Commentary: Engaging African Immigrants in Research – Experiences and Lessons from the Field

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Global migration from Africa to more economically developed regions such as the United States, Europe, the Middle East, and Australia has reached unprecedented rates in the past five decades. The size of the African immigrant population in the United States has roughly doubled every decade since 1970. However, research has not kept up with the growing size of this vulnerable population. Data from African immigrants have not traditionally been reported separately from Blacks/African Americans. There is growing interest in increasing the participation of African immigrants in research to understand their unique health needs and the full spectrum of factors impacting their health, ranging from racial, social, environmental, and behavioral factors, to individual biological and genetic factors which may also inform health challenges. This line of inquiry may also inform our understanding of health disparities among their African American counterparts. However, little is known about effective community engagement and recruitment strategies that may increase the participation of this population in research studies. The purpose of this commentary is to: 1) describe lessons learned from our experiences engaging African immigrants in research in the Baltimore, Washington, DC, and Atlanta metropolitan areas; 2) discuss strategies for successful recruitment; and 3) consider future directions of research and opportunities to translate research findings into health policy for this population. *Ethn Dis*. 2019;29(4):617-622; doi:10.18865/ed.29.4.617

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Introduction

Immigration is a social determinant of health,[1] and personal characteristics, relational factors, social context, environment, and general socioeconomic conditions influence the health of immigrants.[2] Globally, more than 258 million people migrate for reasons including: seeking economic opportunities, fleeing conflict or persecution, pursuing higher education, and reuniting with family.[2] The World Health Assembly has endorsed a resolution among Member States to strengthen international cooperation regarding the health of refugees and migrants.[3]

Since 2010, sub-Saharan African countries accounted for eight of the 10 fastest growing immigrant populations in the United States.[4] In an earlier commentary,[5] we discussed that African immigrants and African Americans in the United States have been studied as a homogenous racial group, although health outcomes differ due to differences in socioeconomic status, culture, and genetic admixture. The transatlantic slave trade resulted in the forced migration of African slaves from mostly West African countries to the United States in the 16th century. However, the current wave of voluntary migration from African countries is a different phenomenon because of the ethnic and genetic diversity of Africans and the different reasons for migrating to the United States.

Due to the growing presence of African immigrants in the United States and their unique health needs, it is essential to know which strategies are effective

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in engaging them in research to ensure adequate representation and a positive research experience. The purpose of this commentary is to: 1) describe lessons learned from our experiences engaging African immigrants in the Afro-Cardiac Study, The African Immigrant Health Study, The Afro-Pap Study, and The Older African Immigrant Study in the Baltimore, MD-Washington, DC, and Atlanta, GA metropolitan areas; 2) discuss strategies for successful recruitment; and 3) consider future directions of research in this population.

Sociodemographic Characteristics of African Immigrants in the United States

Compared with immigrants from Asian and Hispanic countries, those from Africa constitute a small proportion (5%) of the immigrants in the United States.[4] However, there was a 40-fold increase in the number of African immigrants between 1960 and 2007.[6] African immigrants are also a fast-growing segment of Black immigrants and increased by 137% from 2000 to 2013.[4] African immigrants reflect the remarkable socioeconomic, geographical, religious, and genetic diversity of the African continent. In 2015, there were more than 2.1 million African immigrants in the United States.[4] In the same year, those from Eastern and Western Africa made up 80% of African immigrants; together Nigeria, Ethiopia, Ghana, Kenya, and South Africa accounted for more than half of all African immigrants in the United States.[4] Africans also migrate to the United States for humanitarian protection; the Democratic Republic of Congo (35%), Eritrea (6%), and Ethiopia (2%) were in the top 10 African countries of US refugee admissions in 2018.[7]

African immigrants are one of the most educated immigrant groups in the United States.[8] While 42% of African immigrants aged >25 years have at least a bachelor's degree, only 28% of all US-born persons and 27% of all immigrants have a bachelor's degree.[9] In the Afro-Cardiac Study[10], and Afro-Pap Study[11], 51% and 68% of participants, respectively, reported being college-educated. Significant heterogeneity has been reported in educational attainment as 59% of Nigerian immigrants, and 10% of Somalia immigrants had at least a bachelor's degree.[9] Furthermore, African immigrants are more likely to be proficient English speakers[9] as almost half of the 54 African countries have English as their official language.[12]

The top 10 states with the largest populations of African immigrants in order of population size are: New York: California; Texas; Maryland; New Jersey; Virginia; Massachusetts; Georgia; Minnesota; and Florida.[9] The percentage of African immigrants in the Baltimore-Washington, DC metropolitan statistical area (13%) is more than three times higher the national percentage (4%).[9] The sociodemographic characteristics described above may influence health outcomes in ways that are different from other immigrant groups.

Cultural Identity: "American Africans" or "African Immigrants"

The plurality of being African, American, and immigrant in a race-conscious society is an understudied phenomenon. Furthermore, it is unclear how African immigrants construct and retain their own ethnic identity and how this process influences their health. African immigrants create an identity with "double boundaries" where they differentiate themselves from African Americans because of historical disadvantage among Blacks but also identify as African Americans to take advantage of opportunities available to African Americans.[13] For instance, African immigrants may self-identify as African Americans to secure scholarships and awards created for students from under-represented backgrounds.[13]

As African immigrants transition to life in the United States, they maintain connections with their roots, affirm their identity, and assert their unique contribution to the diversity of cultures in the United States.[14] Since African immigrants originate from countries with remarkably diverse ethnic groups, they migrate with diverse cultural identities and may resist the collective racial categorization of "Black."[14] Thus, African immigrants may identify as "Nigerian American," "Ghanaian American," "Ethiopian American," or generally as "African immigrant" and not as "Black/African American."

Indeed, during recruitment, we observed vibrant displays of African cultures with attendees donning their traditional garments to demonstrate pride in their unique cultures. Participants expressed themselves in their native tongues when communicating with other participants and the study staff. Future research should further examine how cultural identity among African immigrants shapes health behaviors and outcomes in this population.

Building Trust with African Immigrants

In the United States, historical research misconduct has led minority and immigrant populations to harbor negative attitudes toward research.[15] Upon migrating to the United States, African immigrants become aware of these historical issues that have been faced by African Americans; these issues may bias their perception of research on Black populations. Immigrants are a vulnerable population because of trauma related to violence, economic, or political instability and immigration status.[1] Immigrants with a history of trauma may be at increased risk for unintentional psychological harm during research participation.[16] From our experiences, participants feared that findings would be used to stigmatize them further or that findings may have no tangible benefits to the population. For instance, some participants reported that if the research revealed high rates of infectious diseases, those findings would be used to further stigmatize African immigrants. To ensure that community members understood the benefits of the study, we briefly addressed the different organizations that had expressed an interest in our studies during scheduled meetings to provide a brief overview. For instance, when we sought to recruit participants from churches, we contacted the pastor of the church using information posted online and scheduled a meeting to discuss the details of the project (see the Religious Considerations section for further details). We discussed the importance of the studies and how information gleaned through research could improve the health of the population and allowed time for questions. There were some institutions that declined to participate in our studies because of time commitment and lack of interest.

We employed several strategies including recruiting from known and trusted community organizations, developing new relationships/partnerships with community organizations,[11] and fostering a culture of transparency of research findings by sharing preliminary results. This approach helped participants develop trust in the research and resulted in participants referring the researchers to other potential organizations for data collection. Hence, adopting a lens of cultural humility by demonstrating our desire to learn more about what is considered culturally appropriate, has enhanced our successes in recruiting African immigrants into our studies.

Critical to the success of the research is to engage community "gatekeepers," such as leaders of religious institutions and community-based organizations to help build trust with participants. Among African immigrants, gatekeepers include religious leaders (pastors, priests, church elders and imams), and community organizers. We leveraged collaborative relationships with various gatekeepers to maximize participant recruitment and enrollment. Gatekeepers helped us to identify the best days and suitable areas to hold field days for data collection; helped advertise the research studies by distributing study flyers at their respective organizations and invited the research team to address their contingents directly. The gatekeepers became more receptive to the research studies when they were assured of confidentiality of the data collected.

In community-engaged studies, race/ethnicity concordance is a facilitator of participant recruitment and retention.[17] Most of our study team members and principal investigators were African immigrants. Being from similar backgrounds helped our team to build trust among the community members and effectively communicate our commitment to improving the health of the population. We used inclusive language such as the word "us" to collectively refer to the African immigrant population. Our team members were able to speak some native dialects of the community members when interacting with participants who may have considered the research teams to be "cultural insiders." This strategy also facilitated engagement, recruitment, data collection and return of results. Future studies among African immigrants should include research personnel who share similar African heritage to ensure successful recruitment and retention outcomes.

Immigration Status and Study Participation

Immigration and legal status are essential considerations in conducting research among immigrant populations. For potential participants, the revelation of their legal status is a valid concern. Undocumented immigrants who choose to participate in research may fear that their status will be disclosed to authorities which may result in detention and deportation.[18] Therefore, we used an oral consent form informing participants that their names or other personal identi-

fiers would not be collected and that all the study-related materials would be stored safely. Participants who were initially hesitant agreed to complete the survey once reassured with the oral consent form. In some studies, we did not ask participants about their legal status; in others, we asked if they were US citizens, permanent residents, students, or "other." In the African Immigrant Health Study, we gave participants the option to provide identifying information (name, phone number and email) so that we could contact them in the future for the other studies on African immigrant health. Most (80%) participants were willing to provide this information.

Religious Considerations

Most African immigrants in the United States identify as Christians (67%) or Muslims (22%).[19] We have been able to successfully engage members from Christian and Muslim places of worship and noted some similarities in our experiences with both groups. We noted that religious leaders served as gatekeepers and their approval was paramount.[20] We did not employ separate strategies for each religion. Many of these organizations met at rented multipurpose venues, so data collection procedures had to be performed efficiently to avoid incurring additional expenses to the religious group for renting the space. To avoid this, we initiated the set-up for participant recruitment before the religious meetings started. Also, some members depended on others for transportation and were therefore restrained in their availability. Providing them with a postage-paid return envelope to return survey items encouraged them to participate and increased survey completion rates.

As religion is an essential value for the majority of immigrant populations, it is necessary to show religious competence when recruiting African immigrants. We made sure that we observed religious practices accordingly. For example, at mosques, the female team members covered their hair when entering the meeting places. Everyone was required to remove their shoes at the meeting places of worship. However, this was not mandatory when recruiting at Muslim community events held outside such as picnics.

Participants recruited from religious groups may differ from the general population concerning health behaviors and acculturation strategy. For instance, religious African immigrants may be less likely to smoke than non-religious African immigrants due to the stigma associated with smoking.[21] During data collection, religiosity may influence their response choices on instruments such as stress, resilience, social support, and depression. Some Christian participants responded according to their faith in the ideal and not by their current circumstances. This observation was particularly evident when completing instruments for social support, resilience, and stress. For example, despite responding affirmatively to having stress, participants would respond "It is well in Jesus' name." Therefore, existing instruments that measure social support, resilience, and stress that have not been validated may have different psychometric properties when used among African immigrants and may perform differently when used in religious settings.

Religion is integral to the narratives shaping experiences of African immigrants in the United States by serving as an invaluable resource in times of challenges and despair. It provides access to a social network which can provide social support and alleviate the stress of acclimating to life in the United States. Future studies should engage religious groups in the design and conduct of translational research among African immigrants.

Logistics of Study Implementation

In the absence of a sampling frame of African immigrants, we employed convenience sampling strategies to recruit from religious and community-based organizations and African festivals, with the intent of purposively targeting sites with a high concentration of African immigrants. We approached each site's respective leaders for written approval before conducting in-person study procedures. We screened potential participants at study visits to determine eligibility. Participants who met the inclusion criteria and gave oral consent were then asked to complete a self-administered survey. The questionnaires included sociodemographic questions, health care utilization behaviors, health history, screening behaviors, and psychosocial factors such as social support, resilience, stress, and discrimination. Also, we collected biochemical or physical measurements, including lipid profiles in the Afro-Cardiac Study[22] and height, weight, and blood pressure in the African Immigrant

Health Study. The Point-of-Care Testing system used to obtain the lipid profiles of participants[23] allowed us to obtain results within a few minutes and provide immediate counseling. Additionally, we provided educational pamphlets on cardiovascular health as well as resources for uninsured adults within the county of the study visit. After completing the studies, participants received gift cards in a nominal amount as remuneration.

After our first data collection in the African Immigrant Health Study, participants reported that because of time constraints after the religious meetings, completing the self-administered or interviewer-administered survey in 30 minutes was burdensome. Therefore, we created an online version of the survey and shared the electronic link with participants one to two weeks before the in-person study visit. This strategy allowed interested participants to complete the questionnaire at their leisure before the in-person study visit. After completing the online survey, participants received auto-generated unique identification numbers and were instructed to bring their numbers to the in-person study visit in order to ultimately link the survey to their physical measurements and receive a gift card. Also, we obtained tablet computers to bring to subsequent study visits as we found that some participants preferred to complete the electronic survey instead of the paper survey. Although all our surveys were in English, we explained some of the questions in local dialects, if participants made this request.

Being cognizant of the potential limitations of only recruiting participants from religious and community-based organizations, we further recruited survey participants via online platforms including Facebook, WhatsApp, Instagram, and Twitter. Study-specific Facebook and Twitter accounts were created, and the infographic about the study that included an electronic link to the African Immigrant Health Study survey was posted and encouraged participants to share the link within their social networks. This strategy allowed us to increase our study reach beyond the Baltimore-Washington area and increase our sample sizes. Online recruitment yielded the highest recruitment rates (70%) in the Afro-Pap Study.[11]

Fostering Long-term Partnerships with African Immigrant Communities

In the process of conducting research among African immigrants, one of our priorities was to establish a long-term partnership with the population. We observed that participants were highly interested in knowing how they could benefit from the study findings. Therefore, the online platforms we created will be used to disseminate the study findings. At various organizations, our team also gave presentations at health fairs, distributed educational materials and linked communities to health care resources. We also provided handouts with information on where to receive health care and social services in the respective counties where data collection occurred for uninsured participants. Although the process of finding and tabulating the resources for the respective counties from which we recruited was time-consuming, we felt that this was critical because immigrants are likely to experience barriers accessing appropriate health and social services due to the high rates of being uninsured/underinsured.[22]

Gaps in Knowledge and Future Considerations

African Americans are a heterogeneous group with genetic ancestries from Africa, Asia, Europe, and the Americas. However, attempts to explain health disparities in Blacks in the United States fail to acknowledge the substantial cultural, social, and genetic heterogeneity, resulting in knowledge gaps regarding important etiological questions. Excluding African immigrants or not purposively recruiting this population is a missed opportunity to examine the genetic, social, and cultural diversity in this population to enhance precision medicine, individual behavioral interventions, organizational strategies, community programs, and policy approaches to improve health.

To improve our understanding of how genetic, cultural and environmental factors influence susceptibility to disease and address health disparities in Blacks, African immigrants must be engaged meaningfully in research. The Africans in America Study[24] is an exemplar of clinical studies among African immigrants to improve the diagnosis of diabetes among Blacks. Rotimi et al[25] have also posited that the African diaspora may improve our understanding of genes such as the apolipoprotein L1(APOL1) and lipoprotein lipase (LPL) that disproportionately affect persons of African descent. Future prospective studies may increase our understanding of how in-

dividual biological and behavioral risk factors among African immigrants interact with the physical and social environmental factors to which they are exposed in their new home countries. These studies may also identify targets for future interventions to improve the health of African immigrants.

Conflict of Interest

No conflicts of interest to report.

Author Contributions

Research concept and design: Commodore-Mensah, Turkson-Ocran, Cudjoe, York, Mossburg, Adu, Dennison Himmelfarb, Cooper; Acquisition of data: York, Mossburg, Adu, Cortez, Mbaka-Mouyeme, Mwinnyaa; Data analysis and interpretation: Nkimbeng, Adu, Dennison Himmelfarb; Manuscript draft: Commodore-Mensah, Turkson-Ocran, Nmezi, Nkimbeng, Cudjoe, Mensah, York, Cortez, Mossburg, Patel, Adu, Mbaka-Mouyeme, Mwinnyaa, Cooper; Statistical expertise: Patel; Administrative: Commodore-Mensah, Turkson-Ocran, Nkimbeng, Cudjoe, Mensah, York, Mossburg, Adu, Cortez, Mbaka-Mouyeme, Mwinnyaa, Dennison Himmelfarb; Supervision: Commodore-Mensah, Patel, Dennison Himmelfarb

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