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Understanding Transnational African Migrants' Perspectives of Dietary Behavior

Kelechi Ibe-Lamberts[1] · **Daudet Ilunga Tshiswaka**[2] · **Anuolwaupo Osideko**[3] · **Andiara Schwingel**[4]

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Abstract
Objective Dietary behaviors serve as determinants for chronic diseases such as hypertension across various ethnicities worldwide and within the USA. We investigated dietary perspectives specifically for US transnational African migrants, a migrant cohort subset of individuals who maintain cross-border ties with their indigenous communities of origin.
Method Using PEN-3 model, focus group interviews with 14 transnational African migrants (seven males and seven females) were conducted in Chicago to explore the perceptions of dietary behavior in regard to chronic disease risk factors among our target population.
Results The findings underscore that transnational African migrants maintain strong ties with their African community of origin, impacting dietary behaviors and attitudes. Further, transnational African migrants maintain traditional dishes through their connections. Despite the ability to import African traditional foods through personal connections, African migrants face a challenge in maintaining culture yet conforming to norms of acculturation.
Conclusion Results from this study serve to advocate for further exploration of the interaction between African migrant dietary behaviors and risk factors to chronic diseases.

Keywords Transnationalism · African migrants · Diet · Risk factors · PEN-3

✉ Kelechi Ibe-Lamberts
kibelamberts@ufl.edu

Daudet Ilunga Tshiswaka
daudeti@uwf.edu

Anuolwaupo Osideko
anuoluwapo_osideko@brown.edu

Andiara Schwingel
andiara@illinois.edu

[1] Department of Psychology, University of Florida, 114 Psychology Building, PO Box 112250, Gainesville, FL 32611-2250, USA

[2] Department of Public Health, University of West Florida, 11000 University Parkway, Building 38, Room 104, Pensacola, FL 32514, USA

[3] Department of Health Services, Policy, and Practice, Brown University, 121 South Main St., G-S121-7, Providence, RI 02914, USA

[4] Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign, 110 Huff Hall, 1206 South Fourth St., MC-586, Champaign, IL 61820, USA

Introduction

The US census projections state that the foreign-born population will increase to approximately 81 million people by the year 2050 [1]. The number of African migrants in the USA grew 40 times between the years 1960 and 2007 from 35,355 to 1.4 million, one third born in West Africa [2]. Information about African transnational migrants is limited since often they are grouped with the US-born Blacks (African Americans) [3, 4]. This unique group of African transnational migrants depends on multiple and constant interconnections across international borders and has their public identities configured in relationship to more than one nation-state; they are dual citizens involved in affairs in two different locations [5, 6]. Today, transnational migrants encounter a world that is much more diverse and due to increased technological advances (e.g., Skype, WhatsApp, Facebook, etc.) maintain a stronger transnational connection compared to previous eras that more aggressively demanded assimilation [4, 7]. Debate

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about when and how the word *transnational* should be employed continues, but recognition is growing for observing objective dimensions in transnational practices [7].

With the migrant population increasing, US public health services will also have to increase its capacity to serve this population. The prevalence of chronic diseases in the USA varies generally between ethnic groups [8]. External factors such as socioeconomic status, environmental barriers, lack of education, health literacy, and delayed diagnosis may correlate to the increased risks of chronic diseases in Blacks [9]. The list of the presumed reasons for this higher prevalence is not exhaustive. Despite increase in awareness in chronic diseases like hypertension in Blacks since the 1980s, control levels continue to fall behind Whites [10].

In respect to research on Black health in the USA, there is a propensity for researchers to group all Blacks together, when there are in fact cultural differences in lifestyle choices, activities, and social norms between Blacks (so called African-Americans, US born) and African migrants [11, 12]. Figure 1 illustrates the complex dynamics of the Black population in the USA. Respectively, African-Americans—descendants of slaves brought to the USA in the 1700s and freed in 1865—and African migrants—foreign-born immigrants from Africa arriving in the USA since 1965 to present day—share two separate histories of migration to the USA that influence the construction of cultural identity, attitudes, and daily life activities of both groups. Because of their sustained cultural practices due to multi-national ties, transnational African migrants represent a group of immigrants with unique practices and beliefs.

Studies have indicated that African migrants initially display better health profiles than African-Americans and non-African Whites [13]. Scholars attribute this phenomenon to the *healthy migrant hypothesis*, which states that entering migrants represent the healthier portion of their population and are not reflective of the true health status of the population from their country of origin [14]. This may lack some validity in the case of today's African migrants due to the influx of African migrants that are also labeled as refugees, people who may not necessarily represent the elites in their origin's society. A review on refugee health studies reported that refugees have a high prevalence of dental, nutritional, infectious, and pediatric illnesses along with an increased morbidity, decreased life expectancy, and poor health habits [15]. According to the 2010 US census, about a quarter of African migrants came to the USA as refugees or received asylum and not on a voluntary basis like classical immigrants do. Researchers in Europe face the same challenges with African migrants in Europe being an understudied population, but rather a group combined into the overall Black population [16]. This emphasizes on the premise that African migrants are overlooked and need to be further explored independently on a global scale.

It is well documented in research on other immigrant groups (Asian and Hispanic) that the engagement in more high-risk, unhealthy behaviors such as poor diet choices and lack of physical activity occurs once acculturated to the USA, a steady shift away from traditional cultural diet [17]. Satia-Abouta [18] introduces this concept of "dietary acculturation" as when a member of a minority group adopts the eating patterns/behaviors of the dominant/host group [19–23]. For instance, among Asians, adoption of Western diets leads to high consumption of processed foods, snack foods, and fat along with a decrease in fish, vegetable, and whole grain consumption [19, 24]. Hispanic immigrants tend to consume high-fat, sugary foods and processed foods and reduce

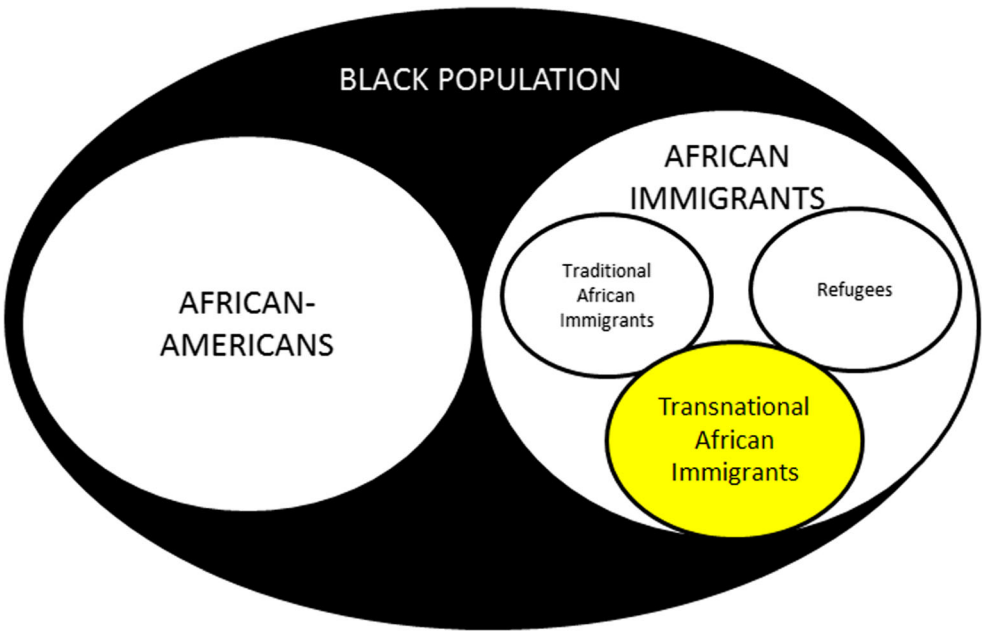

Fig. 1 The Lamberts-Ilunga Diagram of Black migrant displays the complex dynamics of the Black population in America

consumption of beans, fruit drinks, and whole grains when compared with non-immigrant Hispanics [25]. Research also indicates that these choices—diet in particular—are correlated with members of these groups attempting to form a new identity, wanting to prove they belong in America [26]. There is not enough research evidence to form implications that these aforementioned factors are applicable in the African migrant population.

This paper aims to explore the links between transnational social activities, culture, and health behavior risk factors to chronic diseases, specifically dietary behaviors and diet perceptions of transnational African migrants living in the USA. These behaviors could be delineated by factors such as culture, displacement, and acculturation. Studies have shown that diet is one of the more direct determinants of several chronic diseases and the demonstration of a healthy diet bodes positive results for several chronic disease management strategies recommended by health professionals [20]. This study seeks to explore any possible influence that transnational activities and behaviors of these unique African migrant groups may have on risk factors for chronic diseases, with our primary risk factor being diet.

Methods

Participants

Participants in this study included men and women between the ages 25 and 65 years, self-identified African transnational migrant living in the USA for a minimum of 2 years. There were a total of 14 participants (seven females and seven males) originally from Ghana and Nigeria (West Africa). Participants were included through a snowball sampling technique since it is hard to reach community due to their demanding schedules. Selection of participants was not based on shifts in dietary behavior due to acculturation, which further emphasizes our purpose to explore this topic.

Data Collection

Screening Phase

Participants were recruited and screened with questions relating to their dietary behavior, to report their health status and their transnational activities, including maintaining relationships with friends and families back in native homeland, maintaining cultural practices learned from countries of origin, and traveling back home. Following this screening process, those who met the inclusion criteria were invited to participate in a focus group session. The inclusion criteria were the following: residence in the USA for a minimum of 2 years, comprehends English, and the maintenance of transnational ties with native homeland. None of the participants had any diagnosed chronic diseases.

Focus Groups

Two 90-min gender-based focus group sessions were conducted in English by two trained researchers at a local church in the Chicago area. The PEN-3 model guided the semi-structured focus group questions. The PEN-3 cultural model [27] provides a framework for analyzing health promotion and assessment in a way that captures both cultural sensitivity and also appropriateness for health program development. This model has been successfully used for capturing cultural dimensions that interfere with health education and interventions in migrant communities [27–29]. During the focus group, participants were asked questions regarding past and present beliefs about their diet and chronic diseases, as well as behaviors and other dietary risk factors for chronic diseases. Sample questions include the following:

- What types of food do you eat?
- Did you eat the same foods back in your native land?
- If so, how do you maintain your native dishes?
- Who influences the food you eat?
- In what way do you feel your diet impacts your health?

Focus groups were conducted until the point of saturation and themes began to emerge.

Data Analysis

Initially, each researcher, trained in qualitative data analysis, separately coded and analyzed the data for themes using the PEN-3 model dimension of *relationship* and *expectations*, which includes the subsidiary factors of *perception*, *enablers*, and *nurtures* [27]. *Perceptions* focus on the knowledge, attitudes, values, or beliefs stated by the participants that ease or impede personal motivation and decision-making to maintain or change physical activities, practices, or beliefs. *Enablers* allude to societal, systemic, or structural influences that may boost or create barriers to the maintenance or change of health/illness beliefs and practices. *Nurturers* are the supportive and/or discouraging influences that a person may receive from significant others. The transcribed data were reviewed in entirety, and notes or ideas were written beside the data. Then, segments of text were divided and codes were assigned to describe content. With the data reaching a point of saturation, the codes were grouped into themes. Finally, the researchers came together to pool the themes and reach a three-fourth interrater consensus. Preliminary findings conjured common themes such as "African food is healthier," "our food is our identity and connection to home," or "time influences family food choices." The final themes represent the perspectives of

the majority of the participants. When negative cases arose, the team discussed each case, using them as an opportunity to further refine each theme [30].

Results

Several themes emerged based on the specific comments that participants evoked to express their knowledge, attitudes, values, and beliefs. Two main themes that fell within the *perceptions* category were *fresh African food* and *self-preparation of African meals*. *Fresh African food* alludes to having fresh ingredients and no preservatives in Africans' traditional dishes. This means that the ingredients are seen as natural ingredients and are perceived as healthier when being prepared and consumed. The participants' statements reveal that they consider their traditional diets healthier than what they are exposed to in the USA. One of the participants stated:

> *I feel like Nigerian meals in general are more healthy than American meals. There is not a lot of processed stuff; I don't eat any canned goods a lot if it is either fresh spinach, fresh tomatoes to make stews or things like that. There are not a lot of junk foods, so if you think about it we eat carbs, but they're good carbs, complex carbs. So I think it is also like wholesome eating.* (P1W, 27 years old)

Another participant argued:

> *Back at home...we have things fresh, so all this that they're talking about (unhealthy American Food) is a lot different. If you're making salad back home you have lettuce, you have carrots, you have cabbage, ...it depends on you.* (P2W, 63 years old)

Self-preparation of African meals meant that participants believe that they have more control of their dietary behavior based on the ability to cook all their meals from scratch using fresh ingredients. In using fresh tomatoes, vegetables, and even meat while preparing their meals at home, the participants believed that this action controls the amount of positive or negative vitamins and minerals that are being put inside their bodies. A participant mentioned:

> *If you think about it (their traditional diet), it means that we are cooking food from scratch most of the time. We are not going out and buying food, and just because the food isn't salty don't mean it doesn't have any high sodium content. So at least if you are preparing your own food you're in better control of your health and if the doctor says you know you have high blood pressure than you're at risk for that. You are able to control how much salt is put in it.* (P3W, 25 years)

> *My mom is diabetic, and I know some of that stuff, like I found out when I stopped putting the salt in her food, I stopped salt completely… It just helped her, now she's not having so many episodes.* (P1W, 27 years old)

This highlights the ideal that their diet also allows them to communicate with their healthcare providers better because they can actually tell their doctor what is going into their bodies, making it better to prevent chronic diseases.

Access, *cost*, and *transnational connections* were emerged themes that fell under the *enablers* category.

In regard to *access*/*cost*, the participants believe that they have access to the appropriate indigenous ingredients that are essential to the preparation of their traditional dishes through international farmers/world markets and also ethnic-based restaurants that serve as transnational establishments. This allows for the opportunity to sustain the traditional diets in which they associate with healthier options.

> *We can buy African produce here, but it's too expensive!* (P2M, 35 years)

> *Most of my diet here is still Nigerian foods and I shop at Nigerian restaurants, I mean stores…old world market* (P4W, 26 years)

> *Well I would say now since I obviously don't live with my family but I still eat the same food that I ate when I was growing up which is basically like you said a lot of rice, fufu [traditional African dish] you know like with chicken* (P1M, 55 years old)

Although the participants believe that they have access to these ingredients and products that are associated with their native homeland, it comes at a costly price. These traditional ingredients are sold at an expensive rate at these international markets or restaurants. Because of this, participants admit that it is cheaper and easier to access fast foods than the expensive fresh food products compared to their native lands where these ingredients were much cheaper. This increases their likelihood of consuming unhealthy eating products at times:

> *So, but the difference between back home and here is, what I've seen is, it's more cheap(er) to eat fresh food back home [pause] Eating organic is expensive. It's not as if you can't get the same, they have it, but it's so expensive.* (P2M, 35 years old)

> *We have yam [a form of vegetable] here [in the US], but yam is so expensive like.. instead you can use potatoes…* (P5W, 45 years old)

Transnational connections allude to the belief that transnational migrants can alleviate the high costs of imported products and goods from back home by removing the international markets as facilitators and actually traveling to their native homelands to retrieve indigenous food products to bring back to the USA. Compared to most classical migrants, transnational migrants have a unique characteristic that is qualified by their unique sustained connections to their homeland in various forms. This participant highlights the idea of physically traveling back to their homeland during visits and bringing back the necessary goods and products with them purchased for prices much cheaper than it would be through "world" markets. A participant argued:

> *You want things from home, whereas we want to go out, all the way out [to native homeland] to show that [to prove]. Like "No, I don't take such thing [whatever is here in US].*" (P3W, 45 years old)

> *Honestly speaking, people still believe in what, you know, is over there [native homeland]. If I have a means of getting things, I'd prefer it…. If there's means of obtaining things, you know, whatever will help you, you'd rather get it from there [native homeland]* (P4W, 26 years)

They may also come in the form of remittances through friends and family members who would also serve as couriers, bringing gifts in the forms of products and indigenous goods from the native homeland.

Family meals are essential and *limited time* were themes that fell under the *nurturer* category.

Family meals are essential because family eating the same meals shared in native homeland in current household has been pinpointed as a way of sustaining their healthy traditional dishes. The participants believed that their culture emphasizes that the whole family eats what is being made, especially when it is a traditional meal. Below is a comment one of the participants made:

> *Mostly family, I mean if that's what the family is eating is what you're going to eat* (P4W, 26 years old)

> *If the family is okay and they can give you that, they give you that. But, if the head of the family is saying oh we're eating amala [an African dish] tonight, there's nothing you can do, you just have to go along with that* (P2M, 35 years old)

Limited time alludes to the participant's belief that there is inadequate time to consistently consume traditional diets. With work demands being high and time-demanding, it is very difficult for African dishes to be cooked and eaten frequently in a week. It inhibits them from consuming healthier options and rather succumbing to cheaper, faster options that may be less healthy but more considerate of their time. Not preparing dishes from scratch and having to rely on fast foods are circumstances that serve as unhelpful *nurturers* among transnational migrants. Limited time also impacts their ability to have variety in their traditional dishes and makes them more dependent of cooking one traditional dish and eating it multiple times a week until it is finished:

> *Some people work through out of the whole week so they cook and store it in the fridge for the whole of the week. So, every evening he comes, the same food, every evening, whether he likes it or not* (P1M, 55 years old)

> *If I get hungry now, the first thing I think of is rice… maybe when getting home, you start seeing other varieties that you can touch but the first thing that comes to mind is rice and you know that's like an everyday thing. You know I mean you rarely see a day go by that you don't eat rice. You know for the Nigerian, or maybe I should just say me. You know, it's every day for me* (P3M, 32 years old)

There is little variety and not enough time to mix ingredients to prepare other types of traditional meals.

Discussion

Little has been published on the perception of dietary behavior of African migrants in the USA. As the number and variety of African migrants increase, more attention must be paid to their dietary behaviors and patterns, which are related to the prevention and management of chronic diseases [31]. Findings from the focus groups underscore that transnational ties and activities do impact dietary choices and perceptions of our participants.

Participants believe their traditional diets are healthier. The average traditional African dishes are reportedly healthier because they consist of a large amount of vegetables and protein [32–34]. Our participants stressed that cooking their traditional meals gives them more control of the substances that go into their bodies and that are cooked using fresh products and indigenous ingredients from their native homeland. Although they acknowledge that traditional dishes naturally contain a certain level of sodium, they still believe that they have the ability to control the measurements of sodium in their diet. They believe this displays a certain level of accountability with their overall health habits and it is also important when discussing their diet with healthcare providers; they can tell their doctors exactly what they eat and how much they eat of it.

Participants also discussed the importance of sustaining traditional diets for the sake of their families. Our participants stressed the importance of family meals and how it correlates with cultural identity; families commonly share meals, so

sustaining the traditional diet within the household is important for a family in sustaining its cultural identity. Additional research shows that alterations in dietary behavior can impact the overall health status of a migrant family [35]. Evidences show that eating the same foods while living abroad is linked to cultural identity, self-identity, and happiness [36]. Our observations strongly suggest that sustaining their traditional diets while in the USA is a positive health behavior that prevents their risk for some chronic ailments.

Having access to these indigenous ingredients is critical to the proper preparation of these dishes. Participants claimed that although these ingredients do exist and are available at respective world markets or stores that are in the USA, these products tend to be very expensive, similar to how organic food products are more expensive in grocery stores. This creates a possible impediment to being able to sustain their "healthy" habit of cooking traditional dishes consistently in America and leads them to settle for alternative foods. Traditional diets though are sometimes lost with acculturation over time, initiating a cycle of negative acculturation leading to poor health outcomes that can influence migrant groups when they assimilate to American behaviors [12, 37]. Migrants initially retain traditional food but also find ways to integrate traditional foods along with consuming new foods [18].

Research reveals that those who do not fully acculturate and tend to maintain their traditional lifestyle and dietary behaviors display a lower level of hypertension prevalence [38]. Participants stressed that they maintained traditional diets through their ability to travel back home and acquire some indigenous ingredients at a cheaper price and bring them back to the USA, whether it be personally or through visiting family/friends—which highlights their transnational attributes. These products are then frozen and stored for future usages whenever time permits to cook dishes. This transnational connection challenges dietary acculturation because the participants speak of creating transnational channels that allow for the continued access to the necessary products needed to produce their traditional entrees more consistently. Their connections allow access to fresh indigenous ingredients. Their ability to utilize their connections to both lands through various avenues creates an advantage of accessing indigenous food products cheaply. Their primary cultural dietary choices and behaviors remain intact and sustained because of their unique transnational activities despite acculturation barriers.

Despite the perceived positive attributes of maintaining traditional diets and accessing ingredients from their native land, our participants still spoke of the difficulties of maintaining their diets due to their hectic lives and occupational demands in the USA. Studies show that migrants are tasked with adapting to occupational demands and a change in lifestyle that may redound to stress, decreased social support, and a reduction of physical activity with respect to work, travel, and various leisure activities [39]. This can affect diet choices, as one may choose food based on convenience and access and not for healthy purposes. This can also impact the household dietary choices. Participants explain that the lack of time disallows for variety in the preparation of traditional meals in the household. One may eat a certain type of traditional meal for a week until the next time another meal can be cooked. Their limited time to cook traditional diets consistently due to busy work schedules is leading them to fast food or other high-caloric diet consumption. So, they can still at times engage in high-risk behaviors for hypertension.

Transnational African migrants maintain a unique ability to open channels that can potentially influence health behaviors that can impact risk factors for chronic diseases. However, they still face similar challenges that the classical migrants would face in regard to limited time and work demands, food deserts, and low socioeconomic status. Despite the soundness of the methodological approach of this study, there are still existing limitations. Generalization of other transnational Africans must be restricted because the sample of focus group participants was fairly small in size and limited to particular organizations, making it harder to generalize the results to a much larger population. Nonetheless, this pilot study represents an attempt to investigate a complex topic within an understudied population. Future studies should include a larger sample size and participants from other regions of the country. Second, a possible use of a mixed method compared to a solely qualitative method could enhance the finding; utilizing a surveying method can possibly alleviate the issue of generalizability of the results.

This study creates implications for further investigations on the nuances of eating behaviors and its impact on long-term health outcomes relative to hypertension risk factors in the US African migrant population. We are cognizant of the fact that diet is only one factor of chronic disease risk factors, and we believe further studies on other factors such as physical activity or alcohol consumption can be explored. The byproducts of this study are also aimed to create further insight on the phenomenon of transnational migrants. Future studies should also focus on the impact of the offspring and further generations of this unique population and the particular behaviors that they may engage in.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institution and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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