Perspectives

The critical importance of community health workers as first responders to COVID-19 in USA

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Summary

COVID-19 has served to exacerbate existing health disparities and inequities, most—if not all—of which can be traced to the social determinants of health (SDOH) that affect specific populations and communities. Essential to health and health systems long before, community health workers are experts in addressing SDOH in community-based settings; however, they have yet to be mobilized as part of the COVID-19 response both in the US and internationally. We use data from our mixed-methods study with supervisors (n=6), Executive Directors (EDs) (n=7), and CHWs (n=90) to describe the critical role that CHWs can play to assist in response to COVID-19 using New York State's (NYS) as a case example. Building on these findings, we raise specific CHW workforce issues and propose recommendations for how to mobilize this workforce in national pandemic response efforts.

Key words: community health workers, COVID-19, racial and health disparities, workforce support

Introduction

With over 73 million cases and 1 650 348 deaths worldwide, the continued spread of the novel coronavirus (COVID-19) is likely the major public health crisis of this generation (World Health Organization, 2020). The pandemic has only served to exacerbate existing health disparities and inequities, most of which can be traced to the social determinants of health (SDOH), defined as the conditions in which we live, grow, work and play (Office of Disease Prevention and Health Promotion, 2018). Essential to health and health systems long before COVID-19, community health workers (CHWs) are experts in addressing the impacts of SDOH in community-based settings. CHWs' roles and activities are diverse within and across countries and programs, including (i) bridging cultural mediation between communities and health care systems, (ii) providing culturally appropriate and accessible health education and information, (iii) advocating for individual and community needs, (iv) providing informal counseling and social support, (v) providing first aid and treatment for simple ailments, (vi) referring individuals to different levels of care when needed and (vii) monitoring and evaluating overall community health (Ingram *et al.*, 2012). They are trusted community members who promote health and advance justice through the provision of direct care, community organizing and liaising between care providers and community members (Landers and Stover, 2011).

While the inclusion of CHWs in pandemic response efforts appears to be a clear choice, it has yet to emerge as a core component of US-based public health responses. We use data from a mixed-methods study conducted with supervisors, executive directors (EDs), and CHWs prior to the onset of COVID-19 to illustrate

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the critical role that CHWs can play to assist in response to COVID-19, using New York State (NYS) as a case example. Separate focus groups were conducted with supervisors (n = 6) and EDs (n = 7) of eight agencies that hire CHWs under the New York State's Maternal and Infant Community Health Collaborative Initiative (MICHC). The purpose of the focus groups was to examine the roles, responsibilities and available supports for CHWs, and solicit their perspectives on policy and organizational challenges that impact the sustainability of the CHW workforce. Following these focus groups, we administered a survey to 90 CHWs employed by 18 agencies that hire CHWs under the NYS MICHC program. The survey sought to understand facilitators and barriers to CHWs job performance at the individual and organizational level. Building on these findings, we raise specific CHW workforce issues and propose recommendations for how to mobilize this workforce within the national pandemic public health response.

COVID-19 exacerbates existing racial disparities

As of 18th December 2020, there have been 304 960 COVID-19 related deaths in the USA (World Health Organization, 2020). Racial and ethnic information for COVID-19 cases is currently available for 48% of the total deaths in the USA (Centers for Disease Control and Prevention, 2020). Even with this limited sample, the data show that historically disadvantaged groups, such as Black Americans and Latinx, experience COVID-19 infection and death rates that are disproportionately high for their population; together they comprise 50% of coronavirus cases (Stokes et al., 2020). Black Americans represent only about 13% of the population in the states reporting racial/ethnic information yet they account for about 34% of total COVID-19 deaths in those states (Johns Hopkins University & Medicine, 2020). Similarly, Latinx represent approximately 18.5% of the US population and account for 21.3% of all confirmed COVID-19 cases nationwide (National Center for Health Statistics, 2020). These racial disparities are rooted in well-established SDOH, such as income inequality, poor quality or overcrowded housing, and inadequate access to preventive medical care (Macias Gil et al., 2020; Thakur et al., 2020; U.S. Department of Health and Human Services, 2020). Social distancing may not be a viable option for many racial/ethnic minority persons living in poverty, as they may live in small, multi-family apartments or homes. Due to the overrepresentation of Blacks and Hispanics/Latinx within transportation, government, health care and food supply

services, they are more likely to be exposed to COVID-19 than their White counterparts (Johns Hopkins University & Medicine, 2020). In addition, these employment opportunities tend to be lower-wage jobs, are temporary in nature, do not offer telework opportunities; and may not provide paid sick leave and/or medical benefits (Johns Hopkins University & Medicine, 2020).

While shelter-at-home orders and closures of businesses are necessary to promote social (physical) distancing as a means of slowing the spread of COVID-19, these activities are not without consequences. As of this writing, more than 58 million Americans have applied for unemployment insurance as a result of mass layoffs, furloughs and cutbacks since March 2020 (US Bureau of Labor Statistics, 2020). As states have begun to reopen, standard public health practices of testing, contact tracing and isolation coupled with continued social (physical) distancing measures are critical to controlling community transmission of COVID-19, especially in Black and Latinx communities who are disproportionately affected by the virus.

The case for CHW involvement in local and federal pandemic responses

Recent estimates from the US Department of Labor indicate that approximately 117 540 Health Educators and CHWs were employed in the USA in 2019 (U.S. Bureau of Labor Statistics, 2019). Historically, CHWs have been a key component of comprehensive efforts to minimize transmission of communicable diseases worldwide, including HIV/AIDS, tuberculosis and malaria (Schneider et al., 2016) through community engagement, community sensitization, awareness and promotion of preventive practices (Pinto et al., 2012). CHWs have been instrumental in reducing under-five and maternal mortality rates, increasing uptake of immunizations and cancer screenings, providing interventions that reduce mental health disorders and assisting with the management of chronic diseases including asthma, diabetes and cardiovascular illnesses, among others (Perry et al., 2014; Barnett et al., 2018).

More recently, CHWs have played pivotal roles in pandemic responses internationally, most notably the Ebola outbreaks in Liberia, Côte d'Ivoire' and Guinea, and the Zika outbreak in Brazil (Boyce and Katz, 2019). In Brazil, CHWs were instrumental in spreading community awareness of Zika risks at the peak of mosquito season and distributed prevention kits—containing barrel covers, bed nets, condoms and educational materials—to pregnant women (Boyce and Katz, 2019). In Africa, CHWs enhanced syndromic surveillance of Ebola by documenting unusual symptoms or epidemiological patterns while performing their routine activities (Boyce and Katz, 2019).

Regrettably, US-based CHWs have been underutilized in the response to infectious disease outbreaks; CHWs have been primarily deployed in primary health care systems (Boyce and Katz, 2019). While training materials developed by the World Health Organization (WHO) have been made available to prepare CHWs to respond to respiratory disease outbreaks such as influenza (World Health Organization, 2011), minimal attention has been given to their potential contributions to large-scale infectious disease outbreaks and dealing with the aftermath of the social implications of the disease.

In the COVID-19, US-based public health response, many states have recently turned to Partners In Health (PIH) for support in crafting geographically based pandemic public health (Partners In Health, 2020a). PIH has an extensive track record of working with local governments worldwide to strengthen public health infrastructure, provide direct patient care and train the local health workforce (Partners in Health, 2020b). Initially tapped by the Commonwealth of Massachusetts to develop a state-wide contact tracing initiative; more recently PIH has created the US Public Health Accompaniment Unit to partner with states and other localities nationwide to support geographically based pandemic response efforts. Despite the fact that PIH relies heavily upon CHWs in their global efforts, there is little evidence to suggest that the CHW workforce has been systematically and strategically integrated into state and local US pandemic response efforts.

New York State CHW programs as reference point

New York State (NYS) was an epicenter of the COVID-19 pandemic and has a strong CHW infrastructure. We draw on the NYS MICHC CHW program to showcase the potential for mobilizing the CHW workforce to help contain the virus and address social and public health needs emerging from the COVID-19 pandemic. NYS employs 690 CHWs, the largest CHW workforce in the USA (United States Department of Labor, 2019). The majority of this workforce has been deployed within MICHC programs. They are employed through local community-based agencies to enhance health literacy to reduce maternal and infant mortality and morbidity; enrich social-emotional development of children and adolescents; increase supports to address the health care needs of children and youth; increase access to and use of preventive health care services across the life course; promote supports that enhance home and community

environment; and reduce racial, ethnic, economic and geographic disparities to promote health equity (New York State, 2020). Moreover, Governor Cuomo's 2019 Justice Agenda recommends the expansion of the MICHC CHW program to provide social support, information and advocacy to various communities across the state (New York State, 2020). Yet CHWs have not been fully integrated into coordinated efforts for state-wide COVID-19 responses. Using findings from our previous research with CHWs, their supervisors and EDs (Rahman and Ross, 2019a,b), we underscore CHW roles and skills that are well-suited for pandemic responses, especially within Black and Latinx communities residing within the USA.

Outreach and community engagement

CHWs often have deep knowledge of the community they serve and tend to share a similar lived experience, language, culture and socioeconomic needs as the communities they serve (London et al., 2017). Consistent with extant literature on the CHW workforce, 92% of CHWs respondents reported that they shared similar life experiences to clients whom they serve (Rahman and Ross, 2019a,b). CHW supervisors added that most CHWs employed by their agency face the same challenges as the clients, thereby building the foundation of empathic relationships (Rahman and Ross, 2019a,b). Having navigated fragmented systems of care themselves, supervisors noted that CHWs may be well-suited to connect clients to needed services and help in addressing the economic, social, environmental and political rights of individuals and communities (Rahman and Ross, 2019a,b).

Provision of trustworthy and accurate health information and advice

CHWs improve the health literacy of community members by offering preventive education on illnesses, nutrition and hygiene, medications and family planning, using jargon-free communication, local idioms and storytelling (Zanchetta *et al.*, 2014). With a sample of 90 MICHC CHWs, 71 stated they offered information on family planning (79%); vaccinations (n = 73; 81%); nutritional counseling (n = 53; 59%); hygiene (n = 53; 59%); breast cancer (n = 50; 56%); asthma (n = 37; 41%); diabetes (n = 32; 36%); cholesterol (n = 31; 34%); and sexually transmitted infections (n = 22; 24%) (Rahman and Ross, 2019a,b).

CHWs are known to motivate clients to engage in lifestyle modifications using empathy, patience, and

persistence in a culturally appropriate manner (Zanchetta *et al.*, 2012). CHW supervisors in our study noted that it was through engagement, trustworthiness and knowledge of the community and resources that CHWs were able to successfully offer health advice and engage traditionally hard-to-reach populations (Rahman and Ross, 2019a,b). Through these skills, CHWs may assist in regaining the trust of the health care system within Black and Latinx communities. This can possibly result in greater testing, uptake of the COVID-19 vaccination, and accessing health care for COVID-19 and other ailments.

Well before the emergence of COVID-19, significant research has pointed to ways in which Black and Latinx communities have experienced health care experiences as untrustworthy, racist or culturally insensitive (Cahill *et al.*, 2017; Corrigan *et al.*, 2017; Cleary *et al.*, 2018; Prather *et al.*, 2018). Historically, Latinx communities have experienced decreased health care access due to inadequate or no insurance coverage, fear of deportation, provider bias and less access to culturally appropriate health care services (Rodriguez-Diaz *et al.*, 2020).

In the event of COVID-19, Black and Latinx communities have been discouraged by the health care system because of the government's inability to act in a timely manner, lack of readily available testing, delays in test results and overall lack of access to care during the peak of the pandemic (Mays and Newman, 2020). Furthermore, restrictive immigration policies may have prevented members of the Latinx population from accessing testing or care in fear of disclosing their immigration status (Pedraza et al., 2017). The rapidly evolving nature of COVID-19 has led to convoluted public health messaging fraught with mixed messages. Unclear and inconsistent public health messaging may also exacerbate distrust and disproportionately affect populations with limited health literacy, including Black and Latinx populations whose health literacy is lower than non-Hispanic Whites (Thakur et al., 2020). Black and Latinx communities have reported being wary of the public health information they receive, less willing to adopt recommended safety measures and likely to believe in myths related to COVID-19 (Laurencin and McClinton, 2020). With evolving scientific evidence, CHWs who already have a rapport with members of the community they serve and are considered trustworthy, have the potential to clarify and communicate health messages surrounding COVID-19 in layman terms and in an empathic manner.

CHWs also have the potential to play an instrumental role in reducing community members hesitancy to take the COVID-19 vaccine. Through door-to-door visits and

social mobilization (engagement of religious leaders and community meetings), CHWs have been successful in improving the rate of fully immunized children in Pakistan and Sub-Saharan Africa (Afzal et al., 2016; Nzioki et al., 2017; Malik et al., 2020). CHW supervisors and EDs in our study noted that CHWs performed door-to-door visits to their clientele, which may be the most appropriate intervention for social mobilization to reduce vaccination hesitancy. This is extremely important within Black and Latinx communities who have had negative experiences with medical experimentation and vaccines. The potential distrust among the Black community with regard to the COVID-19 vaccine is inextricably linked to the historical Tuskegee syphilis experiment. Similar distrust may lie within the Hispanic community, as patients in a 1940 trial in Guatemala were deliberately infected with syphilis and other venereal diseases (Rodriguez and García, 2013). Possibly, Black and/or Latinx communities may be suspicious of the scientific community in making them 'guinea pigs' for medical experimentation, especially given the speed by which the vaccine was developed and the fact that side-effects have not yet been documented extensively. Moreover, they may feel that health care messaging to take the vaccines may be influenced by the financial motivations of pharmaceutical companies (Freeman et al., 2017). In this climate of distrust, members of these communities who are in fact sick may be afraid to visit clinics and hospitals in lieu of being medical subjects for COVID-19 research, which may result in fur-

(Jacobs *et al.*, 2006). Eighty CHWs (89%) in our study reported that they assisted clients in accessing health care services (Rahman and Ross, 2019a,b). As trusted members of the community, CHWs are well positioned to address the misinformation, fear and stigma surrounding COVID-19 by providing timely health advice on COVID-19 and encourage clients to seek testing, visit doctors as indicated, and comply with health advice related to social distancing, contact tracing and isolation/quarantine.

ther delays in diagnosing and/or treating other illnesses

Risk identification

CHWs have been characterized as 'natural researchers' (Pérez and Martinez, 2008). They observe and relay community realities to others and are in a unique position to identify risks that community members take. They also recognize the social and historical contexts of their communities and outreach base on an understanding of their community's SDOH inequities. Against this background, CHWs can be effective in enforcing public health measures for COVID-19 in their community

compared to the police force. About half of New York City's population is Black or Latinx, yet from mid-March to mid-May 81% of citations for social distancing violations were issued to Black or Latinx individuals (Southall, 2020). CHWs may be able to identify community members who are engaging in pandemic-specific risky behaviors, such as not wearing masks, maintaining social distance and congregating in large groups, and, through their communication skills (engagement, preestablished rapport and active listening), may proactively encourage community members to wear masks, maintain 6 feet of social distance, and regularly engage in hand hygiene. MICHC CHWs who participated in our study have previously performed several risk assessments; 64 (71%) performed risk assessments for substance abuse (alcohol, tobacco consumption), sexually transmitted infections (n = 27; 29%), HIV (n = 26; 29%); and documented family histories (n = 37; 41%)to identify hereditary predispositions to diseases (Rahman and Ross, 2019a,b). Since CHWs have historically screened for various diseases, CHWs could potentially screen for COVID-19.

Contact tracing

Many countries such as Kenya, Liberia and Rwanda have started leveraging CHWs for COVID-19 infection prevention, case detection and response (Ajisegiri *et al.*, 2020). Identification of cases that exhibit COVID-19 symptoms or non-compliance of preventive measures has been shown to flag and interrupt community transmission at an earlier stage (Ajisegiri et al., 2020). Contact tracing initiatives focus primarily on reducing the risk of disease transmission, and access to support (such as food, medicine and hygiene supplies) so effective quarantine/isolation practices are adhered with. Previous research has shown that CHWs can effectively perform household visits to trace contacts and drop off emergency basic survival kits (Boyce and Katz, 2019). EDs in our study reported that CHWs consistently facilitate linkages between families and basic survival needs required for safe quarantine/isolation, including food, clothing and shelter (Rahman and Ross, 2019a,b).

While physicians, nurses, social workers and other members of the health workforce possess requisite skills (e.g. clinical) needed for effective contact tracing, contact tracing efforts are only effective to the degree to which affected individuals are willing to pick up the phone and be contact traced. Effective rapid outbreak containment has been linked with mobilization activities that have garnered trust between health workers and the communities that they serve (Ajisegiri *et al.*, 2020). The existing distrust within Black and Latinx communities of the health care system, combined with welldocumented access and quality of care problems, render CHWs a more suitable workforce for this component of pandemic response. In addition, employing CHWs as contact tracers may also be a more cost-effective alternative that allows other health providers to focus on other much-needed activities (London *et al.*, 2017). CHWs are known to be cost-effective where they have been utilized. For instance, hospitalization costs have been reduced (Jack *et al.*, 2017), along with overall reductions in health care costs in areas of TB, malaria, reproductive, maternal, newborn and child health (Vaughan *et al.*, 2015), and cardiovascular disease prevention and type 2 diabetes management (Jacob *et al.*, 2019).

Addressing social needs

The existing social (physical) distancing measures necessary to curb community spread of COVID-19, such as shelter-at-home policies and closures of non-essential businesses and schools have negatively affected the SDOH for many communities—giving rise to additional social needs. Over 58 million people have filed for unemployment insurance nationwide since March 2020 (US Bureau of Labor Statistics, 2020), with 7 198 600 filings in New York State alone (New York State Department of Labor, 2020). If COVID-19 epidemiological patterns are consistent with those observed in previous pandemics and other natural disasters, substantial increases in domestic violence, child maltreatment, anxiety, depression, loneliness, and substance use are likely to occur (Galea *et al.*, 2020).

Specifically, previous research has shown that individuals who identify as Black have experienced increased rates of posttraumatic stress and depressive symptoms relative to their white counterparts. This has been documented in West Africa after the Ebola pandemic due to exposure to deceased bodies, social isolation and exclusion faced after recovery (James et al., 2019). In the US, Black Americans also faced increased psychological distress post-Hurricane Andrew and Ike (Novacek et al., 2020). Moreover, it is likely that Hispanics and Blacks are to experience high psychological distress due to the stress of financial insecurity; 57% of Hispanics reported lost jobs, reduced work hours, or reduced work-related income during the pandemic, compared to 41% of Blacks and 38% of non-Hispanic Whites (Purtle, 2020). CHWs have the potential to assist in the prevention and early intervention of mental health disorders given that depression, anxiety, post-traumatic stress are possible outcomes of COVID-19 due to social isolation and financial and health concerns. CHW supervisors in our study reported that CHWs are expected to screen clients for mental health disorders using validated instruments (Rahman and Ross, 2019a,b). MICHC CHWs reported that while performing household visits they screen clients for anxiety and depression (n = 75; 83%); identified cases of domestic violence (n = 58; 64%) and child abuse (n = 37; 41%) (Rahman and Ross, 2019a,b).

Referrals to social services

CHWs can continue to be instrumental in linking clients to longer-term social services that extend beyond the immediate scope of what is needed to safely quarantine/ self-isolate. In our research with NYS specifically, referral making was the most prevalent behavior reported by the 90 CHWs; 83% made referrals for public assistance; 75% made referrals to housing services; 72% made referrals to mental health services; 70% made referrals to a primary care doctor; 52% made referrals for vocational services; 30% made referrals to substance abuse services; and 26% made referrals to domestic violence service (Rahman and Ross, 2019a,b). Moreover, 75% of CHWs acknowledged that they followed up with the provider to whom they made the referral, and 92% reported that they followed up with the client about the outcome of the referral (Rahman and Ross, 2019a,b). Seventy-nine CHWs (88%) acknowledged that they were successful in assisting their clients in accessing welfare benefits (food stamps), housing (n = 74; 82%) and documentation-birth certificates, death certificates (n = 60; 67%) (Rahman and Ross, 2019a,b). Given the anticipated 'second pandemic' of mental health and psychosocial problems precipitated by COVID-19, it is critical to have a workforce in place that is comfortable with making referrals to mental health and social services, and also following up with clients to ensure that the referrals are appropriately meeting their needs.

Advocating for clients and communities

As barriers to health and social service access may be exacerbated by COVID-19, advocacy at individual and community levels is essential and will often be required to circumvent obstacles and facilitate access to care. The MICHC EDs and supervisors in our study affirmed that community-level advocacy is an important role for CHWs. This is because addressing SDOH at the individual level will only do little to address intractable issues such as poverty and discrimination among employment, housing, and education (Rahman and Ross, 2019a,b). In the NYS MICHC sample, while 82% of CHWs (n = 74) indicated that their activities regularly involved advocating on behalf of individual clients, 76% (n = 68) indicated that they advocate for the community they serve, and 70% (n = 63) reported that they attended meetings of gatherings about problems in the community to inform community-level advocacy efforts (Rahman and Ross, 2019a,b). The Black Lives Matter movement and protests against racial injustice have led the nation to reflect on personal biases that contribute to overt and implicit racism on a daily basis. CHWs should empower communities to sustain the movement, engage in civic activities and advocate for greater accessibility and funding of social services that are geared towards addressing social and health disparities among Black and Latinx communities.

Considerations for deploying CHWs to curb the COVID-19 pandemic in the USA

While CHWs have a lot to offer to both short and longterm US pandemic response efforts, CHWs work under extremely stressful conditions, and are frequently expected to work from a resource-deprived system to create resources for clients with multifaceted needs (Spencer et al., 2010). MICHC EDs and supervisors suggested that ongoing dissonance between the actual availability of resources (i.e. housing and food vouchers) and the actual possibilities of clients obtaining those resources contributes to a sense of loss of accomplishment and self-efficacy among CHWs (Rahman and Ross, 2019a,b). Community service workers, such as CHWs, have experienced a severe state of preoccupation with the plight of clients; many develop symptoms akin to those of traumatic stress and compassion fatigue (CF) (Cocker and Joss, 2016). In the frontline of the pandemic, CHWs, are at risk for experiencing increased mental health problems, as per prior pandemic crises (Spencer et al., 2010). There have been a number of speculated budget cuts to social services in the USA. In the event that services are no longer accessible or available, CHWs may experience a sense of loss in their inability to connect clients to different social services, which in turn may lead to greater anxiety. Moreover, pending budget cuts and other fiscal constraints may also compromise intra-and inter-agency collaboration and communication. Similar to many human service providers, CHWs may be experiencing anxiety-related to job security and fear of having pay cuts. Given that NYS CHWs indicated that they earn as little as \$12-15/ h (Rahman and Ross, 2019a,b), further salary cuts may result in CHWs facing deep poverty, further jeopardizing the vitality of this workforce.

In our study, CHW supervisors noted that CHWs occasionally have challenges maintaining a strengths orientation to the work that they do with their clients which may be attributable to the nature of the work and that CHWs may have experienced similar circumstances and hardships to those of their clients (Rahman and Ross, 2019a,b). While both supervisors and EDs indicated that they consistently try to instill in CHWs an empowerment-focused approach to client care; many indicated that CHWs experienced difficulty discerning when to refer out if a service needed is outside the scope of what can be provided (Rahman and Ross, 2019a,b). While this tendency to retain responsibility for services provided may be motivated by their commitment to their work, it can also contribute to burnout and CF (Cocker and Joss, 2016). With the extensive psychosocial needs precipitated by COVID-19 and its sequelae, it is critical to consider the well-being of CHWs, who will very likely be among the most vulnerable frontline workers in continued pandemic response efforts.

Recommendations

We propose recommendations that are critical to consider when deploying CHWs in US-based public health response efforts to COVID-19. As CHWs perform household visits and have the potential to contract trace, there is a need for greater access to personal protection equipment and hazard pay. It is also important that CHWs are prioritized in receiving the COVID-19 vaccine given the frontline nature of their work. CHWs ought to be given training and technical assistance in cases where they are unable to do in-person household visits, and instead may have to resort to tele-visits. Resources such as computers, internet access and phones are required. CHWs are also required to be periodically trained on COVID-19 with the evolving research on the disease so timely dissemination of new information can occur.

We recommend greater supervision and other workplace-based supports, i.e., supports typically available through Employee Assistance Programs (EAPs). EAPSs offer screening for issues affecting employees mental and emotional well-being, counseling, referrals and follow-ups. This may be important for CHWs as they may experience the trauma of losing clients, friends and family due to COVID-19. These losses, coupled with the need to navigate the health care and social system at a time where resources are scarce may be frustrating, emotionally taxing and ultimately interfere with personal and professional functioning. There is a need for sustain funding to support supervision for CHWs, and implement wellness programs (mental health counseling, mindfulness, etc.) to ensure the socialemotional health and wellness for CHWs, who are also members who experience the lived realities of those whom they serve.

CHWs, EDs and supervisors, clients and coalition members (including but not limited to public health personnel, advocacy groups, maternal and child health care providers) ought to advocate for greater funding to sustain CHW programs, invest in their well-being and ensure that budget cuts to social services are at minimal. Including clients in advocacy efforts could be beneficial as they can speak to legislators about their personal experiences with CHWs and raise the urgency for the need to sustain CHW programs. Finally, we encourage researchers to engage in community-engaged research to understand how COVID-19 may have altered service provision by CHWs, and how it has impacted client experiences and outcomes. Altered in-person visits may have the potential to impact the credibility of CHW programs. Identifying greater supports for CHWs by clients can assist in maintaining credibility and sustaining CHW programs in the long run. Community-engaged research, vis-à-vis CHWs, may also assist in developing culturally and community sensitive interventions focused on identifying and disseminating appropriate risk and health reduction strategies for COVID-19. Such research is required to ensure that the public health response is not channeled through discriminatory systems and structures that perpetuate inequities, and instead, health equity is achieved.

Conclusion

As demonstrated through the MICHC program in NYS, CHWs have great potential to contribute to the USbased COVID-19 pandemic response. Emerging data indicates that consistent with overwhelming evidence of racial disparities in health outcomes in the USA, people who are already vulnerable to racism, social exclusion and other systemic and structural forms of discrimination are most affected by COVID-19 and its negative sequelae. The CHW workforce was created specifically to reduce racial, ethnic, economic and geographic disparities. Given their skillset, purpose, and demonstrated effectiveness in prior pandemic responses, CHWs should be considered as critical first responders to COVID-19. They have the potential to assist with the screening, testing, and tracing while offering education on the evolving health risks of COVID-19. They can link clients to longer-term social services that extend beyond the immediate scope of what is needed to safely quarantine/ self-isolate, and can advocate for greater health and social service access for disadvantaged groups that may be exacerbated by COVID-19. However, for this workforce to work to its full potential careful consideration of their unique vulnerabilities need to be accounted for in planning efforts.

Ethics of Human Subject Participation

The research was approved by the Institutional Review Board of Fordham University. All participants voluntarily signed an informed consent. Participants were compensated with a \$20 Amazon gift card.

Acknowledgements

The authors would like to thank the Association of Perinatal Networks of New York for their assistance in participant recruitment. We would like to thank Sharon Chesna for introducing us to the Association of Perinatal Networks of New York and assisting us with each stage of the study. The authors will like to thank the community health workers for participating in the study and for all the work they do to serve the clients in need.

Funding

The authors thank the Graduate School of Social Service at Fordham University for supporting this research through compensation funding for participants.

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