

# Surveying Indigenous Latin American Languages in NYC: A report to the NYC Department of Health

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## Abstract

**Background:** The New York City Department of Health and Mental Hygiene and the Endangered Language Alliance (ELA), a non-profit organization with strong community ties, partnered for the first study focused on the demographics, communities, communication, and health of Indigenous Latin American communities in New York. In this report, we summarize key research on Indigenous Latin American immigrants in the United States, present the development of the project and the formation of a team of Indigenous community experts as well as the creation of a questionnaire designed to explore the demographics, communities, language use, and health of Indigenous immigrants. **Methods:** An initial period of research, consultation, and piloting of an in-depth interviewers' guide for the use of ELA-trained community experts fluent in the relevant Indigenous languages, followed by 30 qualitative interviews with members of 6 major Indigenous Latin American ethnolinguistic groups (Garifuna, K'iche', Kichwa, Mam, Mixtec, Nahuatl) now living in New York. **Results:** The following key findings are discussed: (i) Indigenous Latin American communities in the New York area are substantial and growing, but often remain dispersed, invisible, and without access to services, including translation and interpretation; (ii) Speakers of Indigenous languages are maintaining their languages in NYC to a degree, including through digital communication tools and transnational ties, but inter-generational transmission is faltering; (iii) Reported health challenges in this relatively young population, many with children, include diabetes, alcoholism, a worsening diet, and pervasive marginalization.

## Contents

<b>I</b>	<b>Background</b>	<b>3</b>
<b>1</b>	<b>Origins of the project</b>	<b>3</b>
<b>2</b>	<b>Introduction to ethnolinguistic groups in focus</b>	<b>5</b>
2.1	Countries . . . . .	5
2.2	Peoples . . . . .	6
<b>3</b>	<b>Previous research on Indigenous Latin Americans in the US</b>	<b>10</b>
3.1	California and beyond . . . . .	10
3.2	New York City . . . . .	11
3.3	Health research . . . . .	13

<b>4</b>	<b>Methodology and research process</b>	<b>16</b>
4.1	Organizing and convening the team . . . . .	16
4.2	Designing the survey and sampling frame . . . . .	18
4.3	Piloting the survey and iterating community feedback . . . . .	21
<b>5</b>	<b>Ancillary activities</b>	<b>22</b>
5.1	Xilonen Program . . . . .	22
<b>II</b>	<b>Qualitative interviews</b>	<b>24</b>
<b>6</b>	<b>Themes</b>	<b>26</b>
6.1	Demographics and community . . . . .	26
6.2	Language use and attitudes . . . . .	29
6.3	Discrimination and language access . . . . .	33
6.4	Health . . . . .	35
6.4.1	Traditional medicine . . . . .	35
6.4.2	Food and nutrition . . . . .	36
6.4.3	Health issues . . . . .	38
6.4.4	Pregnancy and childbirth . . . . .	40
6.4.5	Challenges with care . . . . .	41
<b>7</b>	<b>Key findings and recommendations</b>	<b>43</b>
<b>8</b>	<b>Conclusion</b>	<b>45</b>
<b>9</b>	<b>Appendix A. List of speakers</b>	<b>47</b>
<b>10</b>	<b>Appendix B. Interviewers' guide (attached)</b>	<b>48</b>
<b>11</b>	<b>Appendix C. Interview transcripts (attached)</b>	<b>48</b>

## Part I

# Background

## 1 Origins of the project

Discussions beginning in the summer of 2016 led to a collaboration between the Endangered Language Alliance (ELA), a local nonprofit with a mission to document and support linguistic diversity, and the NYC Dept. of Health and Mental Hygiene (NYCDOHMH) on the topic of Indigenous Latin American populations in NYC. In the wake of the much publicized *Health of Latinos in New York City* (Greer et al. 2017), an initiative entitled *Proyecto Comunidades Florecientes* (PCF), was launched by Thelma Carrillo and Krystal Reyes of the Division of Family and Child Health. The initiative sought to better understand and serve traditionally neglected segments of the Latino population in NYC. Among the most marginalized and misunderstood segments of this population are Indigenous peoples of Mexico, Guatemala, Ecuador and Peru, who settled in New York in considerable numbers during a period of mass migration beginning in the 1990s. Despite their large numbers there is still no basic demographic information on these communities, nor can we find information about their livelihoods, experiences and challenges in the city, outside of anecdotal remarks and informal observations. Remediating this was seen as an urgent priority given that Indigenous Latin Americans appear to occupy some of the most precarious niches of the local labor market—construction, take-out delivery, and food preparation in kitchens and delis—and appear to be disproportionately underserved in areas of health, education, and other social services.

The Indigenous population of the Americas fell from an estimated 150 million in 1492 at the time of first European contact to an estimated 11 million just one hundred years later. In some areas, 90% of the population was killed by disease. It is estimated that at the time of European contact Indigenous peoples of the Americas constituted 20% of the world population whereas today they constitute roughly 3% of the world population. Indigenous communities struggle with a long history of discrimination that continues unabated until the present and, consequently, extreme marginalization in their countries of origin. As a consequence, migration and urbanization have affected indigenous people disproportionately both in the Americas and beyond. We can see this most clearly in the United States and Canada, where data collection has been the most systematic. Figure 1 shows just how much the increase of the indigenous population has outpaced the increase of the general population for all major Canadian cities, a disparity which is due to migration rather than differences in birth rate.

Many new immigrants to the US coming from Mexico and Guatemala are monolingual speakers of indigenous languages and thus find themselves doubly minoritized in the context of NYC, where Spanish acts as a crucial lingua franca between communities of various national origins.

Given the aforementioned challenges, DOHMH sought aims to partner with indigenous communities to improve health outcomes using a participatory action research and community engagement approach. ELA’s original role in the project, based on its previous experience working with Indigenous Latin American New Yorkers, was to prepare the way for a potential city-wide survey of the major Indigenous Latin American linguistic communities.

ELA submitted a proposal including a sampling frame for such a survey after consultation with community members, organizers, demographers and other experts at the DOHMH. Given the available resources, it was agreed upon that a set of qualitative, ethnographic interviews should precede any further steps towards seeking support for a large-scale survey. The scope of the project was to carry out 30 interviews across 6 Indigenous Latin American ethnolinguistic groups. Part of the interview was designed with the larger survey in mind. We were interested in gathering

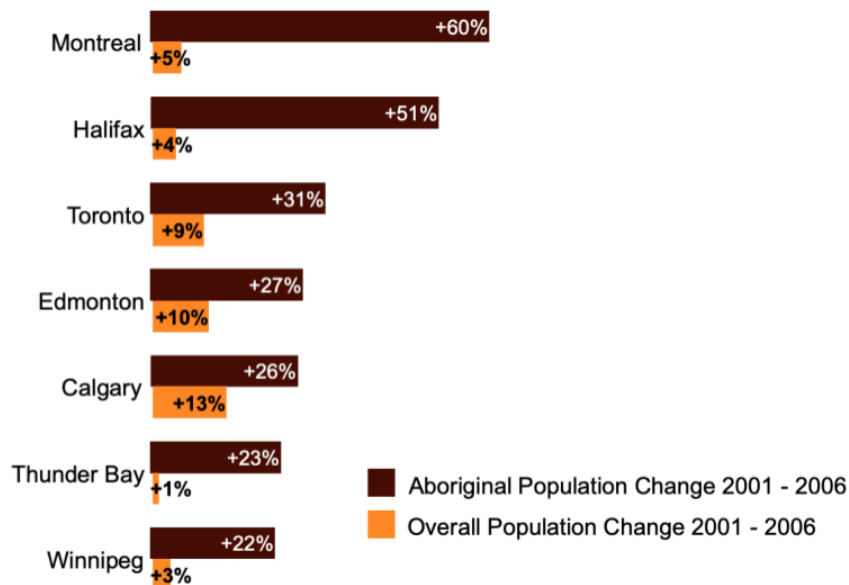


Figure 1: Urbanization among Indigenous/Aboriginal Canadians (Enviroinics Insitute 2010)

community estimates of the size and location of the communities, their gathering places, favored means of communication as well as any divisions that would have to be taken into account for a larger census. Another part of the interview focused on health and experiences with health care in New York City. These questions focused on personal experiences while eliciting estimates about what health problems were most pronounced in a particular community. Nutrition, traditional food and changes in diet were also discussed as part of this portion of the interview. Finally, we were also interested in language issues. All of the interviewees self-identified as Indigenous and almost all were first language speakers of an Indigenous language. We wanted to know about their experience as speakers of Nahuatl, K'iche', Mixtec, and other indigenous languages in New York City. Did they face linguistic discrimination? Did they find it difficult to communicate with health care providers in Spanish or English? We also wanted to know about the domains of Indigenous language use in their families and communities. Were the languages being passed down to the younger generation? If not, what, if any, consequences do the children suffer by not speaking their parents' first language and what consequences exist for the language community as a whole?

These questions span a wide range not typically covered in a single study. The innovative nature of the current study is precisely in its holistic view of language, culture, health and nutrition in a diaspora setting. It is the first such study of Indigenous New Yorkers in NYC with regard to language and health.

With the strong encouragement of the DOHMH, the approach taken to this research was explicitly *decolonizing* in its attempt to recalibrate power relations in research and planning. As one of the framing documents of the project stated, one ultimate aim is “the creation of an open space for the Indigenous community to partner with the health department to improve health” (Garcia-Zepeda 2016). In practice, this meant training community members to carry out many of the interviews in their own languages, also an apparent first for this type of a study. Studies of Indigenous Latin American health in the US have exclusively undertaken interviews and surveys in Spanish, thereby excluding Indigenous language monolinguals and potentially affecting the results of bilingual participants, as well.

At the conclusion of the interviews, we again consulted with our community experts to highlight elements that they considered both important and representative of their communities. These have been incorporated into the current report together with other excerpts to give as full a picture as possible for these communities in their own words.

## 2 Introduction to ethnolinguistic groups in focus

As mentioned above, the current study focused on 6 groups that were estimated to represent the most numerous Indigenous Latin American ethnolinguistic groups in New York City: Garifuna, K'iche', Nahuatl, Kichwa, Mam and Mixtec. Since 2010, ELA has also had direct or indirect contact with New Yorkers who are speakers of Tlapanec, Zapotec, Chinantec, Amuzgo, Otomí, Mazahua, Tepehua, Totonac, Huastec — all from Mexico — as well as Kaqchikel and Qanjobal from Guatemala and Peruvian and Bolivian Quechua. We introduce the six main groups briefly below and contextualize their recent history within their countries of origin.

### 2.1 Countries

**Mexico** is home to more speakers of Indigenous languages than anywhere else in the hemisphere, with 364 varieties of 68 officially recognized “linguistic groupings” (INALI 2008). While earlier policies aimed straightforwardly at the erasure of Indigenous cultures and their replacement with Spanish, the *indigenismo* movement beginning in the mid-20th century led to the explicit identification of diverse Indigenous groups recognized as discrete units. According to the 2010 Mexican census, 6.7 million Mexicans, or 6.7 percent of the population, speak an Indigenous language. An additional 8.8 million Mexicans, aged 3 and older, did not speak an Indigenous language but considered themselves to be of Indigenous origin—indicated a shifting towards self-identification based not just on language but on “ancestral territory, culture, forms of governance and justice, ritual, and other cultural elements” (Stephen 2015).

**Guatemala** has an Indigenous population constituting over 40% of the general population, one of the highest percentages in all of Latin America. The vast majority of this multiethnic and multilingual Indigenous population are speakers of Mayan languages. While non-Mayan languages are also spoken in Guatemala, the communities to which they belong are far smaller and have not been found to migrate to New York. Indigenous Guatemalans have been subject to a uniquely painful history in the living memory of current generations. The Guatemalan civil war, which lasted from 1960 to 1996, decimated many Mayan communities, who were targeted by a series of US-backed military dictators. Over 200,000 Guatemalans perished during the conflict. It is particularly important to note that most of the Indigenous Guatemalans in New York are survivors of one of the most brutal genocides on the continent during the 20th century. It is thus no surprise that many Guatemalans of Mayan descent are observed to hide their Indigenous identity even in New York. On the other hand, there has been a resurgence of Indigenous identity over the last twenty years and Indigenous organizations now have a level of respect and authority in Guatemala that was unknown just a few decades ago. This, however, has been dampened by the increasingly difficult economic and security conditions in rural areas which have forced large numbers of Indigenous small-scale farmers to emigrate in search of better opportunities.

**Ecuador** has also become a major source for immigration to New York with over 60% of Ecuadorian immigrants to the United States settling within New York City. They are the third largest immigrant group in New York City from Latin America. In Queens alone, the 2010 census has recorded over 100,000 Ecuadorian-born residents. Within the larger NYC metro area, which includes Long Island and parts of New Jersey, there are over 300,000 Ecuadorian-born residents.



Figure 2: Southwest Mexico in the *Atlas of the World's Languages in Danger* (Moseley 2010)

While only 7% of Ecuador's population is identified officially as Indigenous, there are nonetheless a large number of Kichwa speakers in New York who form a vibrant transnational community which includes Quechua speakers from Peru and, to a far smaller degree, those from Bolivia.

**Honduras** is home to several unrelated Indigenous groups: the Garifuna, Lenca, Miskito, Nahua, Chortí, Pech and Tawahka. While the traditional territories of most of these groups lies in the tropical rainforest, the Garifuna and the Miskito occupy the Atlantic coast. Few of the interior groups have been found to migrate out of the country but very large numbers of Garifuna comprise a diaspora that spans the United States from Los Angeles to New York. Increasing gang related violence over the last several years has led to a sharp increase in the number of asylum seekers from all parts of the country, including the coastal Garifuna areas. A large wave of young Garifuna asylum seekers arrived around 2014 and were released in New York City with GPS-enabled ankle monitors. Honduras continues to have one of the highest murder rates in the world due to drug trafficking gangs that exert control over large portions of Central America. Even while the need for asylum is increasing, the current US administration is simultaneously attempting to constrict the flow of asylum seekers and immigration more generally.

## 2.2 Peoples

**Garifuna** is a language spoken by people of mixed African and Indigenous Carib and Arawak descent, who originally came together on the island on St. Vincent before being exiled in the late 18th century to Central America. Garifuna people are now found in large numbers in Belize, Honduras, Guatemala, and to a lesser extent, Nicaragua. Estimates of the overall population vary greatly but most are between 300,000 and 600,000. The Garifuna speak a Northern Arawakan language indigenous to the Caribbean. The language reflects Garifuna pre-colonial and colonial



Figure 3: Central America in the *Atlas of the World's Languages in Danger* (Moseley 2010)



Figure 4: Ecuador in the *Atlas of the World's Languages in Danger* (Moseley 2010)



Figure 5: Garifuna historical and modern migration (England 2006:3)

history, with borrowings from Carib, French, Spanish, and English. Garifuna people, despite two centuries of diaspora, including large-scale migration to the US in the second half of the 20th century, share a common language, history, and culture that unites them across national borders.

**K'iche'** is Guatemala's largest Indigenous language, with over a million speakers. The K'iche' are one of several Mayan groups in Guatemala and are concentrated in the country's central highlands. They were the first Mayan group to enter into a major military confrontation with the Spanish conquistador, Pedro de Alvarado, and his armies, and one of the first to be subjugated by European colonizers. Nonetheless, the K'iche', like other Mayan groups of Guatemala, largely maintained their language and many elements of their culture despite five hundred years of colonization. Like the Mam and other Mayan peoples, the K'iche' also suffered enormously during the genocidal campaigns of the Guatemalan state during the twentieth century. Anecdotal evidence suggests the K'iche' are the largest Mayan ethnic group in New York City, but they are dispersed throughout the city with clusters in Sunset Park/Bensonhurst, Corona and the Bronx.

**Kichwa**, or Quichua, is the term used for the Quechuan language varieties spoken in Ecuador, called Runa Simi by speakers. With approximately 600,000 speakers according to the 2010 Ecuadorian census, Kichwa is the principal Indigenous language of the nation, with speakers concentrated in rural highland areas. "Quechua" refers to the variety of the language spoken in Peru, which is also represented by a number of speakers in the NYC metro area. Speakers of Kichwa/Quechua trace their ancestry to the Incas of South America, whose empire spanned the western coast of South America and included parts of what are today Peru, Ecuador, Bolivia, Chile and Argentina. When all varieties are taken together, it is the largest Indigenous language of the Americas in terms of speaker population. The prestige of the language is also being rehabilitated by Indigenous movements and leaders such as Bolivian president Evo Morales. In the current study, we focus



on Kichwa-speakers from Ecuador, but it is important to note that this community still maintains strong transnational links within South America.

**Mam** is a Mayan language spoken by approximately 500,000 Indigenous people principally in the western highlands of Guatemala (the departments of Quetzaltenango, Huehuetenango, San Marcos, and Retalhuleu) and to a lesser extent in the Mexican state of Chiapas. Mam is one of roughly 30 recognized Mayan languages, although in this case, too, varieties of recognized languages may be better described as independent languages themselves. There are a large number of Mam speakers in Morristown, New Jersey from Cabricán. In New York City, the population is relatively new and appears to be spread throughout the city. Our interviews focused on residents of East Harlem.

**Mixtec** is a broad term for a complex cluster of over 50 related language varieties spoken by approximately 500,000 people, according to Mexico's 2010 census (Instituto Nacional de Geografía y Estadística (INEGI) 2010). The names used by the people for themselves and their language are typically related to the word for 'rain', e.g. *Tu'un Savi* 'the language of the rain' and *Ñuu Savi* 'the people of the rain'. These languages, classified as being in the Eastern branch of the Oto-Manguean language family and are spoken primarily by the Indigenous inhabitants of La Mixteca, a region that spans the western states of Guerrero and Oaxaca. La Mixteca has been largely isolated from the reach of the Mexican government and has thus not received nearly the same services as other regions. A relatively large percentage of the Indigenous communities of Guerrero are monolingual speakers of Mixtec. Recent environmental and economic changes appear to have impacted Guerrero more than other regions of Mexico, to the extent that many areas within La Mixteca have been depopulated due to the collapse of agriculture. This in turn has given rise to one of the largest waves of emigration Mexico has ever experienced. Today, Mixtec is a widely spoken language in New York, the mother tongue of many who have only learned Spanish and/or English in New York.

**Nahuatl**, historically spoken by the Aztecs, is today the language of approximately 1.5 million people, according to Mexico's 2010 census. It is the most well known and "emblematic" language of Indigenous Mexico and therefore often studied as a second language by Mexicans of mixed heritage interested in precolonial culture. Nahuatl belongs to the Uto-Aztecan language family, which extends as far north as eastern Oregon. Today the Mexican government recognizes 30 distinct and sometimes mutually intelligible varieties of Nahuatl; the Ethnologue (Lewis et al. 2015) recognizes 28. These stretch from Durango in the north as far south as El Salvador, but the densest concentration of Nahuatl speakers is in central Mexico, including Puebla, Veracruz, and Hidalgo. Nahuatl was a language of administration in the early colonial period and was the source for many words describing Indigenous American plants and animals, e.g. avocado, chili, tomato, chocolate, and coyote, among many others.

**Tlapanec** is an Oto-Manguean language known to its speakers as Me'phaa and has at least four distinctive varieties. It is believed to have over 100,000 speakers principally located in the western Mexican state of Guerrero. It is represented in New York by a relatively young community of immigrants from the area around Malinaltepec. Although not included here as one of the six larger groups, we do include a single interview with one of our Me'phaa speaking collaborators. Tlapanec is the least recognized of the languages discussed here and is unfamiliar even to many Mixtecos and others from the state of Guerrero.

### 3 Previous research on Indigenous Latin Americans in the US

#### 3.1 California and beyond

Whereas very little research has been done on Indigenous communities in New York City, there does exist a literature engaging with Indigenous immigrants, particularly those from Mexico and Guatemala, in other parts of the country, most notably California, Oregon, Washington and the Southwest, where these populations arrived earlier and are more tightly organized. We review here some of the more relevant work in the ethnographic and health literature. Most research makes clear that Indigenous and non-Indigenous migrants, despite a significant overlap in experience, also differ in fundamental respects, tied to history, language, and culture, which in turn have an impact on professional and life chances in the US. Several works also focus on the advancement of Indigenous/decolonizing methodologies in this line of research. We devote some discussion to methodological matters and how they have informed the present study.

Undertaken between 2007 and 2009, the Indigenous Farmworker Study (IFS) in California, is one of the most extensive efforts to date. As reported in Mines et al. (2010), it attempted a “census-like” count of “hometown Mexican Indigenous networks,” gathering data on 350 such networks and identifying an additional 150. Leaders from 67 of the networks provided detailed information about jobs, migration, use of services, and community institutions. A detailed survey was taken by 400 respondents in nine of the networks in California, covering four language communities. Additional material came from field research in selected hometowns and “daughter border settlements” in Mexico, and interviews with key informants who work with Indigenous Mexicans in California.

IFS reported a total of 120,000 Indigenous Mexican farmworkers and an estimated additional 45,000 family members across the state. Those surveyed spoke 23 different Indigenous languages, although the largest groups by far were Mixtec, Zapotec, and Triqui, in that order, all from Oaxaca. Detailed findings related to demographics, education, inequity, housing, and health substantiated the view that the Indigenous immigrant experience is distinct from that of their mestizo counterparts. For example, in terms of health, Mines et al. (2010) found that Indigenous farmworkers “access care at rates far below the general population and decidedly lower than other Mexican-origin farmworkers.” Besides well-known systemic obstacles faced by all migrant farmworkers, there were “additional linguistic and cultural barriers.”

The IFS did not include Indigenous migrants who settle in Californian cities, particularly Los Angeles, where as many as 50,000 Oaxacans, primarily Zapotecs, have moved (Fox and Rivera-Salgado 2004b). Several studies (e.g. Cruz-Manjarrez 2013; Pérez Báez 2009) have looked at migration, education, language transmission, and transnational identities between (primarily Zapotec) areas of Oaxaca and Los Angeles, where it is possible now in some cases to find half or more of a Oaxacan town’s population (Guidi 2013). Kresge (2007), which focused on the various challenges faced by the estimated 100-150,000 Indigenous Oaxacans in both rural and urban California, found that linguistic barriers, including limited Spanish, were one of the most “significant barriers to outreach” and recommended radio, audio/visual media and illustrated pamphlets as a potential solution.

Beyond California, there are significant populations of Indigenous farmworkers in Oregon, Washington, and increasingly elsewhere across the country. In Oregon, estimates of the Indigenous farmworker population have ranged from 40,000, half undocumented (Stephen 2015), to 68,000 (Murphy et al. 2015). Holmes (2013) looks specifically at Triqui farmworkers in Skagit County, Washington. As an increasing number of studies have made clear, understanding hometown networks and occupational niches is crucial to grasping ever more complex migration patterns, whether Tojolabal workers in Biloxi, Mississippi (Moreschi 2010) or Hñahñu (Otomí) migrants from Hidalgo

in Clearwater, Florida. Nor in many cases is migration simply point to point, but rather a dynamic, decades-long process which often started off with in-country migration (e.g. to Sinaloa, Baja California) and may result in a broader “pan-ethnic” Indigenous identity (Delugan 2010).

Research on Mayan communities around the US has likewise found a large and growing but still “invisible” and marginalized constellation of communities, possibly numbering as high as 500,000 (Lebaron 2012). Initially centered in California, Texas, and Florida, Mayan communities—with K’iche’, Mam, Kanjobal, Akatek, and Chuj the most commonly cited, though over 20 different Mayan ethnolinguistic groups may be represented—are now found across the country.

There have been studies of diverse Mayan communities in Georgia (Lebaron 2012), Nebraska (Sittig and Gonzalez 2016), Massachusetts (Capetillo-Ponce and Abreu-Rodriguez 2010), and elsewhere (Loucky and Moors 2000). A number of these studies have focused on increased health risks in Mayan communities, such as depression and alcoholism, given a history of collective trauma resulting from “La Violencia”, a series of genocidal campaigns against Mayan peoples in Guatemala culminating in the 1980s (Millender and Lowe 2017).<sup>1</sup> McGrew (2011) cites several studies on Guatemalan Mayan women seeking medical care in Florida and navigating social networks to gain health information and traditional treatments because of inherent obstacles in receiving such care in California. Recently, Guatemalans, many of them Indigenous, have accounted for “nearly half of all migrants who sought to enter the United States with their relatives” (Nixon 2018).

### 3.2 New York City

The older, larger Mexican immigrant communities in California, Texas, the southwest, and Chicago originate mostly from central and northern states such as Jalisco, Michoacán, and Guanajuato. In New York City and the surrounding area, however, the largest group by far has come from the state of Puebla further south, and in particular from the heavily Indigenous area known as La Mixteca (the Mixtec region), which includes parts of Puebla and Guerrero but also a large section of Oaxaca to the south (Massey and Pren 2010; Badillo 2009:119). The 1990s were a critical decade, with the Mexican-origin population increasing threefold, from 100,000 to 300,000, and approximately half of those migrating between the ages of 12 and 24 (Smith 2005:19)

During this period, according to surveys, two-thirds of all Mexican migrants to New York came from the Mixteca, around half of them from the part in Puebla, giving New York’s Mexican community a substantial Indigenous (and especially Mixtec-speaking) component. Several factors were coalescing at once. The 1986 Immigration Reform and Control Act (IRCA) allowed for family reunification, causing a “surge of emigration by children and adolescents” to the city (Smith 2005:15). At the same time came a deepening of economic immiseration in the Mixteca, compounded by the passage of NAFTA in 1994 and its devastating impact on subsistence farming.

In the mid-1990s, recalled one migrant, “the Mexican Indigenous population from the Montaña [region of the Mixteca] arrived in herds. Every time the coyote arrived in New York, he came with 20 or 30 people. That was every month. He returned to Tlapa and then back to New York” (Hernández-Corchado 2014:242). The geographic origins of the New York community have diversified since the mid-1990s, with more arrivals especially from the state of the Guerrero and more recently from the states of Tlaxcala, Tabasco, Morelos, and Mexico City and its satellite Ciudad Nezahualcoyotl (Smith 2005:23). But the New York community remains distinctive. The city’s Mexican consulate estimated in 2013, based on an informal survey of those seeking consular services, that 17 percent of Mexican New Yorkers speak an Indigenous language (Semple 2014), with Mixtec and Nahuatl the most widely spoken out of 16 total. Furthermore, no single primarily

<sup>1</sup>Sanford (2003:14) cites 440 massacres in villages burned off the map, 1.5 million people displaced, 150,000 who fled into refuge and more than 200,000 dead or disappeared.

Mexican barrio has emerged—instead, Mexicans in New York have settled among Puerto Ricans, Dominicans, Ecuadorians, Colombians, and Central Americans in dense, diverse hubs across the city and the region where Spanish serves as a lingua franca.

Smith (2005) is a detailed ethnography spanning 15 years which tracks the transnational ties between a town in the Mixteca, pseudonymized as Ticuani, and New York (Brooklyn), where a substantial portion of the adult population has migrated. Though linguistic and cultural identity, Indigenous or mestizo, are not discussed in detail, the study looks at the tense community politics between the Ticuani hometown association in New York and caciques in the town, the reshaping of gender roles as a result of migration, and the challenges faced by the second, American-born generation (including Ticuani’s role as a coming-of-age safe space and the rise of transnational gangs incubated in New York).

Hernández-Corchado (2014) focuses squarely on the “proletarianization” of Mixtec and mestizo youth from Tlapa living in New York, arguing that “the large historical framework of unequal social, economic, and political relationships between the Mexican state and the Indigenous population in Mexico” continues to have ramifications. Shame about rural and Indigenous origins (Hernández-Corchado 2014:111), as well as a lack of literacy and fluency in Spanish (Hernández-Corchado 2014:240-1), mean “that *desindianización* is operating also outside of the Mexican territory, and [...] ethnic hierarchies between mestizo and Indians are still relevant in their everyday life as migrants” (Hernández-Corchado 2014:112). As they become workers in New York—preparing sushi and sandwiches in delis and restaurants, delivering pizza, selling food or flowers on the street, working as day laborers—they are also forging new identities...” (Hernández-Corchado 2014:273).

The largely Hñahñu (Otomí) community of Texcatepec, in the Huasteca region of Veracruz, with an estimated 400 to 500 young men working in the New York City area, is an example of a substantial Indigenous community from outside the Mixteca (Fox and Rivera-Salgado 2004a). There have also been a few studies of communities in smaller towns and cities in the New York metropolitan area, e.g. the primarily Zapotec community in Poughkeepsie, north of the city (Mountz and Wright 1996) and the Putlecan (Oaxaca) community in Atlantic City, New Jersey (Grimes 1998). Smyth (2017) testifies to the ongoing dynamism and transnational impact of a number of NYC-based hometown associations, which do not simply participate passively in a remittance economy which the Mexican government uses to its advantage, but are willing to actively challenge it.

Information on Indigenous Latin Americans in the New York City school system is also generally lacking, a welcome exception being the work of Velasco (2010, 2014). Velasco (2010) identifies linguistic challenges facing children from Mixtec-language backgrounds enrolled in Spanish-English bilingual programs.<sup>2</sup> Velasco (2014) is a further study of 23 Mixtec mothers of such children. Though only two women were married to non-Mixtec speakers (the fathers were Mazahua and Triqui speakers), Spanish was the typical language of communication in all the family homes, possibly to bolster the input from school. Yet 6 of the 23 mothers were prompted to take Spanish literacy lessons in New York. This description accords well with our own observations of Indigenous families in the current study. Only in cases where parents are monolingual or whose Spanish is extremely limited have we found that the primary language of the house is the Indigenous language. Very often, parents who may not be able to express themselves freely in Spanish nonetheless force themselves to use Spanish with their children in New York. We return to this below in the discussion of the interviews.

There is a small but thorough ethnographic literature on the Garifuna community in New

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<sup>2</sup>Ruiz and Barajas (2012) and Ruiz et al. (2016) also look at Mixtec families in the US education system, with the latter looking at the possible benefits of transnational teacher education.

York (Gonzalez 1979; England 2006, see also Gonzalez 1988). New York's Garifuna community was already taking root in the 1960s, several decades before other large scale migrations from Mexico and Central America. Like Smith's work on the Poblano community in Brooklyn, England (2006) is an ethnography looking "at the ways in which the experiences of transnational migration affect the social movements of the Garifuna in both Central America and New York City" with a focus on "the family relations, community dynamics, economic practices, history, and grassroots organizing of one particular Garifuna transnational community" (of Limón, Honduras). England discusses a high level of organization in which every Garifuna village was represented by a hometown association, several with multiple associations.

New York City has also been the principal destination for Ecuadorian immigrants to the US, up to 70 percent of whom have come from the heavily Indigenous south-central highlands, constituting the single largest sending region in South America. Pribilsky (2007:8-9) notes, there is "scarcely a household in the Azuayo-Cañari region at the start of the twenty-first century that has not been affected by the massive exodus to the United States".

Pribilsky (2007) provides the most detailed account available of this large-scale Andean migration to New York, spurred by the Ecuadorian economic crisis that peaked in the early 1990s. Principally made up of young, undocumented men, at least initially, this group differs substantially from the earlier, whiter, more middle-class Ecuadorian immigrant community. While not all rural migrants from the Azuayo-Cañari region identify as Indigenous or speak an Indigenous language, "they are equally differentiated from the national culture of mestizos by their very borrowings of Indigenous identity: peasant pollera skirts, felt and woven Panama hats, adherence to "traditional" medicine practices, and linguistic features that blend Spanish with a rich set of Quichua [Kichwa] words and phrases," a mixed or transitional identify "often described, not altogether positively, as cholos (cholas)." Nonetheless, a significant portion of migrants from the Ecuadorian highlands are Kichwa speakers who identify as Indigenous.

### 3.3 Health research

Considerable health inequities between Indigenous and non-Indigenous populations are reported throughout the world, especially in high-income countries. These inequities involve issues of access, environment and health outcomes. Many such outcomes are the relatively recent products of change in livelihood, environment and lifestyle that have been imposed by the surrounding society and are apparent even among ethnic groups that have not been victims of outright genocide in the 20th century as experienced by the Guatemalan Mayans and many others. To take one example, Chen et al. (2016), reports that Indigenous populations of Taiwan display higher rates of elevated blood pressure, obesity and diabetes when compared with the surrounding Han (Chinese) population, and similar results exist for almost all parts of the world where such research has been undertaken. There is still much uncertainty with regard to the source of these disparities and teasing apart genetic, socio-economic and cultural factors has been a long term challenge in this area. Genetic factors have been claimed to provide both heightened risks and protections for particular populations.<sup>3</sup> On the other hand, Montoya (2011) provides a critical examination of the role of Mexican ethnicity in epidemiology, arguing that "pathologizing" ethnicity can mask other factors affecting the health of underserved populations.

Regardless of genetic factors, it is abundantly clear that both health and ideas about health are impacted by migration. As immigrants adopt a more typical US diet, they increasingly suffer from diseases emanating from industrialized countries and modern Western diets, e.g. obesity,

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<sup>3</sup>For instance, Stoddard et al. (2011) claims that genetic factors may prevent obesity among certain Indigenous Mexicans even when income is controlled for.

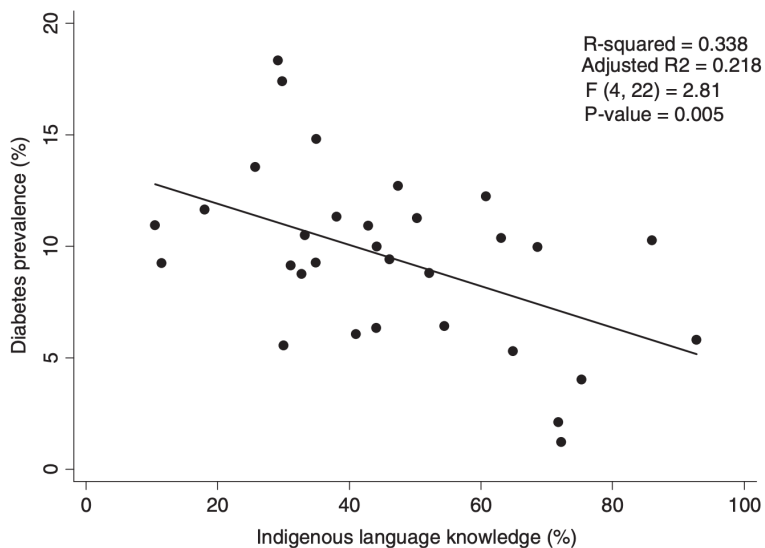


Figure 6: Diabetes prevalence by Aboriginal language knowledge in 2005 (Oster et al. 2014:9)

diabetes, heart disease, hypertension, among others. This, of course, affects both Indigenous and non-Indigenous populations although non-Indigenous populations are more likely to be exposed to a “western pattern diet” prior to migration. Pinedo et al. (2014) has shown that risk for alcohol dependence also correlates to past US migration experience among Mexicans such that migrants are at a higher risk than those who have not migrated.

Several studies have examined the position of Indigenous populations in relation to the so-called Latino Health Paradox, whereby Latino immigrants have better health outcomes than average US-born residents despite a host of disadvantages in comparison to this latter group (e.g. lower socioeconomic status, income, education, access to health care). Particularly interesting are cases in which language use correlates with health outcomes. Pinedo et al. (2014:353), examining a group of Mayan immigrants to the US, notes the following:

Participants who spoke Maya were considerably less likely to engage in hazardous drinking. Past studies have suggested that retaining traditional Mexican Indigenous culture following migration to the US is associated with decreased adverse health-related behaviors, and may serve as a protective factor for poor health outcomes [44, 45]. Hence, retention of the Maya language in our sample population may be a marker for maintenance of traditional roles and identities specific to Mayan culture, which may ultimately serve as a protective factor against hazardous alcohol use [45]. Important to note, however, is that other studies have shown that integration of Indigenous persons into mainstream society in Mexico and other parts of Latin America has been linked to poor health outcomes, including increased consumption of alcohol and adverse social consequences, as a result of the adoption of health-damaging behaviors [46].” (Pinedo et al. 2014:353)

Oster et al. (2014) presents similarly striking findings for the Indigenous people of Alberta, Canada. Specifically, Oster et al. (2014) find a correlation between fluency in an Indigenous language and a lower prevalence of diabetes, shown in Figure 6, This relationship is claimed to be significant even after adjusting for socio-economic differences: “Only Indigenous language knowledge was a significant predictor of diabetes in simple linear regression” (Oster et al. 2014:8).

Hallett et al. (2007) similarly find a correlation between conversational knowledge of an Indigenous language and youth suicide rates in British Columbia, Canada:

“[...] those bands in which a majority of members reported a conversational knowledge of an Aboriginal language also experienced low to absent youth suicide rates. By contrast, those bands in which less than half of the members reported conversational knowledge suicide rates were six times greater. Although the newly minted index of Aboriginal language use was found to form a common factor with other previously identified markers of cultural continuity, even this crude marker of language use was shown to have strong discriminatory power independent of these earlier factors, and to make a significant independent contribution to our understanding of the high youth suicide rates that plague many Aboriginal communities. Altogether these results demonstrate that indigenous language use, as a marker of cultural persistence, is a strong predictor of health and wellbeing in Canada’s Aboriginal communities.” (Hallett et al. 2007:398)

Note that none of these studies claim a direct relation between speaking a particular type of language and good health outcomes. Rather, fluency in Indigenous language is understood as the best proxy of cultural continuity, which in turn supports a sense of “belonging and community”. It is this psychological sense which is understood to be linked to positive health outcomes in a range of areas.

As noted earlier, studies have suggested that Indigenous immigrants can be negatively affected by exposure to US norms and by migration itself. Grieshop (1997) shows that beliefs about health also undergo significant changes in diaspora. Comparing the Mixtec community in Mexico with its transnational Mixtec counterpart in California, it was found that the non-migrant group believed they had more control over their health than the migrant group, who more often ascribed the “locus of illness control” to external forces. Paradoxically, more exposure to modern hospitals and Western medicine seemed to correlate with an increased sense of powerlessness with regard to health outcomes. Our study did not examine these types of beliefs but this might be a valuable area to include in a follow-up study.

The legal status of immigrants also has also been studied extensively for Latin American immigrants (Martinez et al. 2015 and references therein) and must be taken into account for any study of Indigenous Latin American immigrants, as well, who are more likely to be undocumented than non-Indigenous immigrants. Martinez et al. (2015) sum up their meta-analysis of 30 papers on the health effects of immigration status:

“The majority of the studies established a clear association between immigration policies and mental health outcomes such as depression, anxiety, and post-traumatic stress disorder (PTSD) [48]. For example, a clear correlation was shown to exist between conditions in immigration detention centers and increased anxiety, depression, and overall stress [31, 49]. Screening instruments used to measure depression also found that undocumented immigrants are at highest risk of depressive symptoms and are disproportionately impacted by PTSD, anxiety, and depression when compared to other documented immigrants and citizens [49]. In particular, in localities and jurisdictions with anti-immigration policies, the prevalence of negative mental health outcomes is even higher when compared to locations and jurisdictions in the same country with neutral or welcoming policies towards immigrants, including ‘sanctuary cities.’

Mental health concerns including depression, anxiety, and PTSD were not only identified among adult undocumented immigrants, but also among undocumented children [49–51]. Undocumented children experience significant trauma, and studies particularly point to the development of symptoms of PTSD among this affected group [51]. In addition, undocumented children faced unique challenges including barriers to education along with anxiety over arrest, incarceration, and imprisonment of family members due to immigration status, leading to increased child trauma and harm [52].” (Martinez et al. 2015:965)

In this brief overview, we have provided a foundation for understanding the health of Indigenous

immigrants and the risks inherent in immigration, adoption of western norms and a lack of cultural continuity. In the following section we present the design of our original research.

## 4 Methodology and research process

The scope of work for the first stage of the project included:

- (i) organizing and convening a research team of community experts and a network of community partners
- (ii) designing a survey and sampling frame
- (iii) piloting the survey and iterating community feedback.

### 4.1 Organizing and convening the team

Nearly half of all New Yorkers speak a language other than English at home. Half of all those are Spanish speakers, followed by the other 9 large languages for which the city is officially committed to language access: Arabic, Bengali, Chinese (Mandarin, Cantonese, Taiwanese), French, Haitian Creole, Korean, Polish, Russian and Urdu. The most recent census counted approximately 200 languages in the city, with many other larger communities registering tens of thousands of speakers.

	CITIZENS 18 AND OVER	ALL 5 AND OVER
Monolingual English	3,106,953 (59%)	4,009,822 (51%)
Languages other than English	2,172,874 (41%)	3,861,110 (49%)

Table 1: American Community Survey (2015) language statistics for NYC

Since 2010, however, ELA has been collecting language-focused information directly from speakers and communities, summarized in a recently published language map of the New York City area that shows 631 languages at 970 significant sites, such as residential enclaves, religious institutions, and community centers. Many languages not registered at all by the census, or misleadingly categorized, appear to have thousands of speakers.

Our initial aim was to identify the most widely spoken Indigenous languages in NYC in order to assemble a team with representatives from each identified language group who could aid in designing the survey. This involved both drawing on ELA’s long-standing relationships with members of indigenous communities and building a network of local organizations most relevant to Indigenous Latin American communities in NYC.

ELA brought together members of six Indigenous communities, shown in Table 2 below, to guide the project from the outset. The team members are all native speakers of their respective Indigenous languages and longtime residents of New York City. While there was no single Mam community expert to guide the research process, we partnered with a collective of young Mam-speaking mothers, originally from Cabricán, Guatemala and now living in East Harlem—first on the Xilonen Program and then on the qualitative interviews, described further below.

ELA has long-standing collaborative relationships with most of the different team members from various projects. **Leobardo Ajtzalam**, a K’iche’ Mayan from Guatemala, has operated a community internet radio station at ELA for the last three years and has participated in events and activities in addition to fielding requests for interpretation in the NYC court system. **Martín Bermudez**, also from Guatemala, has been active in the organization and documentation of the



Garifuna community in the Bronx and elsewhere. He brings technical expertise and experience with previous survey projects that sought to gather information about the Garifuna community in NYC and Central America. **Maximiliano Bazan** is the primary court interpreter for Mixtec in New York City and collaborated with ELA in our Mixtec literacy program at the Union Settlement Head Start program. **Benita Bazan** is Maximiliano’s sister, also a long time NYC resident who is familiar with the Mixtec community in the South Bronx. **Jackeline Alvarez** is a Mixteca New Yorker and an undergraduate student at Hunter College who was awarded a fellowship from the NSF Research Experience for Undergraduates to work with ELA for the 2016-17 academic year. Jackeline also recruited her aunt, **Carolina Alvarez** to help pilot the current draft of the survey. Carolina is a Mixtec speaker living in Brooklyn who, like many others from her region, only learned Spanish in NY. **Zenaida Cantú** is a Tlapanec speaker who lives in the Bronx and has collaborated with ELA over the last 5 years on documentary and artistic projects. José Juárez is a Totonac *curandero* and activist who lives in Clifton, New Jersey, and has been working within the Mexican community there in different capacities. **Irwin Sánchez** is a Nahuatl teacher, chef and former organizer of Mexican day laborers in New Jersey. ELA has worked with both José and Irwin over the last 8 years on documentary, pedagogical and artistic projects. **Charle Uruchima** is an Ecuadorian-American Kichwa speaker who has been very active with the local Kichwa/Quechua speaking community and now works as a community organizer at New Immigrant Community Empowerment (NICE). A team consisting of Segundo Angamarca, Charlie Uruchima and **Fabian Munuela** run *Kichwa Hatari*, a popular internet radio program for Kichwa speakers in the NYC area broadcast from the Bronx.

	LANGUAGE	COUNTRY
Rosita Alvarez	Garifuna	Belize
Martín Bermudez	Garifuna	Guatemala
Alex Kwabena-Colón	Garifuna	Belize
Leobardo Ajtzalam	K’iche’	Guatemala
Fabian Muenala	Kichwa	Ecuador
Charlie Uruchima	Kichwa	United States
Carolina Alvarez	Mixtec	Mexico
Jackeline Alvarez	Mixtec (heritage lang.)	United States
Benita Bazan	Mixtec	Mexico
Maximiliano Bazan	Mixtec	Mexico
Irwin Sánchez	Nahuatl	Mexico
Judith Santopietro	Nahuatl (heritage lang.)	Mexico
Zenaida Cantú	Tlapanec	Mexico
José Juárez	Totonac	Mexico

Table 2: Community collaborators

Community experts initially came together to share their thoughts about the best way to design and implement the project. In a first round of videotaped interviews, a number of the experts (L. Ajtzalam, M. Bermudez, M. Bazan, J. Juárez, I. Sánchez., C. Uruchima, F. Muenala) introduced themselves and their communities here in New York. We then asked them to discuss the general language situation of their communities, including issues like multilingualism, linguistic barriers, and language transmission. We also asked them about health concerns that are prevalent within their communities. Finally, we asked them what kind of impact it might have on their community to have services provided in their language and more broadly what could be done to

remove some of the obstacles that prevent their communities from accessing health information and services. The perspectives expressed by the experts in the interviews laid the groundwork for what followed.<sup>4</sup> At the same time, we began to build out a more informal, extended network of community partners, beginning with long-time partner **Wendy Mirón** of Little Sisters of the Assumption (LSA) Family Health Service. The Xilonen Program, described below, engaged the research team with a group of Indigenous Mexican and Guatemalan mothers we had previously worked with at LSA on literacy issues. Also involved at the conversation at this stage was **Francis Urroz**, Language Access Coordinator at the NYC Department of Education, who has noted the significant number of students from Indigenous families at the schools she oversees.

Given the scale and complexity of Indigenous Mexican communities in New York in particular, we also consulted and worked with **Marco Castillo** and **Aurelio Fernando Valencia Castaños** of *La Red de Pueblos Transnacionales*, “a New York City-based network of community groups formed and led by immigrants from Mexican rural and indigenous communities, with the mission of advancing social, economic and cultural inclusion, as well as full access to rights through transnational education, organizing, advocacy, and activism.” This unique community-based organization draws principally on 10 Mexican hometown networks in Brooklyn, the Bronx, Queens, and Staten Island, including many Mixtec and Nahuatl speakers. The *red* provided additional interviewees and we continue to collaborate with them on various ancillary projects stemming from the interviews.

## 4.2 Designing the survey and sampling frame

After building a tagged bibliography of the recent literature on urban Indigenous populations, healthcare, wellness and surveying methodology, one basic goal of the survey was to better understand how many speakers of Indigenous Latin American languages live in the city, what languages they speak, and where they reside. The census and American Communities Survey have failed to gather this information for several reasons. Firstly, the relevant question, shown in Figure 7, exemplifies the type of answer sought with large national languages.<sup>5</sup>

In contrast, few speakers of Indigenous languages believe that the census would have any interest in or knowledge of their mother tongues, which have until recently not been categorized as *lenguajes* ‘languages’ but rather *dialectos* ‘dialects’ in many Latin American countries. It is important to keep in mind that their languages would also be unfamiliar to most outsiders even in their own countries of origin. Furthermore, in countries like Mexico, and especially Guatemala, there has been significant stigma attached to Indigenous languages until very recently. In the case of Indigenous Guatemalan immigrants, many of them are survivors of a genocide that had taken the lives of an estimated 166,000 Mayans. Many, including some who do not speak Spanish fluently, even deny speaking an Indigenous language altogether. It is thus understandable that very few would volunteer this information for a government census. To compound all the above problems, the information gathered from those who do fill in their languages for the American Communities Survey is reduced to a set of categories that serve little use, e.g. Bantu, Hmong-Khmer.

<sup>4</sup>Some of these initial interviews can be seen here: Martin Bermudez (Garifuna) <https://youtu.be/o06NyQt90yA>, Maximiliano Bazan (Mixtec) [https://youtu.be/whyJP7Unt\\_8](https://youtu.be/whyJP7Unt_8), Irwin Sanchez (Nahuatl) <https://youtu.be/xQD6KfYR-FE>, Leobardo Ajtzalam (K’iche’) <https://youtu.be/CO1oZRmwZpA>, Charlie Uruchima (Kichwa) <https://youtu.be/1NgV07T1LCY>, Fabian Muenala and Mirian Caguana (Kichwa) <https://youtu.be/P1fbcyQdKUs>, José Juarez (Totonac) [https://youtu.be/\\_UcSmJ5sqjg](https://youtu.be/_UcSmJ5sqjg). These videos were put online with permission but remain unlisted and undiscoverable without the above links. Almost all the video interviews were carried out with men but the larger pool of community experts was more balanced (6 women and 8 men).

<sup>5</sup>In the 2010 census, 40,000 New Yorkers identified as both being of Hispanic origin and as being “American Indian” (a 70 per cent increase from 2000). It remains unclear to what extent this population corresponds to the speakers of Latin American indigenous languages who are the focus of this survey.

**13 What is this person's ancestry or ethnic origin?**

*(For example: Italian, Jamaican, African Am., Cambodian, Cape Verdean, Norwegian, Dominican, French Canadian, Haitian, Korean, Lebanese, Polish, Nigerian, Mexican, Taiwanese, Ukrainian, and so on.)*

**14 a. Does this person speak a language other than English at home?**

Yes

No → *SKIP to question 15a*

**b. What is this language?**

*For example: Korean, Italian, Spanish, Vietnamese*

**c. How well does this person speak English?**

Very well

Well

Not well

Not at all

Figure 7: ACS language questions

Across several iterations, a wide-ranging, 8-page qualitative survey designed to be completed within an hour was created in English and Spanish with extensive input from both DOHMH and ELA's community experts. Community experts subsequently translated the initial survey into five Indigenous languages: Mixtec, Nahuatl, K'iche', Kichwa, Garifuna. The same was done with the one-page script introducing the study and consent form. Working with ELA, those experts available to serve as interviewers for their ethnolinguistic group completed the CITI certification for human subject research (in Spanish), a significant accomplishment for community members without prior experience in formal research.

Individual trainings, constant informal contact, and larger training sessions with community experts covered setup for and discussion of the CITI certification, full discussion of the consent script and interview procedure, complete review of the survey itself, instruction in recording techniques, training in interview style and technique and instruction in transcription and translation, including specialized software tools where applicable.

As the survey was to be delivered orally, each interviewer was responsible for explaining the questions as naturally as possible, elaborating and/or relying on Spanish when required by the circumstances. Very few of our participants have much experience reading or writing in their mother tongues, which are rarely written. All of them were far more familiar with Spanish (or in the case of Belizean Garifuna, English). We experimented with translating an entire survey in such a way that it could be delivered remotely or through an electronic device by a facilitator. While this was done for several of the languages (the most extensive being Mixtec), it was later decided that the survey would be delivered orally by the community experts (or members of the ELA team) in a more natural fashion.

Dialect diversity and variation are naturally greater in languages without enforced standards. For Mixtec and Nahuatl, for instance, there are many varieties that are considered to belong to a single language but are not mutually intelligible. That is, there are many "dialects" of Nahuatl, Mixtec, and several of the other languages involved that should be considered independent

languages.

Given the substantial diversity within the groups, especially Mixtec and Nahuatl, translation of the survey involved the selection of appropriate varieties (based on how widely understood it is, both in the home country and among the target interviewees in New York), the selection of appropriate translators, and an intensive process of oral translation. Survey participants had the choice to take the survey in their Indigenous language, Spanish or English.

The selection of those to be interviewed, given resource constraints and the intensive nature of the qualitative interviews, relied largely on a convenience sample, combined with criteria for representing geographic, gender and age diversity within each group. At an earlier stage of the project, we had drawn on all available information, and community expert feedback, to propose methods for a potential sampling frame for a larger-scale, quantitative survey of Indigenous Latin American communities in New York. The approach considered was to discover, with an appropriately large and diverse sample, the Indigenous proportion of a given national population in New York with known census figures, however low, for the national populations. For instance, combining the Mexican-born population of 326,375 for the city (according to the 2014 ACS) and the Mexican consulate’s estimate (mentioned above) that the national community in New York is 17 percent Indigenous, one could extrapolate an Indigenous Mexican population over 55,000 in the city.

No adequate traditional sampling frames — population lists, for example — are available for the groups included in this survey, which individually would almost certainly fall into what statisticians call the categories of “minor” (1-10 percent of the total population), mini (0.1-1 percent), or “rare” (less than 0.1 percent), where special sampling methods are required. In addition, for other reasons mentioned above, individuals from these groups are difficult for outside researchers to reach (for a parallel case, see Reichel and Morales 2017).

Most indigenous Latin Americans in the city come from seven countries, listed below with the Census Bureau’s population count for New York City from the 2014 American Community Survey (ACS) 5-year Summary, although these numbers most likely represent a significant undercount given the undocumented population. (The relevant question being answered is “Hispanic or Latino by Specific Origin”, except in the case of Belize, where it is “People Reporting Ancestry”.)

COUNTRY OF ORIGIN	ACS 2014	LARGEST INDIGENOUS GROUPS IN NYC
Mexico	326,375	Mixtec, Nahuatl
Ecuador	193,219	Kichwa
Honduras	51,408	Garifuna
Peru	43,241	Quechua
Guatemala	34,569	K’iche’, Mam, Garifuna
Belize	7,301	Garifuna
Bolivia	4,798	Quechua

Table 3: National and Indigenous Latin American communities in NYC

Another approach considered, for the potential large-scale survey, would involve surveying at key sites in key neighborhoods where adult New Yorkers age 18 or older from the seven countries in focus are most likely to be found. Whether or not there is significant clustering of indigenous populations, beyond hometown networks and outside the relevant national population, remains unclear. For each national population, key neighborhoods were identified from a combination of census data and community expert input, shown in Table 4:

Another aim for constructing a sample frame was to identify key events and specific sites at which high concentrations of Indigenous Latin American New Yorkers are likely to be found. Survey

MEXICO	North Corona (Queens), Sunset Park (Brooklyn), North Bushwick (Brooklyn) Corona (Queens), Mott Haven-Port Morris (Bronx), Port Richmond (Staten Island) Mott Haven North (Bronx), East Harlem North (Manhattan)
ECUADOR	North Corona (Queens), North Bushwick (Brooklyn), Corona (Queens) Jackson Heights (Queens), Elmhurst (Queens), Parkchester (Bronx)
HONDURAS	Melrose South-Mott Haven North (Bronx) Claremont-Bathgate (Bronx), Mott Haven-Port Morris (Bronx)
PERU	Jackson Heights (Queens), Corona (Queens)
GUATEMALA	Jamaica (Queens), Far Rockaway-Bayswater (Queens) Bensonhurst (Brooklyn), East Harlem (Manhattan)
BELIZE	East New York (Brooklyn)
BOLIVIA	Jackson Heights (Queens)

Table 4: NYC neighborhood residential concentrations

results, as discussed below, supplemented this initial list given by community experts:

- La Guelaguetza festival (Staten Island)
- The annual Carnaval Mixteco (Staten Island)
- The annual Cinco de Mayo celebration (Corona, Queens)
- Miss Garifuna USA NY Pageant (Central Bronx)
- St. Jacobi Lutheran Church (Sunset Park, Brooklyn)
- Maria Hernandez Park (North Bushwick, Brooklyn)
- Jovenes Cristianos church (Bensonhurst, Brooklyn)
- Saturday/Sunday soccer games, 5-9 pm, at Dyker Heights Park (Bensonhurst, Brooklyn)
- P.S. 146 (East Harlem, Manhattan)

Ultimately, while inspired by the groundwork described above, for the 30-person qualitative survey we went with “snowball” (or respondent-driven) sampling, relying on ELA’s multiple points of entry into each community and asking community experts to identify individuals able to speak from different backgrounds and with a variety of perspectives.

### 4.3 Piloting the survey and iterating community feedback

Each iteration of the survey was tested out at ELA with Indigenous respondents (not included in the final study), and a final Interviewer’s Guide was prepared on that basis. Several questions had to be eliminated or simplified while other areas deserved to be further articulated.

Following IRB approval, the majority of the interviews were conducted between April and June 2018. Interviews were conducted and recorded (audio only) at the ELA office, at LSA Family Health Service (Little Sisters of the Assumption) in East Harlem, or at the interviewee’s homes.

Despite incentives—a \$20 gift card for every 20 minutes spent in the interview, as well as a two-trip Metrocard—it was not always easy to schedule interviews even with these identified participants

given work, scheduling and the sensitivities of the study. In a number of cases, ELA staff had to complete interviews that community experts were unable to complete.

The most labor intensive portion of the work described here was the transcription and translation of the interviews, which were rarely less than an hour's length. Even the interviews done in Spanish required extensive checking and clean-up to ensure the participants' intentions were conveyed faithfully.

The aim was to have interviewers transcribe and translate their own interviews, in some cases with assistance from ELA personnel, though this proved to be labor-intensive, with one person often responsible for 5 manuscripts. The entire corpus of recordings contain over 40 hours of recordings conducted in Garifuna, K'iche', Kichwa, Mixtec, Nahuatl, Spanish, or English. Edited and organized for clarity, the resulting collection of transcripts (translated either into Spanish or English) runs over 450 pages (see Appendix C) and forms the basis of the analysis presented in Part II.

## 5 Ancillary activities

Several small programs emerged from the larger interview project. These were meant to pilot methods of addressing the issues we encountered as we carried out our fieldwork with the participants. In some cases, these programs led to additional interviewees, data and perspectives that would have been otherwise unavailable. We briefly describe one such program below.

### 5.1 Xilonen Program

The DOH's recently released report on the health of Latino populations in NYC (Greer et al. 2017) shows that New Yorkers of Mexican origin have significantly higher rates of diabetes, male obesity and excessive alcohol use together with the lowest percentage of insured adults and the least access to health care and fresh produce. On the other hand, the Mexican population stands out among all groups as having the highest levels of physical activity, and, among Latino groups, as having very low incidence of high blood pressure, asthma, serious psychological distress, drug use, and premature death. This depicts a generation of immigrants in flux. The limited financial resources and immigration status of many of those who arrived in the 1990s has led to very low rates of health insurance and access to health care. Based on informal interviews, many parents report that their diets have changed for the worse after arriving in NYC. However, the positive indicators mentioned above likely bear some connection with the continuation of traditional elements in their diet and lifestyle.

There is presently a unique opportunity in New York City to both document and build upon some of the traditional Indigenous foodways that these communities have brought with them. At the same time, there is an urgent need to understand the unique challenges that these doubly minoritized communities face. They are largely invisible in New York because they are embedded within larger Hispanic neighborhoods although they are not "Hispanic" in the original sense of having roots in a Spanish-speaking community. These communities are also doubly targeted by the ever expanding processed and fast food industries. In their countries of origin, multinational processed food companies are expanding into Indigenous communities, as well as isolated mestizo ones, as urban consumers begin to improve their diets and turn away from junk food.

A recent series of articles in the New York Times brings to light the extent to which transnational corporations have been targeting indigenous Latin Americans as markets in industrialized nations shrink due to a growing awareness of health and diet.

Until recently, Nestlé sponsored a river barge that delivered tens of thousands of cartons of milk powder, yogurt, chocolate pudding, cookies and candy to isolated communities in the Amazon basin. Since the barge was taken out of service in July, private boat owners have stepped in to meet the demand.

‘On one hand, Nestlé is a global leader in water and infant formula and a lot of dairy products,’ said Barry Popkin, professor of nutrition at the University of North Carolina. ‘On the other hand, they are going into the backwoods of Brazil and selling their candy.’ (Jacobs and Richtel 2017)

Similarly, in the same area that gave rise to the indigenous Zapatista movement in southeast Mexico, we find soaring rates of soda consumption and diabetes.

In a country that is among the world’s top consumers of sugary drinks, Chiapas is a champion: Residents of San Cristóbal and the lush highlands that envelop the city drink on average more than two liters, or more than half a gallon, of soda a day.

The effect on public health has been devastating. The mortality rate from diabetes in Chiapas increased 30 percent between 2013 and 2016, and the disease is now the second-leading cause of death in the state after heart disease, claiming more than 3,000 lives every year. (Lopez and Jacobs 2018)

Indigenous groups with less access to public health information about the dangers of sugar have been systematically targeted with advertisements.

Local health advocates say aggressive marketing campaigns by Coke and Pepsi that started in the 1960s helped embed sugary soft drinks into local religious practices, which blend Catholicism with Maya rituals. For decades, the companies produced billboards in local languages, often using models in traditional Tzotzil garb.

Although Coke has since discontinued the ad campaigns, Mr. Martínez, the Femsas spokesman, described them as “a gesture of respect toward indigenous communities.”

He also rejected criticisms that the company’s beverages have had a negative impact on public health. Mexicans, he said, may have a genetic proclivity toward diabetes. (Lopez and Jacobs 2018)

Fast food franchises as well as cigarette and alcohol advertising have long targeted low income communities in NYC and other urban areas throughout the US. Younger members of Indigenous communities living in places like East Harlem have thus experienced both the incursion of sugary drinks and junk food in their home communities in Latin America as well as the onslaught of fast food chains and advertisements in their new home.

It should be noted that diabetes prevention, while urgent for many populations, is an acute danger for undocumented immigrants, who often only have access to dialysis when symptoms have become life-threatening and have practically no opportunity for organ transplants (Wolf et al. 2015). All steps towards diabetes prevention by recovering traditional diets can thus have an outsized impact on the participants recruited for the workshop.

Given the dire situation outlined above, we piloted a nutrition workshop at the LSA Health Center led by our Nahuatl community expert, Irwin Sanchez, who is also a chef and expert in Indigenous Mexican foodways. The workshop, Xilonen Project, lasted for 7 weeks and convened a group of roughly 15 mothers and their children on weekly basis to cook a new healthy recipe and discuss the benefits of a natural diet and the dangers of processed foods and sugary drinks. The larger goals of the program were the following:

- Make traditional indigenous cuisine viable on a limited budget;

- Better understand the concerns of indigenous families, such as those related to health and well-being, discrimination, raising children, through open discussion;
- Better understand what role language and identity plays in the experience of indigenous Latin Americans in NYC;
- Learn about the positive cultural and health-related values held by these communities which can be further promoted.
- Create a network of social support among mothers with young children that can outlast the seven weekly sessions
- Provide practice-based evidence for nutrition-related program development among underserved and culturally diverse populations

We do not enter into detail here regarding the outcomes of the project, as this was detailed in a separate report submitted to the NYCDOHMH, but the discussions and evaluations of the program covered some of the same ground as the larger interview project and thus provided reinforcement for the conclusions developed here.

## Part II

# Qualitative interviews

There are social, psychological and practical issues facing immigrants generally that come as a consequences of being uprooted from one's familiar environment, social network, etc. and the necessary adjustments one has to make in New York. The stressors and health consequences faced by immigrants more generally have been studied extensively and naturally apply to the populations investigated here. The transition to New York is especially difficult for those who come from radically different surroundings. In this case, the relevant surroundings are typically rural farming areas without access to government services, electricity, telecommunication. Migrants from such areas have the extra challenge of overcoming the city bureaucracy and living in crowded quarters of inner city neighborhoods.

The majority of Indigenous immigrants have been inured to great hardship involving tremendous amounts of physical labor merely to achieve subsistence. The average Indigenous farmer in Guerrero works very long hours in the field each day, clearing, weeding, planting and fertilizing a field that in most cases belongs to others. Concepts such as workers' rights and minimum wage are largely unfamiliar in an agricultural society that, arguably, has not changed in significantly positive ways for the last hundred years. There is also an ethnic divide in many Indigenous towns of Guerrero in which Indigenous farmers work land legally belonging to a mestizo land-owning class. The impact of this background should not be underestimated. Indigenous farmers arrive in New York accustomed to being exploited in an unregulated environment by a class whose wealth and power are hereditary and rooted in colonialism. It is not surprising that migrants with this background find themselves funneled into similar situations in New York. Their inurement to exploitation in the fields appears to lead to greater tolerance of working conditions that would not be acceptable to most other immigrant groups. This is described by Holmes (2013), who notes an ethnic hierarchy in the strawberry fields of California where Indigenous Triquis are paid the least and work the hardest, with the Mixtecs above them, Mexican mestizos above them and local workers at the top.



**Minimal Spanish  $\subset$  Minimal English  $\subset$  Minimal literacy**  
 **$\subset$  Inurement  $\subset$  Rural background  $\subset$  Immigrant experience**

Figure 8: Implicational hierarchy of obstacles for Indigenous Latin Americans in NYC

Inurement to exploitation is potentially a major factor in the persistence of such hierarchies in the US.

The properties mentioned thus far constitute an implicational hierarchy, schematized in Figure 8, which appears to hold widely. Latin American immigrants from countries like Mexico, Guatemala and Ecuador with minimal mastery of Spanish are a subset of those with minimal mastery of English. Those, in turn, with minimal Spanish and English tend very strongly to have low literacy.<sup>6</sup> Typically, those with low literacy levels were raised in impoverished rural areas where schooling beyond primary education is still a luxury and where children are often forced by circumstances to work in the fields from roughly the age of 12. Thus, for the populations discussed here, low literacy goes hand in hand with the inurement to exploitation discussed above. This inurement is in turn a feature of rural areas, where agricultural work is unyielding and precarious. Finally, all the subsets posited in Figure 8 must undergo the difficult process of adapting to life in New York City, including navigating its bureaucracy, transportation system, labor practices, etc. This is only made more arduous with low exposure to urban living and the languages of daily life, English and Spanish.

No study has ever examined the correlates of low English and Spanish proficiency among Latin American immigrants but Greer et al. (2017:7) have shown clear correlations with English proficiency for Latin Americans in NYC: “English proficiency among Latinos ages five and older in NYC is associated with increased education and employment opportunities, improved health literacy and more positive interactions with health care providers.”

To this we can add two features that do not fit neatly into the above schema. A number of our participants are single mothers, most often due to separation from their spouses, and had to raise children alone. Being a single mother clearly cannot be related to this hierarchy but the difficulties entailed are compounded by the factors enumerated above.<sup>7</sup>

Another factor which we believe is important but which cannot fit neatly into figure 8 is the largely under-discussed role of physical appearance, or phenotype. Phenotype has been shown to correlate with a number of socioeconomic factors among Mexican Americans, including educational attainment, occupation and perceived discrimination (Arce et al. 1987; Murguia and Telles 1996).

There is yet another factor endangering those who are perceived as Indigenous. In New York, as elsewhere, restaurant and deli workers in menial positions are paid on a weekly basis in cash. As such a large number of these workers are undocumented Indigenous Mexicans and Guatemalans, their phenotype, however it is perceived, is associated with carrying cash on particular days and being afraid to report a crime to the police because of their legal status. They thus become easy prey for robbers. Although it is impossible to know the true numbers of such robberies because the vast majority go unreported, our interviews as well as our discussions with service providers and community health workers suggest that such crimes against undocumented workers are rampant.

<sup>6</sup>This need not have been the case given that many young Mexican immigrants from Guerrero in New York have been exposed to recent mother tongue literacy programs and may have learned to write first in languages such as Mixtec before Spanish. In practice, however, we have not encountered anyone who was literate in an Indigenous language but not in Spanish. Thus, a lack of Spanish comprehension has always correlated to a lack of general literacy. Note also that Garifuna from Belize are generally proficient in English but often have little exposure to Spanish.

<sup>7</sup>It should also be noted that our sample may be biased by recruiting participants from organizations that cater to mothers in need of assistance, such as Little Sisters of the Assumption Health Services.

This has also emerged in studies of Indigenous immigrants in other US cities, e.g. the K'iche' of Massachusetts, (Capetillo-Ponce and Abreu-Rodriguez 2010:63).

Most insidious of all is the targeting of individuals with an Indigenous phenotype on the part of the immigration authorities. The current administration has expanded workplace raids and, for the first time, has allowed immigration arrests at courthouses, where ICE officers now stalk undocumented immigrants who are following court orders to appear for their cases or involved in other cases in any variety of capacities (Surana 2018). This has a wider ripple effect, as noted by Provine and Doty (2011:273): “Treating unauthorized immigrants as quasi-criminals stigmatizes not only them but also all immigrants who ‘look Mexican.’”

Because of limited resources, we were not able to explore all of these topics at the same depth, in particular, sensitive questions regarding phenotype and racial profiling were left for further work. The themes that were covered by the interviews are the following, each separated out into its own subsection in the following.

- Demographics and community (§6.1)
- Language use and attitudes (§6.2)
- Discrimination and language access (§6.3)
- Health (§6.4)
  - Traditional medicine (§6.4.1)
  - Food and nutrition (§6.4.2)
  - Health issues (§6.4.3)
  - Pregnancy and childbirth (§6.4.4)
  - Challenges with care (§6.4.5)

With the help of the community experts, we have selected portions of the interviews to illustrate points that we felt represent prevalent issues within the community and contextualize these within the literature and our own experience.

## 6 Themes

### 6.1 Demographics and community

No Indigenous Latin American community has been properly counted by the US census. The older and more organized Garifuna community, which launched its own campaign for Garifunas to write in “Garifuna” ethnicity on the 2010 census, is something of an exception. (In addition, four of the five Garifuna respondents have been in New York for over 30 years.) The Garifuna respondents mostly echoed estimates given by their community organizations, ranging from 75,000 to 220,000 (for NYC). New York’s status as a major Garifuna center was not in doubt, nor was the basic spatial divide between Belizean Garifunas in Eastern Brooklyn and Honduran and Guatemalan Garifunas in the South Bronx. Parks, especially in the summer, are focal points for the community: Ferry Point Park and Rainey (Waporu) Park in the Bronx, and Linden Park in Brooklyn. In addition to more focused organizations, the Garifuna community, alone of those surveyed, has several pan-Garifuna organizations which respondents mentioned: HIGAGUA (Hermanas Garifuna de Guatemala and Grupo Genesis), UGA (United Garifuna Association), Garifuna Coalition, and UBAFU (Garifuna Sports Club).

The “push factors” of deprivation, marginalization, and poverty back home and the pull of “opportunity” in New York figured strongly in all responses. “On the whole,” said one respondent referring to the major period of migration 30-40 years ago, “the Garifuna people migrated from their country looking for employment and a better way of life.” By contrast, she added, most Honduran Garifuna today come because of violence. A related factor is the ongoing expropriation of Garifuna land due to the expansion of agribusiness, cattle ranching, and tourism, driven the developmentalist agenda of the Honduran state (England 2006:4). More recent Mam and K’iche’ migrants from Guatemala mentioned threats, extortion, and violence. “People get scared, they escape, and they choose to come here,” said one K’iche’ man. “We thought that here in the US it is very easy to earn money and that we would have enough, but that is not the reality.” Migrants from Mexico were more likely to mention purely economic factors, such as heavy *cuota*, the almost obligatory contribution to communal projects demanded in some Mexican towns.

By and large, survey respondents from other groups did not guess at the size of their wider ethnolinguistic community—reflecting the lack of any organized community on that scale and relatively more recent arrival. (Almost all of the others arrived within the last 20 years, if not much more recently, and many had not returned to their home region since immigrating, while some of the earlier arrivals had built up an established rhythm of transnational travel.) Respondents from all groups besides the Garifuna estimated the number of people from their hometown currently in New York. But these estimates ranged very widely, underscoring how dispersed individuals are throughout the city and how little contact they may have with all but close family members. Even where all the respondents came from the same hometown, as for Mam and K’iche’, they sometimes produced a wide range of estimates. It was broadly clear from the interviews that certain hometown networks are robustly present in New York, but no real way to gauge the size of the community beyond that. The lack of widely recognized umbrella organizations in all these communities (with the Garifuna being an exception) may also be factor, although numerous respondents mentioned small-scale efforts on the part of migrants to contribute to the well-being of their hometowns (beyond family remittances).

Although certain concentrations were mentioned by multiple respondents—of Mams in Staten Island, K’iche’s in Brooklyn, Mixtecs in East Harlem and the Bronx—it appears that a straightforward enclave model does not fit these groups and that individuals can be found embedded within larger Latino communities in almost every borough, as well as many surrounding suburbs and towns of the metropolitan area—as is the general pattern among Latinos in New York. The interviews provide limited evidence of connections across Indigenous Latin American groups, primarily within national communities, e.g. occasional encounters between Mixtec, Nahuatl, Tlapanec, Otomí, and Zapotec speakers (from Mexico), or between Mam, K’iche’, and Kaqchikel speakers (from Guatemala), but apparently in a few instances due to shared occupational niches. Thus, when we refer to the K’iche’ or Mixtec “community” in NYC, we are not referring to a traditional community with a demarcated territory or even a particular geographic center of gravity, nor are we referring to a large group of mutually acquainted individuals. The “community”, in this case, is a collection of individuals and families who have emigrated from the same area, speak the same language, and share similar occupational niches and experiences in New York. However, their social networks do not extend far beyond close family relations. This seems especially true of the Indigenous Mexican groups from Guerrero but less so for the others. There appears to be more of an overlap between social circle and “community” among the Guatemalan Mayas, the Garifuna, the Kichwa and earlier Mexican immigrants from Puebla. Note that Indigenous Mexicans outside of New York City also maintain more traditional communities in cases where several families from the same town have settled together in more rural locations. Several such cases are described at length in Fox and Rivera-Salgado (2004b). The atomized nature of the Indigenous communities from Guerrero is one of their defining

features in New York and a primary obstacle to better understanding their numbers and patterns of settlement within the city.

Potentially more useful and representative than working on the ethnolinguistic level would be a fine-grained picture of how hometown networks have clustered in particular areas, on the model of *La Red de Pueblos Transnacionales* (see above). One long-resident Nahuatl respondent, for instance, reported that she knew of approximately 100 individuals from the largely Nahuatl town of San Lucas Atzala in Cholula, Puebla, and that the majority of them live in the Bay Ridge/Bensonhurst area of Brooklyn, and that five of her neighbors are from the same town. A number of other transnational (home region) town/(NYC) neighborhood links came out in the interviews.

Gender dynamics may be skewed in some communities. All Garifuna respondents, for instance, agreed the community skews more female; two attributed this to women migrating alone, in some cases because of domestic violence. (The K'iche', Kichwa, and Mam respondents reported that there are more men in the New York communities than women—anecdotally, this may mean mostly younger men.)

Nevertheless, the internal diversity of each ethnolinguistic group came out strongly in the interviews, and not only because the languages of different locations vary so widely. It seems likely that many of the major varieties of Mixtec, Nahuatl, and Kichwa—each of these in reality an umbrella term including many related but mutually unintelligible language varieties—are present in New York. In addition, it is important to recognize the different complex histories of categorization and subgrouping within each community. Kichwa, for instance, became a lingua franca of Indigenous Andean peoples due to the Inca Empire. Groups like the Kanari and Salasaca, which are represented in New York, once spoke their own languages but today speak Kichwa and Spanish, yet retain a distinctive identity. Religious diversity is another critical factor: in addition to some Indigenous or mestizo religious traditions, Indigenous communities from Latin America may be leaving Catholicism and embracing evangelical alternatives—in some cases tied to larger movements like the Jehovah's Witnesses, in other cases tied only to individual pastors—even more than their mestizo neighbors. Any survey will have to account for this religious diversity within communities.

Holidays and celebrations, to an extent, may be moments where communities come together. Kichwa speakers mentioned the traditional Inti Raymi celebration, sometimes called "the Andean sun festival" and hosted now four years running by the Sisa Pakari Centro Cultural as well as other groups in Corona, Queens.

For the Garifuna community, Garifuna Settlement Day (celebrating the arrival to the shores of Central America, in flight from St. Vincent) is a major annual occasion. For individual towns with enough migrants in New York, the fiestas patronales (celebrations for the patron saints or virgins of particular towns) may be important—for instance, the Cristo de Acapetagua for the Mam, at least of Cabricán, who also have a weekly prayer group. Mixtec and Nahuatl respondents reported only limited participation in pan-Mexican events like Cinco de Mayo and Mexican Independence Day. Soccer leagues and one-off matches are another vital expression of community for the Mam, K'iche', and Garifuna, and possibly other groups.

Respondents mentioned a wide variety of sources for keeping up with news and with each other. Phone use, for both purposes, seems to cut across all groups. In the Garifuna community, Facebook seems to be particularly vital. WhatsApp figured as the other major social platform mentioned by most respondents, given the ability to form groups, make free international calls on the platform, and easily send voice messages (especially useful for speakers of primarily oral languages). Hometown radio stations, now available on the internet, were also mentioned by several respondents: Radio Balam for the Mam speakers from Cabricán, the Spanish-language Metlatonoc radio station for one of the Mixtec speakers, and the Tlapa station for the Tlapanec respondent. Print media, as could be expected, was not mentioned by the majority of the participants as a

major source of news.

## 6.2 Language use and attitudes

Virtually every respondent reported that they still use their Indigenous language in some home context, but the number of people they use it with in New York is often radically circumscribed—perhaps just a parent, a sibling, a few relatives and fellow speakers. Language use may be long distance, if elders are in the home region. There are vanishingly few consistent spaces for Indigenous languages in New York—churches, soccer fields, workplaces, businesses, celebrations, digital spaces.

In terms of the home, many of those with children who reported using an Indigenous language mentioned that the children may only understand a little or respond in English or Spanish. With spouses, too, the common language appears to be Spanish in many cases. The case of a Nahuatl respondent is in some ways typical: she speaks the language with family members from her hometown, primarily her uncle, but Spanish is the main language of the home, because her husband has only passive knowledge of Nahuatl and her children only know “a few words.” Several decades ago, in a Nahuatl-speaking area in central Mexico, there were reportedly already “many households in which parents who are poor speakers of Spanish struggle to speak it even to infants and toddlers” for the good of their children, rather than passing on their native language (Hill 1986, 113). This continues today in New York.

Traditionally, all the languages included here have been primarily oral, with limited opportunities for literacy even if, as in the case of Nahuatl, there is a long history of writing. Nonetheless, many respondents (including four of five Kichwa respondents) reported having some reading and writing ability in their Indigenous language. What this means in practice was not clear, but it may be that digital platforms like Facebook and Whatsapp are allowing for more casual literacy with non-standardized transliteration following English or Spanish spelling. It may also be that the respondents are a particularly engaged group who feel an impulse to take an interest in literacy.

The Garifuna and Kichwa respondents considered their languages to be endangered, but it was only among the Garifuna that several said it was possible to keep cultural identity without the language. This may reflect the situation of language shift as reported elsewhere and the fact that English- and Spanish-dominant Garifuna, whether in New York or in Central America, are nonetheless still considered Garifuna. It may also be related to conspicuous differences in Garifuna ritual, spirituality, food and dress, beyond the obvious linguistic differences with the neighbors.

Language shift, in the Garifuna case as in all the others in focus here, is a process already well underway in the larger towns and cities of the home region. As one respondent from Honduras noted, because of pervasive discrimination and resulting negative language attitudes, Garifuna families in Tegucigalpa, La Ceiba and San Pedro have already largely switched to Spanish.

One respondent explained that language shift in her family went back at least 80 years to when her mother’s generation, in Guatemala, was prohibited from speaking Garifuna in school. “And with them being discriminated against, I think they didn’t want their kids to learn it, thinking that if they weren’t speaking this, maybe they wouldn’t be discriminated against.” Her mother saw little utility, only trouble, in Garifuna and spoke to her daughter in Spanish instead.

It was only when the respondent was in her 20s after college, living in New York, that she became interested in Garifuna and started speaking it, a striking but not entirely unique case of “learning a first language second” and doing so in New York. Despite all the challenges, New York’s diverse and active Garifuna community provided opportunities for this highly motivated individual to activate her passive knowledge of language: joining a dance group, becoming involved in the community, learning to read and write, eventually even becoming a court interpreter. Noting that Garifuna people from Livingston, Guatemala tended to know the language, she would speak to

anyone she met from there in Garifuna, “so that I was using the language, practicing, practicing, and that’s how I immersed myself in it.”

Later, she raised her son in the language in New York, which she admitted is uncommon, though she knows several other families who have managed to do the same. “It’s work,” she explained. “It takes work. We have the myth that you’re going to confuse the child or that the language is of no value. That type of thing. They won’t need it. They won’t need it to get a job. It’s unnecessary. That type of thing. But I want it.... It’s not pride per se but I would say it’s more spiritual. Because it’s something that is God-given.” Her husband has not been entirely enthusiastic. “Every year we go to Guatemala and try to spend a month there,” she added, and her New York-raised Garifuna-speaking son was such a rarity that he “was like a celebrity.”

Transnational ties may have a downside for the vitality of Garifuna life in New York, explained another respondent, from Belize—“because those that are passionate about it, you know, they get older, they retire, and they leave,” returning to Belize. “When I came to the United States in 1982,” she explained, “I was surprised that most [Garifuna people from Belize] here in New York were speaking American [English].” What brought Garifuna back for her was the United Garifuna Organization, which had a building on Ralph Avenue in Brooklyn at a time where everyone would come together and speak Garifuna on the weekends.

Later, this scene disappeared, but the respondent still uses the language whenever she gets the chance, as she described from a very recent encounter on the street:

I didn’t know them. But then I looked at them and I said ‘Hey, niduheñu (my family)!’ And they said, ‘oohhhh!’ Probably they were here from Honduras or Guatemala. But they were conversing in Garifuna, so I, you know, acknowledged them, and they were like happy to see that I had acknowledged them, you know.

Such unprompted use of Indigenous language with strangers in public was not reported for any other Mexican or Guatemalan group surveyed here. The Garifuna language can be particularly useful in bridging the divide between Anglophone Belizeans and Hispanophone Hondurans and Guatemalans, and there may be a generational shift in attitudes: “The older Garifuna people, they tended to want to not speak the language. They would mostly speak [Belizean English] Creole. But when my age group came up, we decided that we are not going to do that. We’re going to speak our language.” There is also some use of the language in church settings.

For the other communities, there is the continuing presence of a speaker base in the home region, but also a mounting anxiety about language transmission and cultural identity. “It has been shocking even with our own children when they cannot or do not want to speak our language,” said one Kichwa parent, noting that she does know some Kichwa-speaking children being raised in New York. “Here I don’t really have anyone to talk to,” said another speaker, who only uses Kichwa now on the phone with long-distance friends. Recently, someone he didn’t remember from the New York-based group Sisa Pakari recently addressed him in Kichwa on the street: “Imanalla mashi maymantak shamunki?” (How are you, mate, where are you coming from?). It came as such a surprise that he could only respond in Spanish.

By contrast, another respondent reported using the language wherever possible: “I talk to anyone I know who are Kichwas ... at work, for example, I always speak in Kichwa. Some answer me in English, others in Spanish, but since I am very bold or tough in character, I’ve forced them to respond in Kichwa.” For this speaker, Kichwa “is like my mother. It is the language that was born with me from the first day. It is the language of my people. It is the root of my existence.” Or as another Kichwa respondent put it: “Kichwa is a language we were born into. It is a particular way of feeling and thinking that comes easily to us, such that any thought can develop easily in our brain, with our hearts and heads together.”

One K'iche' respondent sees his language being "left as second choice," not just in New York but at home as well, as prosperity, some of it remittance-driven, is transforming his town. "About 20 years ago... there were no streets. There were no big houses. Now I see that there are houses like that. And streets. And the children are dressed like ladinos [non-Indigenous]—it's not like before."

"Spanish is a necessity," another K'iche' respondent tells his son, who he is trying to raise in the language in New York, "but our language K'iche' is also very important." Several factors, including overall strength of the language, recency of arrival, and the clustering of speakers in one section of Brooklyn, may explain why the use of K'iche' seems relatively robust not just in homes but wherever K'iche' people meet. According to one respondent, K'iche' is the main language he uses around his neighborhood in Brooklyn and at his evangelical church (Portadores de Paz), where many people are from the K'iche'-speaking town of Nahualá. "It is necessary to preach in our language," he adds, "so that they will understand well the words that come from the Bible."

In the case of Mam—for which all respondents were young Mam-Spanish bilingual mothers, on "active duty" in language transmission—there are signs of rapid language shift. Their use of Mam is primarily with other family members and with others that they know speak the language. One reported that her husband's family, though from a neighboring village, only speaks Spanish. Another learned Spanish through school and work—little was spoken in her family—but now finds herself raising her children in Spanish, not through any conscious decision but because it was easier. Their children, the mothers almost uniformly report, may understand some Mam, but they are Spanish- or even English-dominant. A major worry that several respondents articulated is that their children will not be able to communicate well with their own Mam-dominant grandparents and may face barriers if they return one day to a still Mam-dominant Cabricán. Aside from a weekly prayer group, the principal space for Mam may be on the soccer field: "We play on 114th St [Thomas Jefferson Park] and in the little field on the side of Metropolitan Hospital. It's a Cabrican league where we speak in Mam and joke in Mam."

One of the more striking comments on the part of the Mam participants equated membership in the Mam community with fluency in the language so that being Mam was seen as something that could be gained and lost over a lifetime. In response to the question, "Can a person be a Mam without speaking the language?", she answered:

No. When a Mam no longer speaks her language she is no longer Mam. She's like a Spanish person because they never understand Mam. If they do not understand Mam they are not Mam. For me, my children are not Mam because they do not understand a word in Mam. I have to teach and teach them to come singing words. They arrive there and they will get used to it because they know Mam there. They are listening to words in Mam and then they will become Mam again. (MAM 2018 06 18d)

Such a language ideology has been reported elsewhere in places as diverse as Indigenous Latin America and the Basque Country in Spain. It should be taken into account for groups that profess such ideas that language loss could be far more consequential than those for whom language is but one identifier of group membership.

At the same time, we find a significant gap between perceptions of language acquisition on the part of children and their language acquisition itself. Many mothers, including the Mam mother cited directly above, admit that their children do not have a good comprehension of their Indigenous language despite some degree of child-directed language use in that language.

It's easier for me to read in Spanish than in Mam although I understand more Mam. I try to teach my children some words in Mam, but I teach them more Spanish because when I talk to them in Mam they do not understand me. They even ask me 'What are you talking about?' We speak in those two languages: Mam and Spanish. (MAM 2018 06 18d)

Others claimed that their children had a grasp of the language but whenever attempts were made to demonstrate this, the children were reluctant to speak or showed a lack of comprehension.

Mixtec respondents reported little in the way of Mixtec-language spheres in New York, not even the home. While some had already been in Spanish-language contexts before migration, arrival in Spanish-dominant New York was a shock for others. “We have not spoken it since we left there,” said one. “I really only [use it to] talk to my mom and my sister and my brothers in Mexico... But with my cousins here we only speak Spanish.” Another concurred: “I speak to [family members here] in Mixtec, but they no longer want to speak it. They respond in Spanish... On the phone is where it’s needed.” He also proudly tries to use a little on Facebook. Even back in Mexico, this respondent was having trouble passing on the language to his two sons in the more urban (but still Mixtec) environment of Tlapa. He took the unusual step of sending them back to his smaller hometown of Yuvi Nani, “where they are with other kids who speak, because I want them to speak it.”

Besides calls back to family in Mexico, some use the language with relatives here, as well as with fellow townspeople or people from the same area, but usually only once acquaintance has been established after an initial approach in Spanish. Something similar was reported for Nahuatl several decades ago—that Spanish would be used with people from a different town even if there was good reason to believe they speak Nahuatl. With both Nahuatl and Mixtec, the sheer diversity of varieties also plays a role here, with Spanish sometimes a necessary common language. Marriages with people from outside one’s hometown also shape the linguistic environment at home. The Tlapanec respondent, strongly committed to her language and married to a fellow Tlapanec speaker, nonetheless is finding it challenging to transmit her children in New York.

One woman married a fellow Mixtec from a nearby town whose family had already switched to Spanish: “Sometimes when I speak Mixtec with my children, my husband says he does not want me to speak Mixtec to the children, he says that it’s the language of the Indians.”

One interesting “public” setting for Mixtec and other Indigenous Mexican languages was mentioned: a weekly meeting of the multi-level marketing company Amway in upper Manhattan, where Spanish serves as a lingua franca but apparently speakers of Indigenous languages are routinely present and can find each other.

Nahuatl respondents likewise seemed to have few outlets for using their language in New York. “It was here that I stopped talking,” said one, “because there is no one here to talk to.” Back in Mexico, she had used the language with her grandparents and her father—here, after several years, her uncle “once again started talking to us a little in our language”, but she doesn’t use it with her husband or her children. Another Nahuatl respondent said she had no Spanish when she arrived, until her husband forced her to study and learn the language here. “He didn’t like it when he spoke Nahuatl and he turned to the wall, because he did not understand what he was saying.” Now she only uses it with her parents in Mexico, over the phone.

In closing this section, it is important to note that there exists important differences between the groups, which affect their abilities to seek help and overall opportunities in New York. Most Garifuna who migrate to New York are comfortable in Spanish, English or both, even though they might be most comfortable in Garifuna. For younger migrants, Garifuna is an in group language and a language of culture. For others, however, most notably the other Mexican and Guatemalan groups, there is a considerable portion of the migrant population who are almost completely monolingual in their Indigenous language. Language ideology, discrimination and pervasive myths about confusing children with multiple languages, all conspire to lead parents who are far more fluent in their Indigenous language raise their children in Spanish. In extreme cases, where parents speak no Spanish, children are spoken to primarily by other caretakers or through ad hoc sign language. We cannot comment here on the full consequences of this but, in combination with the lack of



time these parents have with their children in the first place, we believe it represents a crisis for Indigenous children in NYC and elsewhere in the Indigenous Latin American diaspora. It may be possible to mediate this to some extent with informational campaigns to at least dispel common myths about multilingualism “confusing” children and to fight negative stereotypes of Indigenous languages.

### 6.3 Discrimination and language access

While a number of respondents said they had not experienced direct discrimination in New York, others had, whether as Mexicans, Latinos, or Indigenous. A generalized atmosphere of fear, accelerating in the last few years, has also had an impact. Even on religious holidays, mentioned one K'iche' speaker, “Although it is in a church, it is dangerous to leave, because here there are no freedoms that we feel.” Even playing soccer, he added, “sometimes American people arrive and take us off the fields. They tell us that we have to leave because [they are] playing... We feel that we are not in our country, and if we are fools, we will get into trouble... We are not safe here. We are afraid to go out [because there are] many dangers in the streets.”

Sometimes discrimination is directly related to the use of Indigenous languages.

Once I was working with my mommy in the factory [in Manhattan],” said a Kichwa respondent. “Then the boss began insulting us by demanding that we not speak in dialect. I approached her and told her that she was ignorant.... After that I left work, this boss humiliated many people who did not speak English. I went out throwing the job and did not even pay my salary.

Another talked about a palpable discomfort among fellow passengers when he speaks Kichwa with his wife in the subway. “They have not told us anything, but people are surprised, scared.... I can see that they are suspicious.” Sometimes the linguistic chauvinism exists with the group itself, or even the family. “They could say, who is this Indian? And that is already racism. Our own people would do it. Well, I felt sad because a lot of people suffer from that when they come here,” said one Mixtec respondent. “Yes. sometimes people would laugh at me [for speaking Mixtec on the street in NYC]. Sometimes I walk and speak in Mixtec over the phone, and people would laugh at me.” A Mam speaker was told off by her brother-in-law for speaking to her own child in the language. He told her that she was in New York, not Guatemala, and that teaching her child Mam would result in people discriminating against him later on. “Nobody intimidates me for speaking [Mixtec],” said one respondent. “I have not had a problem with speaking Mixtec. I worked in a factory with the Chinese and they did not discriminate against me.” In some cases, New York could serve a positive role as a site for a re-valuing of Indigenous identity. “People in New York have shown a lot of interest and respect,” said one Kichwa speaker. ”’What language do you speak? [they ask sometimes]. Where are you from? How beautiful your outfit or your clothing is.”

Lack of knowledge of English was the main language barrier mentioned, making many things difficult. Some also mentioned challenges with Spanish, while others made clear that provision of Spanish-language services could be adequate. Several mentioned or have encountered monolinguals, including in New York, and mentioned the importance of communicating with them. “You often meet people who do not speak Spanish and who only speak their [languages],” said one Mixtec respondent. “It can be Mixtec, Tlapanec, Nahuatl, like that. They suffer more because it is very difficult, not speaking Spanish and then English is a second language that they have to work on.”

A Garifuna respondent said she has encountered a number of monolinguals in her job as an interpreter.

I remember there was one man, who had disabilities... and Garifuna was his first language so he was more comfortable with Garifuna. That’s what he understood more than Spanish. This

other woman, she was from Aguan. Again it was her first language and she was comfortable with the language. She would understand things better in the language. I was asked to interpret for a six or seven year old child at a school. The teachers weren't sure if he had mental disabilities so they were doing a test.... He was bright. I don't think there was anything wrong with him but Garifuna was his first language. He spoke a little Spanish and he spoke a little English but as far as the terms [in those languages], he didn't understand what they meant.

Another mentioned that monolinguals would likely be coming from more remote communities in the Honduran department of Colón, or possibly from Atlántida or Cortés.

One Mam respondent pointed out that couples can sometimes manage in a hospital if one of the two speaks Spanish and can translate for the other. Reports of family members taking on the burden of providing translation in this way (children often playing the same role) are quite common. As many participants even had trouble obtaining Spanish interpretation at institutions like Metropolitan Hospital, the participants did not even consider seeking interpretation in their mother tongues in hospitals or clinics.

A K'iche' respondent underlined the vital importance for him and his community of having interpretation in their mother tongue:

For me, it is very, very important, that when you get to a hospital you can quickly find a doctor or a nurse [who speaks K'iche']. Possibly I speak to you in Spanish, and I tell you that I am from Guatemala and that I speak in K'iche'- you get more confidence for explaining your state of health to them. For me it is very important, in case there are opportunities for our people who are studying [to help translate]. Or even to put a K'iche' translator in some hospital.

Discrimination takes many forms and, as mentioned earlier, affects Indigenous immigrants due to the languages they speak as well as their physical appearances. Some of our interviews suggested that phenotype plays a large role in the targeting of Indigenous immigrants by members of other groups, as well.

It happened to me once, I was walking down the street. I was with my daughter and my husband. And we came walking at 10 o'clock at night and two Dominicans, I believe, came. And we were just walking and she, I don't know, was enraged. Then she began to insult us, to tell us 'O damn Mexicans, go back to your country, what are you doing here?' And my English was not very good, right, I had been here around 7 years. I went back and told her, 'And who are you to insult me? You shouldn't insult me. You tell me something again and I'm going to talk to the police. You do not have the right to insult me, because I don't know you.' Just seeing our appearance, she says 'they are Mexican'. (NAHUATL 1:359)

Note that the interviewee surmised the origin of her verbal assailants as Dominican based on appearances (and perhaps speech) while the latter makes similar assumptions about the former. Stories of harassment at the hands of Hispanic neighbors are, unfortunately, commonplace among our participants. The large-scale arrival of Mexican immigrants starting in the 1980s led to tensions between the new arrivals and the largely Caribbean Hispanic groups who dominated many of the neighborhoods the newer migrants moved into, such as East Harlem, the South Bronx and Corona, Queens. Many participants tell stories of being targeted as Mexicans based on their appearance. The Mexican phenotype in the New York popular imagination is largely an Indigenous phenotype, as the majority of Mexican migrants in New York have hailed from regions that are predominantly Indigenous, chiefly in Puebla and Guerrero. During that period, and to a lesser extent today, "looking Mexican" was a liability in terms of one's safety and a trigger for harassment, especially of younger generations.

## 6.4 Health

Almost all respondents reported being in good health, but this may be connected to the fact that the majority of interviewees being between the ages of 25 and 60, and also that many immigrants in these communities tend to be working-age. Good health, in the words of one Kichwa respondent, is about “eating healthy, getting exercise, playing, and drinking purified water.” At the same time, almost all of those interviewed had direct experience of some health issue, possibly a family member’s, and the particular challenges of navigating a health issue as an Indigenous immigrant in New York.

### 6.4.1 Traditional medicine

Forms of traditional medicine continue to exist, alongside associated culture-specific conceptions about health and the body (largely beyond the scope of this study), in all of the Indigenous groups included here. Almost every respondent reported some ongoing presence of traditional medicine in the community, particularly in the home region, but not all reported themselves to employ such medicines or practices. The use of medicinal herbs appears to remain particularly strong for all groups, but substantially less so in New York due to various factors linked to availability.

Some individuals and groups have been able to find relevant or similar plant medicines in the *botanicas*, principally serving Caribbean Latino populations, and other stores selling natural medicines. As one Garifuna respondent reported, “we know where to go buy it [at] the Botanica and the Korean stores—we go and we buy these herbs that we cook, so that we can drink, we could bathe with it, rub, and whatever.” She added that herbs play a particularly important role in soothing new mothers, who are given a kind of herbal brew “to clean her body after giving birth.” While medicines like this can be prepared by anyone with the knowledge, the Garifuna community also acknowledges *buyei*, traditional healers who serve as intermediaries between the living and the ancestors and aim to cure spiritual illnesses. At least one well-known *buyei* is active in the NYC Garifuna community, possibly others, with some moving between countries (Johnson 2007).

K’iche’ respondents were familiar with specific plant medicines and the illnesses they help cure: an herb called “lemon” (possibly lemon leaves) that can be boiled in a broth to cure fever, “yerba buena” for stomach pain, a plant called “ruda” (*Ruta graveolens*) whose branches and leaves must be crushed to help cure ear aches. But the spread of evangelical Christianity may be dampening interest in traditional medicine: “There are many who no longer believe. Some say that it is not possible and that it is better to believe in God.” Even as many now preferred doctors, there is skepticism about the high (and ongoing) costs of Western medicine.

“Our Andean medicine is very good and cures many diseases,” said a Kichwa respondent, describing medicines like a combination of cane liquor, rosemary, pennyroyal, rue, guayunga cocoa butter, almonds, kuy, dog, seeds and vegetables. One Kichwa respondent at least heard of a Kañari healer in New York, but another (who had a strong experience of traditional cures at home) had no sense of access here.

One Mam mother knows how to work with ordinary ingredients commonly found here and finds it more reliable: “Onion, garlic is medicine. Then the peel of the orange, I cook this and then I give them a little. Then my baby does not get sick and cough so much. On the other hand, yes, if I gave them the medicine that the doctor gave me, sometimes that would give him an allergy or give him another illness or get some red welts.” Others use epazote for hurt feet, ruda (*Ruta graveolens*) or manzanilla (chamomile) for stomach aches, salvia (sage), and other plants, in some cases sent by relatives from home.

Traditional Mixtec medicine, sometimes called *tatan*, involves ritual more than herbs, according

to one respondent. "In almost all our of little towns, they use it," he said, referring to the sweat lodge, or *temescal*. Yet herbs were also mentioned: *minu* (epazote), *castila* (mint) and chamomile, among others.

One Nahuatl respondent was not sure about the presence of *curanderos* or traditional medicine here in New York—and she was skeptical about its efficacy and cost—but had visited one in Mexico because of possible symptoms of diabetes. Having paid \$500 for a first session, he wanted her to pay more for a follow-up after diagnosing her with an *espanto* (fright) resulting from witchcraft (*brujeria*). "I believe him," said the respondent, "because sometimes people would call me on the phone and they would threaten me. They do not like me."

At least some Indigenous individuals in New York are finding ways to receive plant medicines here and self-medicate based on transmitted community knowledge. "We can cure ourselves," said the Tlapanec respondent, referring at least to those who are from the *pueblo* or the *colonia*, "or we call the parents [in Mexico] and they send us [herbs, ointments, or other medicines]," which come via *paqueteria*, the extensive, informal parcel services that connect transnational Mexican communities. "That way we heal," she said, "but they do not go to a healer here."

#### 6.4.2 Food and nutrition

Immigrants seeking a better life and more opportunities are not prepared for what is often experienced as a decline in living standards, when it comes to food and nutrition in New York. Despite greater abundance, especially of meat, many respondents reported feeling that their diets have changed for the worse since arriving in the US. For those who work in food service, a large group in some communities, eating on the job and on the go may make things worse. Not only is the food they are eating less likely to be natural and more likely to be processed—the circumstances of diaspora also lead to feelings of alienation from traditional foods and foodways, as remembered in Table 5 below.

"[My diet] has gotten worse," said a Garifuna respondent. "There are too many chemicals in the food." Another agreed, citing the prevalence of (healthy) fish back home, along with the staple of yucca. "They wouldn't use that much sugar or anything that causes diabetes," she added. "Now we eat more processed food even back home they eat more bread than before. Before we would just have tortilla, flour tortilla, *ereba* [cassava bread] and coconut bread. So that wasn't harmful. But now we're buying more bread from the store." Instead of fried chicken, there were traditional foodways involving vegetables and leafy greens that are not available in NYC.

This should not be taken to mean that nutrition was ideal in countries of origin. For Garifuna, obesity was already an issue before migration, although this was not seen to be the case for the other groups.

When I was growing up in Belize, people were always obese in Belize. But we didn't see it as obese. We said, oh, you know, in those days we didn't even use the word 'overweight' in Belize. We didn't use it. We were comfortable people with that size: *dibuneti* [hefty]. *Dibuneti*, that's a good thing. You know, it was a good thing. But then, later on, we start to understand and realize, hey, you know, being overweight is not that healthy.

Obesity today "is a big issue," the respondent added, reflecting that American products and habits were reinforcing existing Garifuna instincts but that recently the community is responding and trying to get away from fried food:

You know, Garifuna people mostly eat a lot of starch. You know, we eat a lot of rice. I think Garifuna people... you know, now that's changing, but in those days they weren't too big on eating vegetables. But now it has changed. I see a lot of change, because when I go to events,

GARIFUNA	<i>ereba</i> (cassava bread), <i>hudutu</i> (mashed plantain stew), baked chicken, fried fish, fish stew, rice & beans with coconut milk, green bananas
K'ICHE'	corn tortilla, <i>chipilin</i> (a leafy green) with beans and eggs, chicken, beef, sauce of chayote, squash, mushrooms, herbs, boiled hierva buena, roasted tomatoes and other vegetables, fish
KICHWA	corn, meat, <i>cuy</i> (roasted guinea pig) with potatoes, cooked apples (for babies), various grains ( <i>chuchuca</i> , barley, quinoa, rice), tender corn soup, toasted corn, roasted potatoes, <i>pusku</i> , <i>killina</i> , <i>chibil</i> (similar to tamales), machica con panela (ground toasted barley); harina de habas (cornmeal soup), sopa de choclo (Peruvian corn soup)
MAM	Peas, pumpkin, tamalitos, rice & beans, tortillas, meat (consumed twice a week on average), pasta. eggs, herbs, chayote, beans
MIXTEC	tortilla, herbs, guajes (pods), <i>iva chichi</i> (bean leaves), <i>iva ti'un</i> & <i>iva te'to</i> (parts of agave cactus), dried fish, sweet bread, anoda cristata (a flowering plant), <i>iva</i> (herbs, leaves, mushrooms) with sauce, salsa molida, quelite (green, leafy vegetables)
NAHUATL	corn, tortillas, seafood, mole poblano, beans, rice, potatoes, corn, quelites, quintoniles (leafy green or purple root herbs), guasompes (leafy green flowers made with cheese), pipitza and papalo (green herbs), quelites, flor de calabaza, (pumpkin flowers), eggs, chilmole, pork, bull meat, radishes
TLAPANEC	Handmade corn tortillas made with maseca; raw vegetables; cilantro; raw papaya; quelite (various herbs); watercress with salt, lemon, and tortillas

Table 5: Traditional foods as recalled by participants

you'll see a lot of vegetables, and these events when they offer food, there's a lot of vegetables.... It's changing. We used to eat a lot of fried food. You know, fried this, fried that.... We fry our fish, we fry our bread, banana, we fry whatever... I've seen a big change in having more steamed fish, more baked this, you know.

A K'iche' respondent sees a stark contrast between the food in his hometown and what he found here: "Here there is nothing natural. It's pure canned food. And [with] fast food, you feel when you eat the food here, it gives you a lot of stress fatigue. [It] weakens one." Meat might be rare at home, "but here you always eat bread, rice, meat, and, if you do not take care of yourself here, you get fat." People walk on the street eating nachos and drinking Red Bull fast to stay awake—an unimaginable sight at home. People arriving here from his community get fat within 3 to 6 months, he added, but lose weight again if they return to Guatemala.

In comparison to the migrant generation, said one Kichwa respondent, the older generation of women back home are healthier and stronger because of the food there, with full sets of white teeth. Whether in terms of flavor, nutrition, or freshness, the food here "is no good," said another. "It has another flavor and very easily makes us sick." "Beyond exercising thrift in procuring food," reports Pribilsky (2007), "migrants also had to combat the tendency to give in to the convenience of buying prepared foods." As one respondent said, it was the conditions of life as a single working man just as much as the food:

I ate here, there, anywhere, and as you know the stomach is being destroyed. I did not eat

in a single restaurant, I ate any candy from the street. That's where my problem started: my stomach started to get sick. But since my wife arrived, with her we prepared food. She cooks and we eat what we used to eat in Ecuador.

A Mam respondent concurred, but said there was more that people could be doing to improve their diets.

Those who eat in restaurants every day are affected, they gain weight, those who work in pizzerias. Singles are the most affected. There is traditional food, but they are sorry to cook. If you live in an apartment, everyone has a stove, you can find something that they sell in any brand, and you can do it Cabricán style, with less fat, less oil, to stay healthy.

Another respondent had actually experienced the improvement herself, thanks to a greater variety of available foods and ingredients: "My diet has improved [here]. I [started] eating fish, fruits, vegetables and a little rice. I used to eat a lot but not now, my whole family eats a little. We eat more fruit and salad."

As a Mixtec interviewee made clear, the change in diet can occur immediately, but take years to reverse:

When I first came here, I started the first week eating food that I didn't like [because it was unhealthy], and I ate it because I had no choice. I couldn't find food like what I used to eat when I was at home. And I continued eating it and, yes – food from here is delicious but for me it is unhealthy food that will not help me. But I continued eating it. After a week, two weeks I started feeling tiredness, something like being lazy. Sometimes I felt like sleeping, but I couldn't sleep. I didn't feel like doing anything. I ate healthy sometimes but not every day. I ate fried food every day, hamburgers, French Fries, fried chicken...

[I ate] where I worked. I ate sausages, pork bacon, turkey bacon, ham and all kinds of bread. But everything is cooked with oil. I sometimes wanted something healthy, but no... And as time passed — a year, two years, three years—I couldn't take it anymore. And that's when I started to realize that it wasn't normal. I was not normal, I was lacking sleep every day. Tiredness and after that I looked for a doctor, I investigated...There he told me that I had high cholesterol. He told me not to eat more fried food, no red meat, no pork... That was last year. That's when I started cooking, preparing vegetables, everything that was healthy. I cooked fish, but in an oven, chicken, salmon — I could eat all of that, he said to me. And yes, one week passed, two weeks, three weeks and I began feeling better.

Our experience in the Xilonen program, described above in §5.1, made very clear that the majority of immigrants from the Mixteca region of Guerrero were generally unaccustomed to eating meat on a regular basis. Most reported eating meat once or twice a month due to scarcity and poverty. The resulting diet was far more healthy than the "western pattern diet" although we do not have sufficient information on malnutrition and food security in Guerrero to make strong claims (but see below for some negative assessments). What is clear, however, is that nearly the entire population from this region went from a largely vegetarian diet to one that is heavy on meat and processed foods, and this appears to be having consequences on their (self-reported) health.

### 6.4.3 Health issues

By far, the illnesses mentioned most frequently were diabetes and alcoholism, cited as major community health problems by two-thirds by respondents, as well as cancer, mentioned by just under half.

As the Tlapanec respondent summed it up, these are health problems resulting directly from the tremendous stressors of migration, overwork, dramatic cultural change and lack of access:

They come, basically to work, they have that idea of building their house and then returning [to their hometown]. They have two jobs, one in the morning and one in the evening. They basically don't eat well and then they get sick. They also endure it and so they go on. They are also not informed that they might be able to go to the hospital but not pay much. They do not know that. Some are not informed of that. And mentally, some who are depressed take refuge in alcohol... Acute depression, they feel alone, or so much work. Or sometimes some who have their wife there and they leave them [back home], but the wives go with other [men] and that is where they get lost most. This has happened to my brother-in-law, to my husband's brother.

Or in the words of a Mixtec respondent:

I want to return to my town, but we are undocumented and I have children here. If I go back to my village I do not have another opportunity to return here. And the children who are from here, we cannot take them to the town. [That's why] we put up with staying here [living in New York]. Here you suffer from everything [illness-wise] because life is very hard with your children. [It's] a lot of work with the children [and also with] personal work. We suffer from stress sometimes.

A Nahuatl man was diagnosed with diabetes just a year after arriving in the US, at the age of 23: "After [my son] was born, I gained weight and I drank a lot of soda." The Tlapanec respondent had a gallbladder issue and had to have it removed shortly after immigrating, a result, she was told, "of an excess of worries and eating a lot of salt and fat." She added: "I would say that when I was in [my home] town, I did not get sick at all."

Mental health—stress, anxiety, depression—came up repeatedly as a widespread problem that remains little diagnosed or discussed. "I would say 80 to 85 percent... up to 90 per cent [of my community] in New York City suffers a lot of stress, anxiety and all that," said one Mixtec respondent. "We don't really deal with mental issues well yet," said one Garifuna respondent, "we ignore it." Some mentioned in this context the difficulty of adjusting to a new climate, especially the extreme cold of the winters.

One Nahuatl woman highlighted the psychological effect of hearing about deportations in the current political climate:

It affects me when I see many abandoned, abandoned children. And sometimes I wonder if they were my children, what would I do? Abandoned by immigration, and I hear people say, 'They've already deported him.' And mom, what are you going to do? Or the children how are they going to be? Even if you say it will not touch you, but it does affect you emotionally...

Single mothers face the additional burden of raising a child in an unfamiliar society, without the extended family that would usually play such a vital role. One Nahuatl woman highlighted loneliness ("having no one to talk to") as a core mental health issue: "It affected me a lot to be away from my family... There are many people who lock themselves up, do nothing, stress, work, rent, children." For at least one Kichwa respondent, moving to New York from a smaller US city ameliorated precisely this feeling—the move was made for her mental health, to have more amenities and more community within walking distance.

Alcoholism, apparently among men in particular, can be an unquestioned norm of behavior. "Before I used to drink alcohol," said a Mixtec respondent who later spent time in the hospital, "I didn't drink a lot, just six, seven, or eight [alcoholic] drinks [in a night]." A Kichwa respondent described how the wider ramifications in his community:

There are quite a lot of alcoholism problems in the community, although this is a phenomenon that many people do not want to admit. They believe it is temporary, but there have been families who have suffered enough about an alcoholic father or mother.... I know people who have lost work because of alcoholism.

Domestic violence was mentioned by a number of respondents. “There are many people, many women who do not report [the abuse],” said a Nahuatl respondent. One Kichwa woman said she personally knows 5 cases of domestic violence in her network. According to one Mixtec respondent, it’s not necessarily that domestic violence exists more in Indigenous communities, but that “especially the Indigenous are putting up with a lot, because we look at that as before like it’s normal. And then they still do not want to talk, because they think that if there is violence and they call the police they will be intimidated.” Thus, we find elements cited here that affect undocumented immigrants across the board as well as those that may target Indigenous immigrants more specifically, such as the inurement to abuse discussed earlier, a particularly damaging remnant of the colonial legacy.

She also described her own experience:

[I came] alone. I have gone through many things, I arrived here a year and a half ago, I got together [with my partner]. I experienced domestic violence. I stayed with a daughter and we had trauma. We still have traumas. I remarried... I do not have a job now but my husband and I do sell things on the street. He sells books and, for example, special days like February 14 I make my [flower] arrangements. I sell. As on May 10 [Mother’s Day], I make my arrangements. I sell. I do not feel sorry for being in the street hawking.

Acute disease came up less, possibly given the younger profile of these communities. Garifuna respondents in particular mentioned the impact of cancer, but this is likely due to the Garifuna population having laid roots in NYC earlier and having more older members in the city, although this must be examined further. “Talking for myself,” said one respondent, “I had three family members that have died of cancer. My aunt and two of my cousins have died here in New York: two of breast cancer, and one, she had cancer in her shoulder.” Another Garifuna woman echoed this: “Quite a few cases of cancer, breast cancer. I have the impression that for every family at least someone has died of cancer. In my case, my mom died of cancer.”

HIV has been a major issue in the Garifuna community and one of the larger Garifuna organizations was originally founded to address the HIV epidemic in the community. Today, however, according to one respondent, it is hidden and ameliorated by drugs. In the Kichwa community, on the other hand, said another respondent, HIV has become an important problem in New York rather than Ecuador. She knew of three people from her town alone, now living in New York, who are infected, with one case involving prostitution, another infidelity.

#### 6.4.4 Pregnancy and childbirth

A number of those interviewed, both mothers and fathers, have had children in New York City and described a spectrum of experiences. A lack of prenatal support and knowledge, according to one Mixtec man, led to a difficult first pregnancy for his wife:

The first time she didn’t know what to do. She ate everything, she didn’t think about it. When she was first [pregnant], she drank soda, she ate everything and what they call sugar. My first child missed a month [didn’t finish the nine-month pregnancy term]. She was kept in the hospital. Because her sugar was really high.[...] That’s why they kept her, because that first girl was about to come out [prematurely]. Its weight was fine, except for her days [the premature birth].

One Nahuatl woman who has had three children in the city feels that the experience has improved over time, especially when it comes to (Spanish-English) translation:



At the time it really was very difficult to go to a hospital. There was not the help that exists now. We did not have [Spanish] translators, and I even remember that [when] if I had an appointment at 9 o'clock in the morning and someone did not come to translate for me at the appointment, I had to wait until all the patients who understand perfect English [were done] and they left us to the last.

On the other hand, there were rare reports of Indigenous language interpretation at hospitals, although these were not systematic. A Mixtec father reported his hospital experience with his wife who was giving birth, “when my wife came, she didn’t speak Spanish that well and there [in the hospital] they found someone that speaks Mixtec and translated for her.”

Another Nahuatl respondent had a good experience until after the moment of birth itself: “They treat you well. They give you respect. They respect you. They explain things to you. But when it comes to taking care of you, they only say, ‘You need to recover.’”

Several noted the lack of postpartum support in the New York context, including a Mixtec respondent who has had three children here with some support from her husband but none, she said, from her “macho” extended family. As another Mixtec woman put it, drawing out a contrast with the typical lack of any support system here: “In my town, it is like this: a woman who gives birth to a baby cannot do anything, nothing. You gave birth, you rest, the baby is taken care of by the mother-in-law...The only thing is to breastfeed...”

A number of respondents did learn about and receive WIC, but not all, and not necessarily at first. It was only on her second pregnancy, said the Tlapanec respondent, that she learned from her social worker about WIC and having a nutritionist and other benefits.

One Nahuatl woman described the post-partum depression she suffered after giving birth and has seen in others:

I feel that many women suffer from postpartum and depression. A lot, because they get desperate with not knowing how to take care of children, they get desperate too much....a lack of information, fear of spending money, illiteracy... Because all the people I know, many did not even reach high school. Many have not finished their studies.

#### 6.4.5 Challenges with care

Between worries about money, insurance, work, and cultural norms, many respondents from different groups mentioned that they and others they know typically only go to the hospital when something becomes serious, and not for preventive care or at an earlier stage—“like we do not take it seriously and let it get worse,” as one Kichwa respondent put it. “I was healthier when I was back in my town, but it changed,” said one Mixtec respondent. “When I came here, I started feeling bad. I got sick. But after I got here, I didn’t look good, because we don’t go to the doctor when we should, to ask them to check us.”

Respondents also mentioned experiences at a number of specific NYC hospitals that appear to serve substantial numbers of Indigenous patients, with varying success, including Metropolitan, Mt. Sinai, Elmhurst, Bellevue, Coney Island, a women’s clinic in Jamaica.

One Mixtec man described the positive experience that resulted when he finally addressed a chronic health issue:

I’m okay now, but in 2003 I was in pretty bad shape and I didn’t know what my pain was about. I was in pain, but I didn’t know what it was. Then I left my job and went to look for medicine from a doctor, my pain was getting really bad, I wasn’t able to sleep because part of my body was in pain. Once I got to the doctor, he said to me, he sent me to get an X-ray. We don’t know how your body’s system is. Then he said, ‘Come with me, you are in pretty bad shape.’ I

don't know what to call it in Mixtec. Pneumonia. Yes, that's what he found, but I didn't know what it was.

And then he said to me, 'Why did you take so long?' And as you know, here if I stop working [I'll be unable to pay bills], so I thought the rent is going to be a lot. Then the doctor said to me, 'Is your life more important, or the rent? Do you think you're going to be able to buy your life or the rent?' I will be able to pay the rent, but not my life. Then I spent a month [in the hospital]. A month. And he performed four operations on me. Yes, he made four different holes on my back [side]. Yes, I spent a month. I had some type of tube and also a small container with a lot of liquid in it. I went to two hospitals before I came out.

I got better here, because there is medicine, but in Mexico only if you have money will you be treated. Yes, I did suffer other diseases, because there is no medicine to treat us, because there is no money, but here they don't say anything. Money or no money they take you and treat you.

The same respondent noted that health problems in New York pale in comparison to the food insecurity he saw in his hometown:

The ones there suffer the most. Because there's nothing to eat. Yes, nothing to eat. The little they eat consists of vegetables and beans. They eat when they get food. And when they don't get food, they will only eat tortillas and salt. There's a lack of things to eat, that's why they're not healthy. So they are born with disease. There are no doctors, no money to treat themselves, so they die.

With insurance through employment almost non-existent, much depends on the ability to access Medicaid or some other form of support. Some have experienced what they perceive as discrimination which may relate to being Latino, speaking Spanish, or not having insurance. One K'iche' respondent described his doubts now about going to the hospital:

Yes, I went to the hospital. They neither gave me medicine, nor prescribed medicine. I only went to sleep in a bed, but when the receipt comes, it comes for \$900 or \$800... And at that moment [I realized that] they did not take care of me at all. And they did not understand me well... As I have heard and seen before, we are not valued....No one speaks to us in our language and that is why we do not understand well and explain ourselves well. They told me [at the hospital] that everything was fine, but that's not what I felt.

Beyond the (spoken) language barrier, there can be a literacy barrier when everything at the hospital is presented in print. As one Nahuatl respondent pointed out:

Here you have a paper for you to learn to do this, they just give us the packages, there are a lot of them, they throw them in. Maybe they do not know how to read. There is a lot [of illiteracy]. Because of all the people I know, many did not even reach high school, many have not finished their studies, and sometimes they ask me 'How did you learn English?' I say 'I study, read, do homework with my children and you. And you? Listening, do you know how to write? Do you know how to read? No. Because I do not know what it says.

Other barriers to accessing care are tied to housing, work and wider social problems which came up in the interviews even though these topics were not a focus. One Garifuna respondent involved in the community mentioned the numerous Garifuna people from Honduras, possibly recent asylum seekers, in New York City homeless shelters. One Nahuatl respondent described the fallout from her battle with a difficult landlord:

I lost my apartment and they sent me to court. I lost it.... When my dad died, I lost my apartment [too]. After 15 days they gave me, they told me you have 3 months until eviction. Because I was living in a condominium and the owner wanted it back and everything. For me, to have called 311 because we did not have water in winter, hot water, we did not have heating and they gave the woman a \$5000 fine because there were little children, and the only child that was in my house was my son. I got sick and because I got sick, called 311. And the lady was angry because I called 311. And she gave me a deadline, she said 'You know I'm not going to renew the lease, I want you to go.'

The landlord claimed the need to use it for their own family, but the result for the respondent is that she ended up having to spend time in a shelter—after having paid high rent without getting proper heat or hot water.

While it also goes beyond the scope of this study, several respondents alluded to issues around work, wage theft and occupational safety. One Mam respondent said she knew of 3 or 4 people from Cabricán alone who have been run over by cars while working delivery. One K'iche' respondent described how the current political climate allows bosses to steal the wages of vulnerable workers, especially day laborers:

You work 2-3 days with some man, and suddenly he tells you that they won't pay you. They leave, although they are there. They did it to me once. A man took me to work. I worked 3 days with him. He then tells us, 'Tomorrow there is no work.' 'It's okay,' we tell him, but he's going to pay us. 'No', he tells us. He's not going to pay us, and then he offered us his phone if we want to call the police. It scares us. What do we do? We leave it there. We give our 3 days, and we come back... Sometimes I meet my people from La Ceiba. They tell me, 'I have 2, 3 days of work with a man who did not pay me.'

## 7 Key findings and recommendations

Indigenous Latin American communities in New York are substantial, growing and diverse—including, minimally, tens of thousands of individuals speaking dozens of distinct language varieties. In 30 interviews totaling over 40 hours, members of these communities have shared a range of experiences which we as a research team, including ELA staff and community experts, are still digesting and will continue to work with over the coming months and years. However, we believe that some of the material discussed above permits some cautious, initial generalizations and recommendations, while also calling out for further, in-depth study and engagement.

**Demographically**, indigenous communities are embedded with their national communities, and within New York's wider Latin American world more generally, and thus may appear to be dispersed and invisible. Family, hometown, and acquaintance networks are informally active and critical where they exist. With the exception of the Garifuna community established earlier, many Indigenous communities may be younger than the general population, including many young parents with young children—who may be in a precarious position linguistically and culturally—and in some cases there may be a gender imbalance due to migration patters.

*Initiate a city-wide effort to educate policy makers, health workers, teachers, and other service providers about Indigenous populations in NYC.*

In terms of **language use and attitudes**, speakers of Indigenous languages are maintaining their languages in NYC to a degree, wrestling with a range of attitudes derived from a history of discrimination and shaming. Digital communication tools and transnational ties may be helping,

but intergenerational transmission is extremely weak and in some cases this may be having a very concrete negative impact, particularly for the children of monolingual and Indigenous language-dominant parents. Patterns of language shift already underway in the home region appear to accelerate in New York, where there are few spheres (often not even the home) for use of the language. Levels of Spanish and English vary widely, however, and ability to read and write in traditionally oral Indigenous languages is relatively rare.

*Acknowledge the existence of Indigenous languages and help create more spaces where possible for Indigenous language use and instruction. Extend outreach to Indigenous parents about the importance of parents' speaking to children in one's own mother tongue similar to existing NYC-DOHMH outreach aimed at increasing child-directed speech.*

**Discrimination and language access** are substantial issues for Indigenous communities, whose marginalization and invisibility – most providers will not even know of the existence of these languages—make it especially hard for them to learn about and access city services.

*Meet the pressing need and growing demand for an organized, trained network of interpreters for the major Indigenous languages represented in New York. Existing services used by city agencies, such as Language Line, are not equipped to handle these relatively smaller, oral, highly diverse and unstandardized languages. Interpreter training with local providers like the cooperative Caracol or the Mayan League in DC could help existing ad hoc interpreters, many of whom worked on this project.*

Indigenous communities bring with them substantial knowledge about **traditional medicine**, especially plant-based medicine, but may lack access to materials and healers in New York.

*Engage further with Indigenous practices, knowledge, and conceptions around health—with potential benefits in terms of both enhanced cultural continuity and improved health outcomes.*

**Food and nutrition** in Indigenous Latin American communities, while often precarious, has also tended to draw on locally sourced, all-natural ingredients and a range of traditional, culturally salient foodways. In New York, given the constraints of immigrant life, there appears to be a widespread feeling that diets have changed for the worse: less natural, more chemical, and alienated from tradition, in addition to the rapid and massive increase in the consumption of meat, processed food and sugary drinks.

*Support more activities like the Xilonen Program that show how Indigenous ingredients can be sourced and Indigenous foodways maintained in New York.*

The most frequently cited **health issues** for respondents were diabetes and alcoholism, as well as cancer, mental health issues, and domestic violence. A relatively young and largely healthy population is facing challenges that appear to be particularly connected to the isolation and overwork of their socioeconomic situation.

*Engage in a participatory process with Indigenous communities around ways to address the issues identified—possibly focusing on programs that improve diets and relieve stress, particularly on single Indigenous mothers.*

**Challenges with care** include worries about money, insurance, work, housing and cultural norms, with many respondents mentioning that they and others they know typically only go to the hospital when something becomes serious.

*Spread awareness of Medicaid and other free and low-cost programs that Indigenous New Yorkers may be eligible for and emphasize the importance and accessibility of preventive care.*

## 8 Conclusion

This study is meant to help initiate a two-way learning process between policy makers and Indigenous communities. To quote Kichwa community expert Fabian Muenala:

From my perspective, I consider that this preliminary study has a fundamental importance: making visible other forms of life and social organization. And for this I consider it fundamental, and to some extent vital, to increase the number of studies and research on the themes of health and prevention that peoples have developed in their communities of origin and develop clandestinely, even outside the law.

From ELA's perspective, one of the most valuable things we can do is serve as a bridge between policy makers, researchers, media, non-profits and the general public and many different linguistic communities in NYC. At the same time, this has also been an important learning experience for our organization, in which we have increased our own capacity to collaborate with health related organizations and city agencies.

The most urgent goal is to understand the needs of the community better. We hope this initial qualitative survey has both outlined fruitful approaches for moving forward and helped built the kinds of relationships that will make moving forward possible.

Thinking ahead towards longer-term, broad-scope goals, we can conceive of three cross-cutting levels at which Indigenous communities can be better served.

**Providing translation and interpretation for existing services:** At the most basic level, the DOH can simply treat Indigenous languages on par with national languages by providing translations of currently existing material, including health information as well as interpretation services in neighborhoods where the need is greatest. According to Medina (2019): Mam, K'iche' and Q'anjob'al — all Indigenous to Guatemala — have each become one of the 25 most common languages spoken in immigration court in the past few years, as are Mixtec and Zapotec. One research quoted estimates that as many as a third of the migrants currently crossing the border through Arizona do not speak Spanish—and many will reach New York.

While this would be an excellent start, it does not address the fundamental challenge that the vast majority of those individuals who do not speak Spanish also do not read in their mother tongue. Mother tongue literacy is relatively new in Mexico, having only been introduced in the last 15 years or so, and has not been implemented evenly throughout the country. Moreover, the need for Indigenous language interpretation is growing fast. Audio-visual materials distributed through community networks, by community members, have the greatest chance of succeeding.

**Creating new services catering specially to Indigenous populations:** In some areas with larger, long-standing Indigenous Latin American populations, especially in California, a host of new models have arisen for understanding and working with Indigenous populations. The Indigenous Farmworker Study, discussed above, provided a groundbreaking understanding of these communities.

Pan-Indigenous organizations, formed by migrants in 1994, include the Frente Indígena de Organizaciones Binacionales (Indigenous Front of Binational Organizations) (FIOB), an umbrella group that includes Mixtecs, Zapotecs, some Purépechas and some Triquis. Today FIOB has offices across California and Mexico. Likewise, CBDIO (Centro Binacional para el Desarrollo Indígena Oaxaqueño) is an Indigenous-led organization which has focused on improving health outcomes and on the importance of interpretation, including interpreting training and service provision in Indigenous languages.

Likewise, the Mixtec/Indígena Community Organizing Project (MICOP) in Ventura County “provides basic aid, educational workshops, language interpretation services, along with cultural pride and awareness events and refers Mixtec community members to health and social services. MICOP has trained 25 Mixtec *promotores de salud* that are bilingual in Spanish and Mixtec, and several with English fluency as well” Maxwell et al. (2014). Several clinics in the county have hired Mixtec interpreters to improve communication and be welcoming and to help provide culturally appropriate care. In Oakland, the Street Level Health Project in Oakland has pioneered a Mam-language health outreach program involving Mam-speaking community health workers.

All of these developments in California, where Indigenous immigrant communities are better organized and have deeper roots, suggest a future path for New York and its unique matrix of Indigenous language communities.

**Strengthening networks and building community:** ELA, city agencies, and others can help in the effort to connect isolated families and create networks that expand beyond the nuclear family and village level. This may include meetings for language groups and a stronger network for mutual support, which is especially lacking in the case of Indigenous Mexicans from Guerrero and environs, who arrived in large numbers only over the last 30 years.

## 9 Appendix A. List of speakers

	GROUP	AGE	GENDER	HOMETOWN	YEARS IN NYC
Speaker 1	Garifuna	63	Female	Dangriga, Belize	36
Speaker 2	Garifuna	53	Female	Livingston, Guatemala	14
Speaker 3	Garifuna	80	Male	Belize	49
Speaker 4	Garifuna	57	Male	Corozal, Honduras	31
Speaker 5	Garifuna	57	Female	Cortes, Honduras	49
Speaker 6	K'iche'	35	Male	La Ceiba, Guatemala	14
Speaker 7	K'iche'	48	Male	Pasin, La Ceiba, Guatemala	n/a
Speaker 8	K'iche'	41	Male	La Ceiba, Guatemala	n/a
Speaker 9	Kichwa	57	Male	Quilloac, Kañar, Ecuador	4
Speaker 10	Kichwa	57	Female	(Puruha) Riobamba, Chimborazo, Ecuador	3
Speaker 11	Kichwa	63	Female	Peguche, Imbabura, Ecuador	24
Speaker 12	Kichwa	53	Female	n/a	n/a
Speaker 13	Kichwa	80	Male	Salasaca, Ecuador	18
Speaker 14a	Mam	30	Female	Cabricán, Quetzaltenango, Guatemala	10
Speaker 14b	Mam	35	Female	Cabricán, Quetzaltenango, Guatemala	10
Speaker 15	Mam	32	Female	Cabricán, Quetzaltenango, Guatemala	10
Speaker 16	Mam	32	Female	Cabricán, Quetzaltenango, Guatemala	9
Speaker 17	Mam	34	Female	Cabricán, Quetzaltenango, Guatemala	4
Speaker 18	Mam	21	Female	Cabricán, Quetzaltenango, Guatemala	2
Speaker 19	Mam	34	Male	Cabricán, Quetzaltenango, Guatemala	15 (in US)
Speaker 20	Mixtec	26	Male	n/a	4
Speaker 21	Mixtec	49	Male	Íta Ndabi, Guerrero, Mexico	12
Speaker 22	Mixtec	26	Male	Yubi Naní, Metlatonoc, Guerrero, Mexico	5
Speaker 23	Mixtec	37	Female	Guerrero, Mexico	14
Speaker 24	Mixtec	38	Female	Chilistlahuaca, Metlatonoc, Guerrero, Mexico	14
Speaker 25	Nahuatl	30	Female	San Lucas Atzala, Cholula, Puebla, Mexico	11
Speaker 26	Nahuatl	42	Female	Resurrección, Puebla, Mexico	23
Speaker 27	Nahuatl	33	Female	Xalatzala, Guerrero, Mexico	9
Speaker 28	Nahuatl	36	Male	Puebla, Mexico	19
Speaker 29	Nahuatl	34	Female	n/a	11
Speaker 30	Tlapanec	32	Female	Malinaltepec, Guerrero, Mexico	11

## 10 Appendix B. Interviewers' guide (attached)

## 11 Appendix C. Interview transcripts (attached)

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