation of the discussion around the issues touched on during the FGD.

Findings

Programmatic approaches: The personnel in their discussion described the programmatic approaches they adopted in their community-engaged work. These approaches included

- one-on-one approach;
- placing premium on relationship;
- collaborative efforts.

Individualized approach: They outlined their key considerations in engaging with individual community members, whom they aptly described as "meeting people where they are." On first contact, getting to meet people where they are, as opposed to inviting them elsewhere, was an important strategy employed. Meeting people at home or engaging them in their own space (in their neighborhood) proved to be effective in fostering relationships with individuals in the community. "One of the most important things is, and has been, us to meet people where they are at,… allowing people to be wherever they're at and whatever that means for them, whether it be in their home or if you're meeting them and doing outreach out in the com-

munity. Meeting them in their spaces….." [Participant #1] The philosophy of meeting people where they are at was also applicable to people's position regarding the COVID vaccine. "..for the most part, I do not see hesitancy as a bad thing because if you just see why people may be hesitant, people want to make the right decision. If they aren't sure about something, I don't think we'd want people to be jumping into making decisions blindly that they aren't sure about". [Participant #4] They also emphasized the need to demonstrate genuine care by treating people with kindness, empathy, non-judgement: This involved deliberately adopting a manner of approach that broke down unspoken barriers, enabled connectivity, and birthed a perception of concern. "I put myself in their position. How would I like to be approached? Of course, the one thing I love is a smile and kindness because people can sense that. As most of us probably know, especially Black folks dealing with other folks, that your tone of voice, you can just really, you can hear a smile. You can even tell it now. That just being kind and sincere, I think that's what people sense…is sincere-ness, and that I really do care about your health". [Participant #3] In an attempt to further establish one-on-one connection with community members, they made use of text-messages, emails and phone-calls. Apart from being effective means of communication, these avenues were useful in engagement for vaccination. ". .'cause we've been using other strategies as far as text messages and emails and even, in some instances, phone calls." [Participant #1] "The initial call is approximately five minutes. My return call, okay, if I book them, that takes only maybe a couple a minutes. When I say book them, if I make an appointment with them to be vaccinated. Then I contact them that following Wednesday." [Participant #3] "We do follow-up calls 24 to 48 hours after they receive the vaccine, just to check in and see how they're doin'." [Participant #2]

Placing premium on relationship: Community outreach coordinators emphasized the vital role that relationship with community members played in their outreach efforts. This strategy was facilitated through: Prioritizing relationship-building, as well as leveraging long-standing relationships with community members. Relationship-building was considered a priority, deliberately effected, and thus aided in establishing some degree of trust towards the outreach coordinators. This ultimately led to an increased number of vaccinations. "Because when we make these personal contacts, we need to build trust and once that trust is built, then usually, those calls end up in vaccination appointments…" [Participant #2]Prior long-standing relationships with community members were leveraged and further optimized by taking advantage of racial concordance. Trust was further fostered by the experience of the personnel, most of whom had grown up in community. ". . .specifically our initial assessment was African heritage community members. That we're all from the same community. That's one really important factor. It breaks through that initial sort of barrier of building the relationship when people see that they look like them". [Participant #1] "Having what we've gone through as Black folks, it's extremely important to me that you have someone that you're familiar with". [Participant #3] "When I was younger, I was a lot more connected to my community…They knew who I was. They knew whose child I was. Those relationships were formed and solidified. Now, seeing them again, after all these years, we all go our separate ways. Coming back and seeing them, and reconnecting has been extremely rewarding and valuable too." [Participant #2]

Collaborative approach: There was such emphasis on the collaborative nature of the work. There were weekly team meetings; weekly meetings with stakeholder organizations; and partnerships with healthcare systems.

Weekly team meetings: Team members met weekly where they engaged in strategic planning, especially in the face of the rapidly evolving pandemic.". . .that's where these weekly meetings that we're having, where we're talking about it with each other and figuring out our plan. What have we done? How's it working? What can we change? What are we going to be doing differently next time?" [Participant #4] The meetings also served as educational sessions in preparation for outreach. They shared new information, and updated themselves on the latest products, guidelines and eligibility for vaccination to ensure that information given to community members was current. "The community coordinators spend a lot of time educating ourselves as part of our outreach strategy on making sure that we're up to date on what vaccines are available, the technology that's used, the rules regarding who's eligible to be vaccinated". [Participant #2]

Weekly meetings with stakeholder organizations: The outreach coordinators engaged organizations of interest, who were requested to come around weekly to give their support in various ways towards the outreach efforts.

"Now we're meeting weekly with the organizations. We just had a meeting added today, which has been needed with this organization to really do good work with our clinics". [Participant #1]

Partnerships with healthcare systems: They also reached out to, and engaged hospitals and agencies within the community, requesting for their partnership in expanding outreach efforts to more people in the community.

"<hospital>. <hospital> and, let's see, <hospital> have been coordinating with us and being helpful in our outreach in order to reach more of the BIPOC community". [Participant #2]

Vaccine mobilization outreach strategies

Community education: Community outreach coordinators emphasized the critical role of community education in vaccination efforts. They described the various strategies employed in educating community members about the COVID vaccines. These included one-on-one engagement through phone calls and in-person conversations; inviting community members to events specifically organized to provide relevant information; disseminating materials with printed information on the vaccines, preventive measures and other resources; and promotion of preventive measures and behaviors through a social media campaign.

- One-on-one conversations and follow-up. Personnel engaged community members through phone calls and emails, to have conversations about the vaccines and provide relevant information, respectively. "[lead] had the community consultants definitely follow up on anyone who was hesitant and invited them to our educational opportunities. Initially, it was mailing information or send-

ing, emailing information, and then when we began the office hours educational sessions, inviting those people to those." [Participant #2]

- Racially-concordant presenter-audience health education events. These educational opportunities were a series of virtual meetings called Office Hours with Black Health Professionals. These events were hosted periodically by Black healthcare professionals and scientists for community members. Each of these events featured a Black medical professional and/or scientist who addressed a COVID-related topic of community interest and responded to questions that attendees had. In addition, these sessions were recorded and available to community members unable to attend the live sessions. "I'd say a big part of the outreach and getting people to get their vaccines is the educational part of it. Some things that we've been doing are those office hour events, like number two said. Something I've been doing to help out with that is going down lists of phone numbers and emails that we have, and messaging people, letting them know that we're having those events that they can go to get information on COVID and the vaccine." [Participant #1]
- Information dissemination at vaccine "clinics." Educational materials on the vaccines were printed and added to bags given out at vaccination clinics hosted in community spaces and events. Information on preventive measures as well as resources available to address other needs (e.g. food) were included in the bags, which leveraged iconography (a logo designed by a community member) to reinforce messaging around prevention. Participants reported that materials provided enabled recipients to educate others or at least offer the same information. "Also, when we go to these vaccination events, we have bags with different materials in them. One of the things that we have in there are various forms of educational material they can read about COVID and protecting themselves and different resources they can go to if they have more questions or know other people that want to get vaccinated. From giving them that information, they can learn themselves but also teach other people along the way and give them that information of where to go." [Participant #1]
- Targeted public/media campaign. In response to recommendations from community members, a social media campaign primarily targeting youth and young adults was launched. This strategy involved harnessing the creative arts (music, dance, acting) to produce videos with relevant messaging about key preventive measures for COVID: Wearing masks, staying at least 6-feet apart, and getting vaccinated. "We have a campaign going on, mask up, back up, vacc up, or mask up, back up, vax up for folks to Instagram or tweet, Facebook or whatever the other young adults do use to share. It's all part of that messaging." [Participant #1]

Enhancing information access: Other strategies used in this community-based effort to facilitate vaccinations were aimed at enhancing information access for the Black community

- Accessibility of outreach coordinators: Community outreach coordinators provided their contact information widely to community members and not only gave permission but encouraged wide dissemination of those. Outreach coordinators also collated contact information of community members they engaged with which facilitated timely information sharing. ". . . when we make these personal contacts, we need to build trust and once that trust is built, then usually, those calls end up in vaccination appointments and increased-the people that we schedule for a vaccine appointment then go onto ask others and send others and refer them to our organization to schedule their vaccine appointments. We also are keeping a list of email addresses and phone numbers to disseminate more information." [Participant #2]
- Leveraging technology and social media: A website was developed to ensure that community members had a "one-stop," trustworthy information resource that they could readily access. To ensure the receipt of timely information, the website was regularly updated with new information regarding COVID-including emergence of variants, vaccination eligibility, and upcoming vaccine clinics. Social media posts of Public Service Announcement (PSA) videos produced were boosted on various platforms (Facebook, Instagram) and updates provided *via* text messaging. ". . .posting our information and vaccination clinic information and education to our social media as well as our website." [Participant #2] "I've been updating the websites, almost daily. I know I've had to upgrade my skills and understanding how that works. We're using Facebook. We do have somebody who helps us with that as well but updating it daily and just taking a look at some of the changes daily so that can be updated, as well as using Facebook. I just updated that this morning." [Participant #1]

Establishing vaccination navigator and advocacy roles: One of the innovative strategies that were part of this community-led effort resulted from the need to address the need for guidance in navigating the healthcare structure and advocacy for community members. The outreach coordinators undertook navigator and advocacy roles. Their tasks included the following:

- Scheduling vaccination
- Addressing potential barriers (e.g. transportation)
- Being present at the vaccination clinic, (reassuring for community members)
- Playing an advocacy role when community members encountered challenges in the clinic (e.g. determining eligibility)
- Making reminder calls for vaccination appointments (maintaining confidentiality)
- Follow-up phone calls post-vaccination (24 hrs, 48 hrs)
- Providing further information/education as needed

"This organization in particular is extremely special because we're, out of all the organizations that I know that are scheduling vaccination clinics, we're the only one that does follow-up. We do follow-up calls 24 to 48 hours after they receive the vaccine, just to check in and see how they're doing." [Participant

#2]

Enhancing access to vaccination clinics: The community-based organization also partnered with healthcare systems to host vaccination clinics, bringing those to community spaces and events. This made it more accessible for community members.

Addressing vaccine hesitancy/resistance: A variety of strategies were implemented specifically to address vaccine hesitancy as well as vaccine resistance; the initial task being to identify where community members may be on the continuum of acceptance to resistance. An initial needs assessment determined that community members may be hesitant due to reasons that were primarily associated with the vaccine, while others may be resistant due to beliefs not directly related to the vaccine such as mistrust of the medical and research communities [26] (Table 1).

APPLIED AREAS	OUTREACH STRATEGIES
Organized Community Education	Targeted outreach [Individual, Businesses] Invitation to educational/informational sessions ["Office Hours with Black Health Professionals"]
Organic Community Conversations	Leveraging racial concordance to engage Shared history Shared lived experiences Active listening (hearing people out; resisting the urge to counter/argue) Validating concerns and experiences Maintaining positive countenance and attitudes non-judgmental Respectful of differing opinions and perspectives Empathy (see 'self' in 'them')
Data collection on reasons for vaccine hesitancy	Identifying specific concerns Gaining deeper insight Seeking knowledge to respond to concerns identified Providing information
Holistic community engagement	Asking about and addressing other needs aside COVID Grocery store gift cards Information on community resources to meet socioeconomic needs Promoting other preventive measures: Providing masks, hand sanitizers, information on COVID Using branding materials-logo recognition eliciting trust in legitimacy of program

Table 1: Outreach strategies to address vaccine hesitancy and resistance

Challenges: Some of the challenges encountered in the course of the community-engaged work included keeping up with the rapidly evolving pandemic and the changing information; accessibility of vaccination clinics; lull in rates of vaccination over time; and vaccine hesitancy/resistance. These have been elucidated below:

Keeping up with rapidly evolving pandemic and changing information: The COVID-19 pandemic brought with it sudden changes in policies, guidelines and eligibility; requiring quick adjustments in community outreach strategies. Change was a consistent theme

- About vaccine (availability, eligibility): With the constant rate of new information being disseminated, it was challenging for personnel to remain updated about which vaccines were available, and who was eligible. "..it is changing information, knowing what vaccines are out, who is eligible to get the vaccine,.." [Participant #4]
- About clinics (when, which vaccine, which dose, what to give out): In relation to clinics, personnel reported issues such as not having a work/duty schedule; not knowing where clinics would be held each coming week; and being unsure about which round of vaccines would be given. "..and even just week to week, where our clinics are. Which ones we're working at? If it's going to be first dose or second dose? Are we doing the full bags with all the information, or are we just handing out some of the smaller items?" [Participant #4] Reactionary versus responding: In trying to balance availability of new vaccines with unpredictable clinic activities and all, the personnel often found themselves without a plan which they described as being reactionary, and analogous to "disaster relief". Not having pre-determined schedules, forced the personnel to function more or less by reacting to situations as they came up, an experience which they said, was comparable to being in the middle of a major humanitarian-crisis situation. "Just that changing dynamic of that. I think that's like working with the Red Cross, right? Work with the Red Cross and you have disaster relief. You just need to be able to react and go." [Participant #1]
- Rapid availability of vaccines-unanticipated: Since the approval of vaccines was an emergency response by the government to the COVID-19 pandemic, the personnel pointed out that they were not adequately prepared before-hand

with the necessary information. This proved to be a huge challenge. "Like I didn't recognize or realize that we would have vaccines sort of this soon and it sort of just came on. There was just like the first few weeks of this, and I'm so grateful for this team, it was hectic and hard. I didn't know which way to go, but we just needed to react and react and react". [Participant #1] The personnel found themselves having to perform under less-than-ideal situations, as work dynamics were not structured for efficient operations. They were thus unable to forecast and plan accordingly. "..I like to have a better; I'll just say a better setup for people to work in …. It's tough to be able to set things forward in a way that's more organized, I guess." [Participant #1]

Accessibility: There were barriers related to access to vaccination clinics

- Limited clinic hours: Community coordinators reported that since the clinic was only open during the regular working hours, some people, though willing, could not be scheduled for vaccination appointments, as they were unable to get time off work to get vaccinated. "Now that we have the vaccines, a lot of different jobs are opening back up and people are going back to work. Some of the challenges that we've also seen is scheduling people during these clinics that have to work during the day." [Participant #2]
- Transportation: For some community members, getting transportation to the clinics was a major challenge, especially for persons with disabilities. "Another challenge knows people want the vaccine, but they don't have transportation. We are able to provide that for most of our clinics, but then logistics of people, like there was one guy who had a power wheelchair. I know I brought that up a couple of times, 'cause it just still stuck in my brain. I don't know if he ever got his vaccine yet because there was no way to transport him." [Participant #2]
- Difficulty obtaining data from healthcare systems: In order to evaluate, and to monitor progress on vaccination amongst people of color, community coordinators approached local healthcare institutions (and government agencies) for data on BIPOC communities. Unfortunately, their efforts were unsuccessful, due to lack of accurate facility-level data on these populations. ". . community agencies, like ourselves and other ones, need to continue to track statistics on BIPOC community. The one thing that I've encountered in trying to gauge where we are at in our efforts at getting people vaccinated is running up against the, and I won't call it a fact because I just haven't received the information, but the difficulties in obtaining statistical data from health institutions and entities and organizations. ." [Participant #2]

Lull in vaccination rates over time: As age for eligibility reduced, there were less people seeking to get vaccinated. Community coordinators reported that as age eligibility reduced, the majority of respondents were still the older members of the BIPOC community. "I haven't been booking many people of our color though. Unless maybe some older ones. The young ones, as I mentioned in that get together that we had Wednesday, they're just not goin' for it." [Participant #3] "…we can feel the lull in things like when we started off with 65 plus and we were talking BIPOC community. After a few weeks, you could feel a lull. It became extremely difficult in order to find and reach and contact." [Participant #2]

Vaccine hesitancy/resistance: The coordinators reported encounters of vaccine hesitancy and vaccine resistance, even though they recorded successes with vaccination efforts overall. Unique aspects of hesitancy that came up included perception of mixed responses per race/ethnicity, and the challenge of grappling with multiple issues aside vaccination.

Perceived variation in response per race/ethnicity: One of the coordinators described her personal experiences, and noted that there were differences in responses from different racial/ethnic groups; which she perceived as associated with racial concordance or lack thereof in her engagement interactions. "I sometimes have a challenge approaching them [Native Americans] because I have some, in different groups, in my personal life, where I'm engaging with these women, and I find it very challenging…" [Participant #3] "Dealin' with Black people, African, American American. That has been my most challenge. Where I live at, I had literally told myself I am not saying anything else to these people. I find myself going over there anyway." [Participant #3] Difficulty addressing wide-spectrum of issues. Having to confront people with the message of COVID-19, including the importance and need for vaccination at the time, was a challenge for the personnel because some individuals were going through their own set of challenges some related to COVID. These included socioeconomic and health-related challenges. Hence for some, vaccination was not a priority. "..because there's other things that are happening and affecting people related to COVID,…" [Participant #2]

Results

Successes and positive outcomes

There were several outcomes and outputs that were considered successes. These included:

- Enhanced community health literacy due to access to healthcare-related information *via* various media
- Directory of contacts (emails, phone numbers) which facilitated dissemination of information
- Vaccination rates at scheduled clinics almost always close to targeted quota
- Most of the elderly in the community fully vaccinated
- Vaccination of other underserved groups (Indigenous, LatinX, LGBTQIA+, Asian, Pacific Islander, Desi American, and low income communities)
- Increased visibility of persons of color in the public health field
- Further community building

Discussion

Lessons learned

Several observations were made regarding lessons that were learned from the field. These included the following:

1) Tips on how to address vaccine resistance

i) Limit efforts with persons who are 'vaccine resistant'

ii) Do not be 'defensive' of 'coercive'; simply provide valid information

iii) Stay accessible.

2) Seemingly "little things" make a difference as demonstrated by profound gratitude expressed over

i) giveaways (tote bags, masks, hand sanitizers),

ii) getting vaccinated

iii) the follow-up calls after vaccination.

3) 'Vaccine hesitancy' is not a bad thing

i) People have legitimate reasons

ii) Listen and "see" why the hesitancy

iii) Provide information to aid decision-making

4) COVID morbidity and/or mortality often motivation for vaccination

i) Loss and/or impact of COVID on family member(s)

ii) Perception of the vaccine as lifesaving due to personal experiences or observations

Recommendations and next steps

The following are key recommendations intended to help enhance community-engaged health promotion efforts around and beyond COVID-19.

- Tracking and documentation: It is important to track the vaccination rates of the Black community served as well as other underserved communities benefiting from community-engaged efforts, and thus assess program effectiveness.
- Relationship-building: Maintaining relationship with communities served would help to gain further insight to "hesitancy" and ensure strategic positioning to address other health needs that will arise
- Maintaining individualized approach. People have different contexts and are at different places in terms of their health literacy and where they are at with health-related decisions such as vaccinations.
- Information gathering/data collection in partnership with community: These should inform "next steps" and facilitate obtaining funding to meet community needs
- Programing beyond COVID-19: Focusing on health literacy and continuing efforts in health promotion regarding chronic conditions.

Conclusion

The pre-existing relationships, racial concordance and embeddedness of the outreach personnel in the community, along with partnerships with healthcare systems in the locality were key factors to the success of this grassroots outreach intervention to enhance COVID-19 vaccination in the Black communities and other underserved groups. Findings support the effectiveness of culturally-responsiveness of interventions that are led and implemented by persons from within the Black/African-American community. Relationships and racial concordance are valued, and can be leveraged for health promotion efforts in this priority population. To effectively address the persisting racial health disparities beyond COVID-19, the healthcare system and the medical community must also work in partnership with communities to develop and implement structural changes in healthcare policies and processes.

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Conflict of Interest

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References

1. Tai DBG, Shah A, Doubeni CA, Sia IG, Wieland ML (2021) The disproportionate impact of COVID-19 on racial and ethnic minorities in the United States. Clin Infect Dis 2:703-706.
2. Alcendor DJ (2020) Racial disparities-associated COVID-19 mortality among minority populations in the US. J Clin Med 9:2442.
3. Millett GA, Jones AT, Benkeser D, Baral S, Mercer L, et al. (2020) Assessing differential impacts of COVID-19 on black communities. Ann Epidem 47: 37-44.
4. Abba-Aji M, Stuckler D, Galea S, McKee M (2022) Ethnic/racial minorities' and migrants' access to COVID-19 vaccines: A systematic review of barriers and facilitators. J Migration Health 5:100086.
5. Tenforde MW, Self WH, Gaglani M, Ginde AA, Douin DJ, et al. (2022) Effectiveness of mrna vaccination in preventing covid-19-associated invasive mechanical ventilation and death-united states march 2021-january 2022. Morbidity Mortality Weekly Rep 71: 459.
6. Centers for Disease Control and Prevention (2022) Stay up to date with covid-19 vaccines including boosters. Nat Center Imm and Res Dis (NCIRD).
7. US Food and Drug Administration (2022) Coronavirus (COVID-19) update: Fda authorizes moderna and pfizer-biontech bivalent covid-19 vaccines for use as a booster dose in younger age groups.
8. Peters MD (2022) Addressing vaccine hesitancy and resistance for COVID-19 vaccines. Int J of Nurs Stud 104241.
9. Dubé È, Ward JK, Verger P, MacDonald NE (2021) Vaccine hesitancy, acceptance, and anti-vaccination: Trends and future prospects for public health. Annu Rev Public Health 42: 175-191.

10. Khubchandani J, Sharma S, Price JH, Wiblishauser MJ, Sharma M, et al. (2021) COVID-19 vaccination hesitancy in the United States: A rapid national assessment. J Comm Health 46: 270-277.

11. Sharma M, Batra K, Batra R (2021) A theory-based analysis of COVID-19 vaccine hesitancy among african americans in the United States: A recent evidence. MDPI 9:10.

12. Mann S, Christini K, Chai Y, Chang CP, Hashibe M, et al. (2022) Vaccine hesitancy and COVID-19 immunization among rural young adults. Prev Med Rep 28: 101845.

13. Stoner MC, Browne EN, Tweedy D, Pettifor AE, Maragh-Bass AC, et al. (2022) Exploring motivations for covid-19 vaccination among black young adults in 3 southern US States: Cross-sectional study. JMIR Formative Res 6:e39144.

14. Hamel L, Lopes L, Muñana C, Artiga S, Brodie M (2020) Race, health, and COVID-19: The views and experiences of black Americans.

15. Sekimitsu S, Simon J, Lindsley MM, Jones M, Jalloh U, et al. (2022) Exploring Covid-19 vaccine hesitancy amongst black Americans: Contributing factors and motivators. Am J Health Prom: AJHP.

16. Kricorian K, Turner K (2021) COVID-19 vaccine acceptance and beliefs among black and hispanic americans. PloS one 16: e0256122.

17. Howard MC (2022) A more comprehensive measure of vaccine hesitancy: Creation of the multidimensional vaccine hesitancy scale (MVHS). J Health Psy 27: 2402-2419.

18. Maragh-Bass A, Comello ML, Tolley EE, Stevens D Jr, Wilson J, et al. (2022) Digital storytelling methods to empower young black adults in covid-19 vaccination decision-making: Feasibility study and demonstration. JMIR Formative Res 6: e38070.

19. Andreas M, Iannizzi C, Bohndorf E, Monsef I, Piechotta V, et al. (2022) Interventions to increase COVID-19 vaccine uptake: A scoping review. Coch Data of Sys Rev 8 CD015270.

20. Wiley Z, Khalil L, Lewis K, Lee M, Leary M, et al. (2022) A framework for inspiring Covid-19 vaccine confidence in african american and latino communities. Vaccines 10: 1319.

21. Mugenyi L, Mijumbi A, Nanfuka M, Agaba C, Kaliba F, et al. (2021) Capacity of community advisory boards for effective engagement in clinical research: A mixed methods study. BMC Medical Ethics 22: 1-7.

22. Derose KP, Williams MV, Branch CA, Flórez KR, Hawes-Dawson J, et al. (2019) A community-partnered approach to developing church-based interventions to reduce health disparities among African-Americans and Latinos. J Racial and Ethnic Health Dis 6: 254-264.

23. Smith C, Porter III A, Biddle J, Balamurugan A, Smith MR (2020) Peer reviewed: The arkansas minority barber and beauty shop health initiative: Meeting people where they are. Prev Chronic Dis 17.

24. Centers for Disease Control and Prevention (2022) Ways health departments can help increase Covid-19 vaccinations. Nat Center Imm Resp Dis (NCIRD).

25. Centers for Disease Control and Prevention (2021) 12 COVID-19 vaccination strategies for your community. Nat Center Imm Resp Dis (NCIRD).

26. Okoro O, Kennedy J, Simmons G, Vosen EC, Allen K, et al. (2022) Exploring the scope and dimensions of vaccine hesitancy and resistance to enhance COVID-19 vaccination in black communities. J Racial Ethn Health Disp 9: 2117-2130.