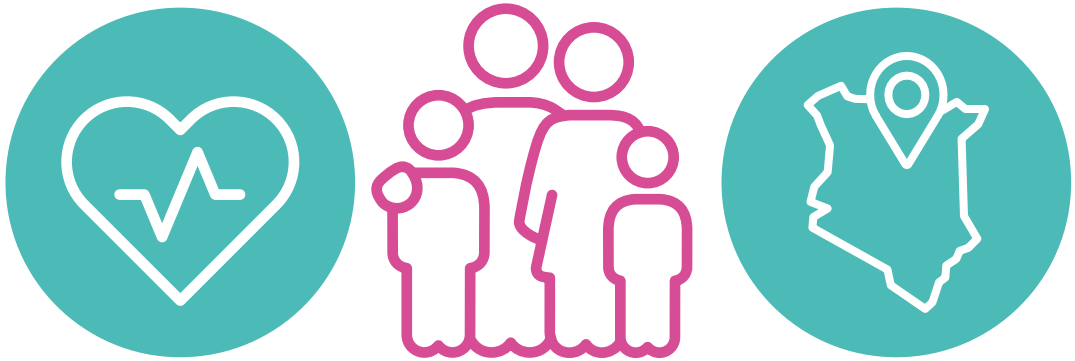
KENYAN COMMUNITY HEALTH PROFILE 2022



A BOLDER HEALTHIER BIRMINGHAM

Author Foreword

The Kenyan Community Health Profile was commissioned by Birmingham City Council to review the evidence on the Kenyan community in Birmingham and nationally. The report synthesises evidence on the experiences, needs and outcomes of the Kenyan community across a range of health and well-being indicators, including education, employment, housing, mental health, disabilities, substance (mis)use and physical activity. It illustrates the multi-layered barriers and inequalities faced by Kenyan people in relation to their health and everyday lives and highlights gaps in the existing evidence base. The report demonstrates the public health need for comprehensive monitoring, research, and engagement with Kenyan communities at a local and national level.

The Kenyan Community Health Profile is part of a wider series of evidence summaries produced by Birmingham City Council which focus on specific communities of interest.

Authored in partnership with Marya Arian
Global Managing Director at Hawkmoth Consultancy

Hawkmoth is a strategic advisory firm for global businesses and government.

Contents

List of Figures

List of Tables

Community Evidence Summaries

As part of the Public Health Division's work to improve the understanding of the diverse communities of Birmingham, we are developing a series of short evidence summaries to improve awareness of these communities and their needs.

There are common objectives for each of the evidence summaries which are:

- To identify and summarise the physical health, mental health, lifestyle behavioural, and wider determinants of health-related issues that are affecting the specific community both nationally and locally.
- To identify and summarise gaps in knowledge regarding the physical health, mental health, lifestyle behavioural and wider determinants of health-related issues that may be affecting the specific community both nationally and locally.
- To collate and present this information under the 10 key priority areas identified in the Health and Wellbeing Strategy for Birmingham 2021.
- To engage with the local communities on the evidence found and any gaps.
- To promote the use of these summaries for Local Authority and wider system use for community and service development.

Executive Summary

The Kenyan Community Health Profile identifies and summarises the national and local evidence concerning the health, lifestyle behaviours and wider determinants of health that affect Kenyan communities, both in Birmingham and across the UK. It covers health topics from maternity to ageing and dying well, includes health status risk factors such as diabetes and CVD (cardiovascular disease), protect and detect topics such as screening and vaccinations, and other themes such as knowledge and understanding around health issues affecting Kenyans.

There has been evidence of health inequalities between ethnic minority and white groups, and between different ethnic minority groups across the UK for some time. This community profile aims to unpack some of these issues, with a focus on the Kenyan community in Birmingham.

Kenya was part of the British Empire in Africa from 1895 gaining independence in December 1963, becoming a member of the Commonwealth in the same year. At this time, Kenya became a republic with the President of Kenya as head of state., Kenya contributed troops during both World War I and World War II, it is estimated around 1.4 million African soldiers served in the Second World War, which included 289,530 in the King's African Rifles (from Kenya, Tanzania, Uganda, and Malawi).

In the late 1960s and early 1970s, migration from Kenya was mainly of ethnically South Asian Kenyans who were forced out of the country. Upon arrival, this community of South Asian Kenyans mostly settled in Leicester and by and large mirrors the immigration map for people born in India. In the 2011 Census, a high proportion of British residents who were Kenyan identified as Asian (69%), compared to Black (16%). Consequently, the Kenyan profile will explore Indian and Black African-ethnic data, especially when Kenyan-ethnic data is scarce.

Of Kenyans who arrived before 1981 in the UK (n=82,736), 47% were Hindu, Sikhs accounted for 12.5% and 9.7% were Muslim. Overall, majority Kenyans in the UK are Hindu (37%; 51,211), followed by Christian (25%; 33,797), Muslim (12%; 16,965), and Sikh (10%; 14,212).

The 2011 Census recorded 11,099 Kenyan-born residents across the West Midlands and 3,988 in Birmingham with the community mainly concentrated in Hall Green, Springfield, Handsworth Wood and Sparkbrook wards.

The age profile of the West Midlands Kenyan community mirrors the age profile of the community across England and Wales, with 62% between the ages of 45 and 64.

The evidence and understanding of health inequalities faced by Kenyans in Birmingham has been identified through a variety of information sources.

The key health inequalities and points identified within the Kenyan profile are:

- There is a lack of information specific to the Kenyan community. Improved data collection at Kenyan-specific level is needed to gain a true understanding of the health inequalities faced by the Kenyan community within Birmingham.
- According to the Kenyan STEPS survey 2015, only 6% (male 6.8%, female 5.2%) of Kenyans have a minimum of the recommended five servings of fruits and vegetables daily.
- Data shows there is a high smoking prevalence when compared to other African countries, with 11.6% or 2.5 million Kenyan adults consuming tobacco (19.1% men and 4.5% female).
- A London-focused study with Kenyan-Asian participants found that participants were critical of both the psychiatric system and psychiatric staff.
- Kenyans are more likely to have diabetes than other African communities.
- Black African and Caribbean elders (BACE) have a higher prevalence and earlier onset of dementia compared with the White UK population.

Methodology

An exploratory search was undertaken by the Public Health Communities Team using a range of databases such as National Data Sources, NOMIS (Office for National Statistics), and PubMed to identify information on the Kenyan community for this profile. Keyword search terms and subject headings relevant to the themes were identified. All references used within this profile are outlined in the endnotes. As an initial exploratory search, the following avenues were examined:

a. National data sources

NOMIS data:

Data has been extracted by ethnicity from the 2011 Census available at https://www.nomisweb.co.uk/. It should be noted that the most recent ethnicity data available is from the 2001 and 2011 census, so any conclusions from using this data and information should be made with caution. The next census data should be released at the end of June 2022.

National Public Health (PHE fingertips) and government data sources (ons.gov.uk and gov.uk):

Data has been extracted where relevant Kenyan community-level information was available.

National voluntary and community sector reports:

These have been identified through Google Scholar and national websites, specifically where relevant Kenyan community-level data and information were available, such as:

- Diabetes UK (https://www.diabetes.org.uk/)
- Public Health England (now replaced by UK Health Security Agency and Office for Health Improvement and Disparities (https://www.gov.uk/government/organisations/public-health-england)

b. PubMed search

In addition, a PubMed search conducted on https://pubmed.ncbi.nlm.nih.gov/ was performed. All searches contained the keyword "Kenyan" as well as words that were specific to the topic theme. Examples of this are included in the search strategy (Appendix 1).

c. Grey Literature

Where information sources had not been identified through a or b, further searching through Google, Google Scholar, and PubMed using topic-specific search terms was carried out. Papers that were relevant to the UK were included i.e., data and information stemming from local or national-level reports and/or surveys.

Findings from international and national systematic reviews and large-scale epidemiological and qualitative research studies were also considered for inclusion. International research findings were included if they were deemed to be comparable or relevant to the national population.

In addition, "snowballing" - a technique where additional relevant research is identified from the reference list and citations of the initial search or published article was also applied. Additional papers were identified

from reference lists using this approach, where these additional resources enhanced the knowledge base. Generally, searches were limited to the year 2000 onwards, however, older information was occasionally considered where information was scarce.

d. Data consolidation and analysis

Results retrieved from the initial searches were reviewed by the Public Health Communities Team against the search strategy (Appendix 1). The articles utilised in this document were then analysed, identified, and cross-referenced with other themes throughout the report.

137,492 KENYAN-BORN PEOPLE IN ENGLAND & WALES
according to the 2011 Census

3,988 KENYAN-BORN PEOPLE IN BIRMINGHAM (0.4%)
11,099 Kenyan-born people across the West Midlands (0.2%)

UK'S KENYAN COMMUNITY

*Annual Population Survey

144,000*	137,492	129,356
2020	2011	2001

INTERNATIONAL CONTEXT

According to the UN's figures, the UK accounts for 33% of the Kenyan population abroad and almost 80% of the Kenyan population in Europe.

Kenya and Britain have a long-running relationship, rooted in Kenya's history as part of the British Empire in Africa between 1895 and 1963. Kenya gained independence from Britain in December 1963.

Among non-UK countries of birth with the highest proportions holding a UK passport. Kenya-bom citizens had the highest percentage of holding a UK passport and acquiring British citizenship (86.9%)

A BOLDER HEALTHIER BIRMINGHAM

1.0 Introduction

1.1 Overview of the Kenyan community

1.1.1 Demography

According to the 2011 census[1], there are 137,492 Kenyan-born people in England and Wales. Specifically, it recorded 135,966 Kenyans in England, 1,526 in Wales, 2,743 in Scotland[2] and 301 in Northern Ireland[3]. The 2020-21 Annual Population Survey recorded 144,000 Kenya-born residents in the UK[4] [5].

The rate of growth of the Kenyan-born population in Britain has slowed down: from 1991 to 2001 the population of those born in Kenya increased by 15% (from 112,441 to 129,356), compared to from 2001 to 2011 when the population only grew by 6.3% (from 129,356 to 137,492)[6]. However, it is worth noting that the Census recorded a substantial increase in the Black African population between 2001 and 2011. In 2001, the Census recorded 494,669 Black Africans in England and Wales, which was 0.9 % of the total population. This number increased to 989,628 in the 2011 Census, accounting for 1.8 % of the total population, a rise of 100.1 % over the decade[7].

1.1.2 History and Migration Patterns

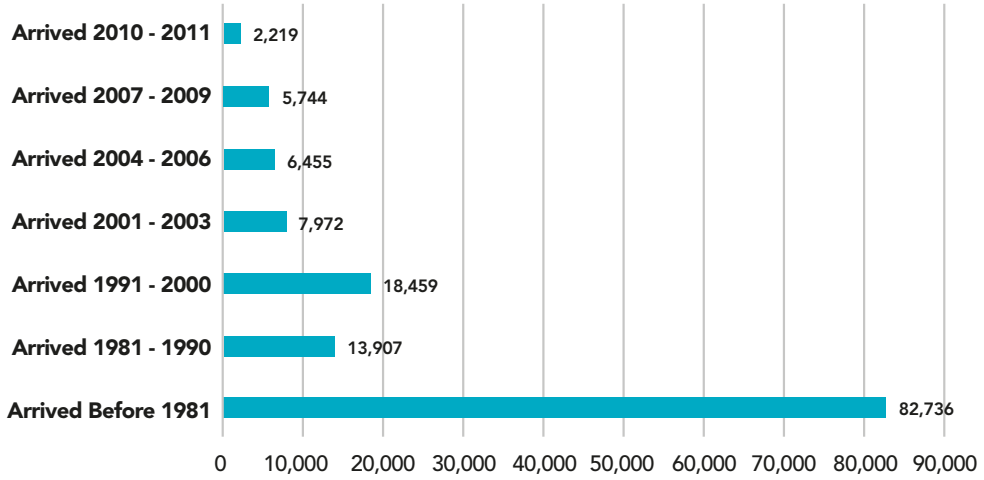
As shown in figure 1, the main wave of migration from Kenya was before 1981 (60%). In the late 1960s and early 1970s, the migration from Kenya was mainly of ethnically South Asian Kenyans who were forced out of the country. Upon arrival, this community of South Asian Kenyans mostly settled in Leicester and by and large mirrors the immigration map for people born in India[8].

Kenya is located on the East African coast and borders Tanzania to the South, Uganda to the East and South Sudan and Ethiopia to its North. The eastern edge of the country borders Somalia and the Indian Ocean. Together with Somalia and Ethiopia, the three countries together are referred to as the Horn of Africa. Since 1981, there have not been substantial migration waves from Kenya, the recent migration from the country involves ethnically Black African Kenyans[9].

Kenya was part of the British Empire in Africa between 1895 and 1963. Kenya gained independence from Britain in December 1963, becoming a member of the Commonwealth in the same year. At this time, Kenya became a republic with the President of Kenya as head of state. While part of the British Empire, Kenya contributed troops during both World War I and World War II. It is estimated around 1.4 million African soldiers served in the Second World War, which included 289,530 in the King's African Rifles (from Kenya, Tanzania, Uganda, and Malawi)[10].

One of the key aspects of migration from Kenya is the migration of the Indian community from Kenya to the UK rather than Black African-Kenyans. Due to its two-stage journey, the Kenyan-Indian community is a distinct ethnic group compared to the South Asian diaspora from India, Pakistan and Bangladesh. Kenyan-Indians are called 'twice migrants', having completed a two-stage journey, first from the Indian subcontinent to a selection of East African nations and then to Britain. Migration from the Indian subcontinent to East Africa began at the end of the nineteenth century. The East African region was partitioned between Germany and Britain in the 1890s, creating economic opportunities and prompting migration from South Asia. East African territories acquired independence in the early 1960s and the governments adopted an economic policy of Africanisation restricting work permits and trading licenses for non-citizens. This prompted the large-scale migration of the South Asian community from Kenya to the UK[11].

Figure 1: Migration pattern from Kenya to England and Wales, 2011



Source: 2011 Census, Table CT0562

1.1.3 Languages

Kenya is a multi-ethnic country with more than 40 ethnic groups and multiple local dialects and languages. The national language of Kenya is Swahili (the native name is Kiswahili), and the official languages are Swahili and English[12]. In England and Wales, 15,059 people recorded Swahili as their main language, 82% of whom were of African ethnic heritage[13].

Of Swahili speakers in England and Wales, 12,353 recorded Black African as their ethnicity[14]. Also, of Swahili-speaking Black Africans in Britain, 5,020 were Christian and 6,720 Muslim[15]. Considering the majority of Kenyans in Britain are ethnically Indian, the main languages spoken by the community will be South Asian. According to the 2011 Census, the top ten main 'other' languages in the UK included Punjabi (273,000 people), Urdu (269,000), Bengali (221,000) and Gujarati (213,000) which appeared as the

second, third, fourth and fifth most commonly spoken 'other' languages, respectively[16].

1.1.4 Food

As a multi-ethnic country, Kenyan cuisine has multiple cultural influences. The national dish of Kenya is considered to be nyama choma (grilled barbecue of beef or goat meat served with ugali – cornmeal, and kachumbari – vegetable salad). The coastal dishes in Kenya have Arabic and South Asian influences and include food items such as pilau (rice with meat cooked in stock), chapati (soft flatbread), and madafu (coconut water taken from unripe fruits)[17]. This compares to the cuisine of the central Kenyan region which is comprised of a combination of meat meals served with carbohydrates such as potatoes[18]. While the staple food of the Luo and Luhya communities located close to Lake Victoria is fish, the urban Kenyan population subscribe to various cuisines depending on their origins[19].

1.1.5 Culture

Many notable personalities in the UK were born in Kenya, gaining prominence in several sectors. This includes renowned biologist and writer, Richard Dawkins who was born in Nairobi and moved to England aged eight. Other notable Kenyans in the UK include British Paralympic wheelchair racer, Anne Wafula Strike MBE, cyclist Chris Froome OBE, British politician Baron Hain PC, and crossbench member of the House of Lords, Baroness Prasher CBE PC.

1.2 International Context

1.2.1 World Demography

According to the UN's figures, the UK accounts for 33% of the Kenyan population abroad and almost 80% of the Kenyan population in Europe (see table 1). The UN's data on 'total migrant stock' estimates that in 2015 more than 455,000 people from Kenya were living outside of the country's borders[20]. The following figures show the top ten Kenyan diaspora communities abroad.

Table 1: Top 10 countries with largest Kenyan diaspora communities, December 2015

Country	Number of people
TOTAL	455,889
United Kingdom of Great Britain & Northern Ireland	151, 073
United States of America	105, 467
Uganda	43, 512
Canada	27, 929
United Republic of Tanzania	27, 247
Australia	17, 850
South Africa	17, 686
Germany	15, 034
South Sudan	9, 558
Italy	3, 641

Source: UN: Population Division - Trends in International Migrant Stock; Migrants by Destination and Origin, table 16[21]

In 2018, Kenya received roughly £556 million, making it the 11th largest recipient of remittances from the UK, equivalent to roughly 0.8% of Kenya's GDP[22]. Kenya and the UK have long-standing ties with close cooperation in key sectors of education, trade and investment. The UK is the largest European foreign investor in Kenya, some of the UK's major investments are in Kenyan financial services, telecommunications, chemicals, agricultural and manufacturing sectors. Currently, there are about 100 British investment companies based in Kenya, valued at more than STG £2.0 billion[23]. Similarly, the UK is Kenya's second most important export destination, with exports including tea, coffee and horticultural products.

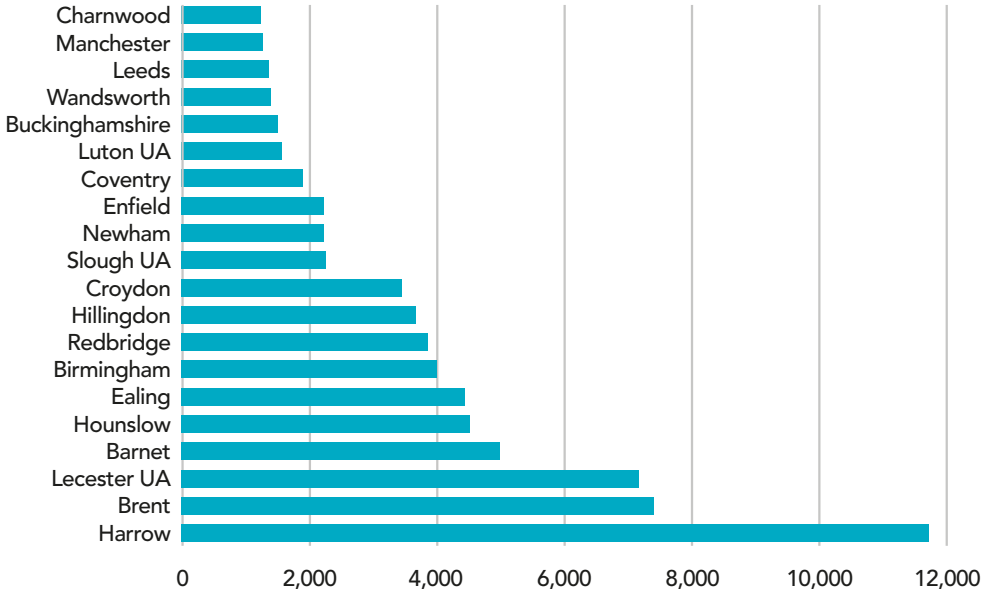
1.3 National Context

1.3.1 National Demography

As shown in figures 2 and 3, below, the greatest proportion of Kenyans is in North West London, particularly Harrow and Brent, followed by Leicester. The presence of the community in these locations indicates the Kenyan-born category likely represents the Indian ethnic group as it mirrors the map of British Indian residents.

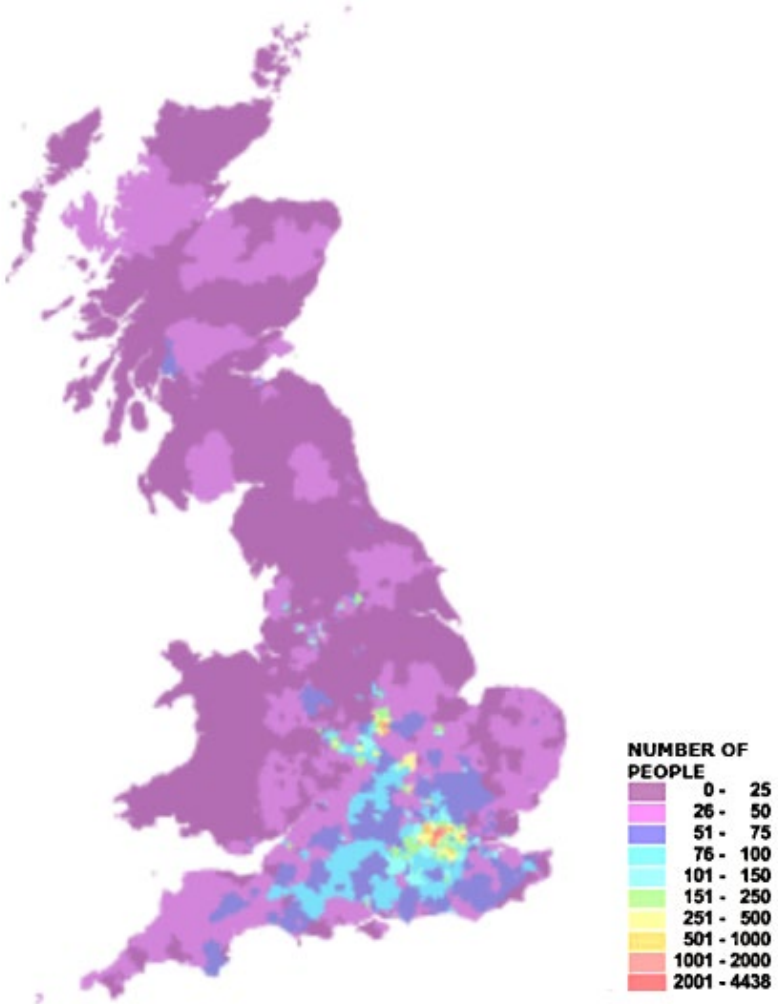
According to the 2011 Census, there are 3,988 Kenyan-born residents in Birmingham, one of the largest settlements of the British Kenyan community.

Figure 2: Top 20 areas with Kenyan-born residents across Britain, 2011



Source: 2011 Census, Table QS203EW_Numbers

Figure 3: Concentrations of Kenya-born residents



Source: Map image from BBC[24] (Map shows the country as if areas with roughly equal populations were the same size, densely populated London takes up much more space than sparsely populated Scottish Highlands.)

1.3.2 National Identity

In the 2011 Census, a high proportion of British residents who were Kenyan identified as Asian (69%), compared to Black (16%)[25]. There is limited information on the size of the different communities within the Black African ethnic field. Research has found those noting the 'Any other Black/ African/ Caribbean background' category substantially undercount the full size of these communities[26].

Published research[27] has found that the 'countries of birth' category only provide an indicative measure of the size of some of the different ethnic subgroups and that it is in general a poor proxy measure for ethnic origins[28]. For example, high proportions of residents who were Kenyan, Tanzanian, and Ugandan born identified as Asian (69%, 68%, and 58%, respectively), in comparison to Black (16%, 17%, and 33%, respectively)[29] [30]. In contrast, 93% of the Ghanaian-born and 92% of the Nigerian-born British residents identified as Black[31].

1.3.3 Country of Birth

Among non-UK countries of birth with the highest proportions holding a UK passport, Kenya-born citizens had the highest percentage of holding a UK passport and acquiring British citizenship (86.9%)[32]. There are 125,000 British nationals (as opposed to nationals of the country of birth or other nationalities) among Kenya-born citizens in the UK[33]. For some ethnic groups, country of birth is a poor proxy for 'Black African' ethnicity, for example in the 2001 Census, only 10.5 % of those born in Kenya identified as 'Black African'.[34]

As evident in table 2, the highest number of African born in the UK are from countries with colonial ties, in particular, South Africa, Nigeria, Zimbabwe, Kenya, Ghana and Somalia[35].

Table 2: Top five countries of the African-born population in England and Wales:

Country	Number of people
Nigeria	**191,183**
South Africa	**191,023**
Kenya	**137,492**
Zimbabwe	**118,348**
Somalia	**101,370**

Source: 2011 Census, Table QS213EW, Country of birth

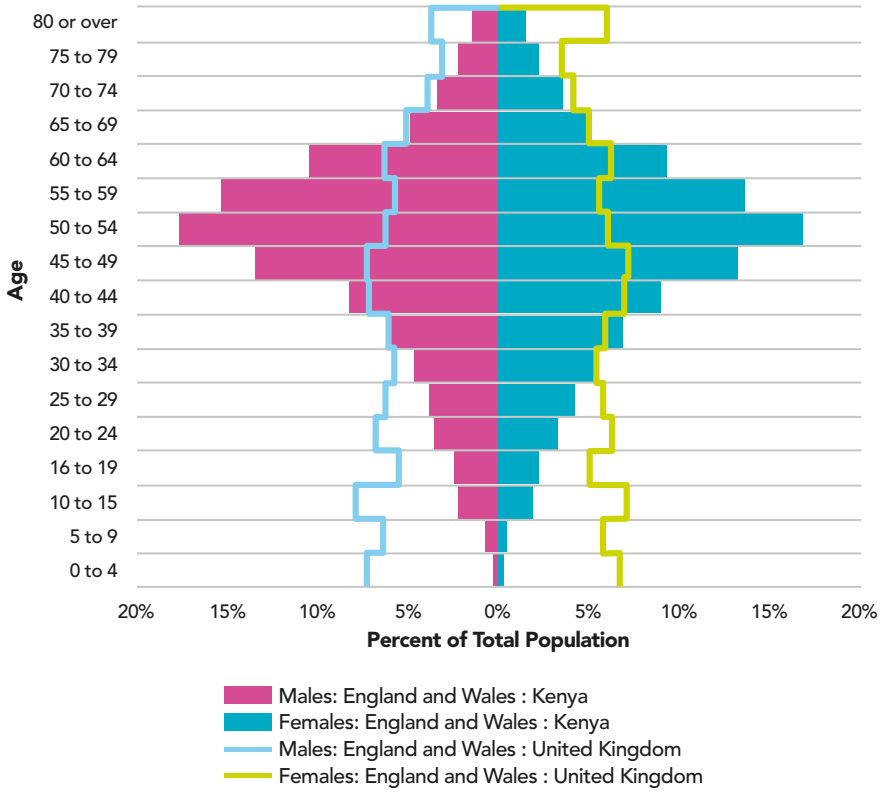
1.3.4 Religion

Of Kenyans who arrived before 1981 (n=82,736), 47% were Hindu, Sikhs accounted for 12.5% and 9.7% were Muslim[36]. Overall, the majority of Kenyans in the UK are Hindu (37%; 51,211), followed by Christian (25%; 33,797), Muslim (12%; 16,965), and Sikh (10%; 14,212)[37]. In contrast to the religious makeup of the Kenyan community in the UK, Kenya's 2019 census recorded a total of 47.2 million persons with an estimate of 85.5% of the total population being Christian, 11% Muslim (many of whom are refugees and asylum seekers from neighbouring Somalia[38]), less than 2% are Hindu, Sikh, Baha'i, and those adhering to various traditional religious beliefs[39]. Non-evangelical Protestants account for 33% of the population, Roman Catholics 21%, and other Christian denominations, including evangelical Protestants, African Instituted Churches and Orthodox churches, 32%[40].

1.3.5 Age Profile

The Kenyan-born group in the UK has an older age profile, compared to most other ethnic minority groups. The age profile of the Kenyan community reflects the early migration of the group, with 60% migrating to England and Wales before 1981. The second- and third-generation Kenyan residents likely record Britain as their country of birth, British as their national identity and Asian or Indian as ethnicity, which means the birth of later generations is not reflected in the Kenyan age profile.

Figure 4: Age profile of Kenya-born residents in England and Wales, 2011



Source: 2011 Census, Table CT0561

1.4 Birmingham context

1.4.1 Demographics

The 2011 Census recorded 11,099[41] Kenyan-born residents across the West Midlands and 3,988 in Birmingham[42], with the community mainly concentrated in Hall Green, Springfield, Handsworth Wood and Sparkbrook wards (table 3).

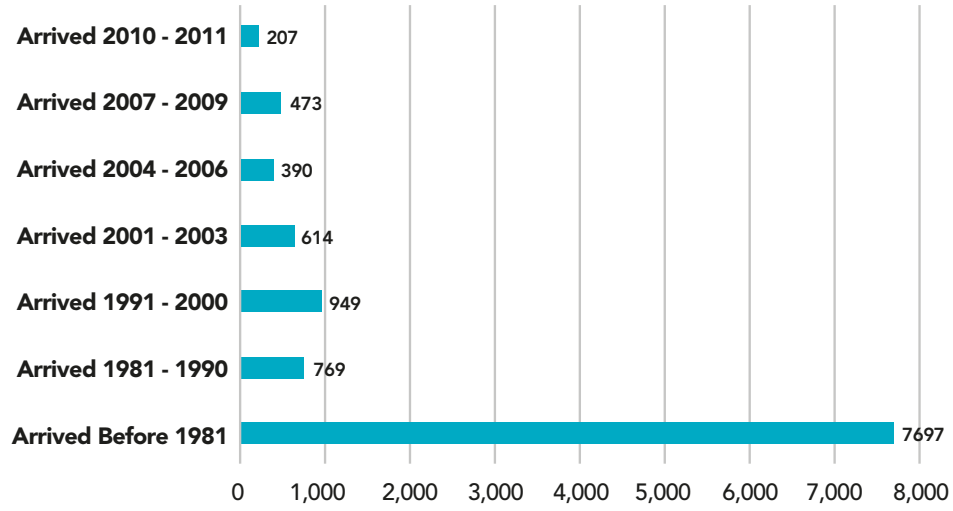
The 2001 Census recorded 3,769 Kenya-born residents (0.4% of total city population)[43], this increased to 3,988 (same proportion: 0.4% of total city population) in 2011[44]. This is shown in figure 5 below, which mirrors migration patterns from Kenya to Britain, the main wave of migration from Kenya to the West Midlands was before 1981 with around 70% arriving during this timeframe. Since 1981, there have been no significant migration waves from Kenya to the West Midlands.

Table 3: Top 10 wards in Birmingham with the greatest proportion of the Kenyan community

Birmingham ward	Number of Kenyans	Proportion of ward (%)
Hall Green ward	**416**	0.3
Springfield ward	**385**	0.3
Handsworth Wood ward	**302**	0.2
Sparkbrook ward	**211**	0.2
Acocks Green ward	**148**	0.1
Aston ward	**187**	0.1
Billesley ward	**153**	0.1
Bordesley Green ward	**106**	0.1
Brandwood ward	**76**	0.1
Edgbaston ward	**137**	0.1

Source: 2011 Census; Birmingham City Council[45]

Figure 5: Migration pattern from Kenya to the West Midlands, 2011



Source: 2011 Census CT0562

1.4.2 Languages

According to the 2011 Census, there are 1,250 Swahili speakers in the West Midlands, and 364 people[46] in Birmingham who noted Swahili as their main language, only 2.4% of Swahili speakers in Britain live in Birmingham with the majority living in the district of Ladywood (131)[47]. The top three wards with the greatest number of Swahili speakers in Birmingham are Aston, Nechells, Lozells and East Handsworth.

Table 4: Top 5 wards with greatest number of Swahili speakers in Birmingham

Birmingham ward	Number of Swahili speakers
Aston	**44**
Nechells	**37**
Lozells and East Handsworth	**35**
Ladywood	**26**
Soho	**24**

Source: 2011 Census, Birmingham City Council, QS204

A BOLDER HEALTHIER BIRMINGHAM

1.4.3 Age Profile

The Kenyan community in West Midlands has an older age profile with 62% between the ages of 45 and 64, mirroring the age profile of the community across England and Wales. 45 to 64-year-olds account for 62% of the Kenyan community in the West Midlands (6,914), while 0 to 19-year-olds only make up 5% (552).

Figure 6: Age profile of Kenya-born residents in West Midlands, 2011

Source: 2011 Census, Table CT0561[48]

CHILD POVERTY

In absence of Kenyan-specific data, viewing statistics on the Indian and black ethnic groups proxy shows that 30% of children living in Black households were living in low-income families, ten percentage points higher than the national average However, Indian households were the least likely to live in low income and material deprivation compared to all ethnic groups (17%; three percentage points lower than the national average)

CHILDHOOD OBESITY

Using data on the Indian ethnic group as proxy, the percentage of overweight children aged 4 to 5 decreased in the Indian ethnic group from

14.9% to **13.8%**

It has the lowest proportion of all ethnic groups

36.5% of those in the 10 to 11 age group are overweight

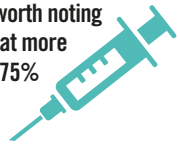
1,402 BIRTHS AMONGST KENYA-BORN WOMEN yielded a total fertility rate (TFR) of **1.89**

KENYAN-BORN WOMEN HAVE ONE OF THE LOWEST BIRTH RATES

among African women in England and Wales

MORE THAN 90%

As majority of Kenyans identify as Asian, it is worth noting that Indians have the highest vaccine uptake at more than 90% for both primary vaccinations, and 75% vaccine coverage or the primary course and pre-school booster offered at 5 years of age



2.0 Community Profile

Significant health differences exist between minority ethnic groups and White populations, a pattern which is reflected in the Kenyan community. The following sections present and highlight key health statistics and data from a collection of sources. Each section features key findings in bullet point format, before presenting detailed evidenced information. All findings are essential for informing policy, which can be used to address health concerns for Kenyans within the UK and specifically Birmingham.

Key findings

- Kenyan-born women have one of the lowest birth rates among African women resident in England and Wales.
- The majority of Kenyans identify as Asian, Indians have the highest childhood vaccine uptake, at **more than 90%** for both primary vaccinations, and **75%** vaccine coverage of the primary course and pre-school booster offered at 5 years of age.
- Using data on the Indian ethnic group as proxy, the percentage of overweight children aged 4 to 5 decreased in the Indian ethnic group (**from 14.9% to 13.8%**).
- According to the 2011 Census, the **1,402** births amongst Kenya-born women yielded a total fertility rate of **1.89**, lower rate of birth than mothers from Somalia (**4.19**) and Nigeria (**3.32**), but higher rate than Zimbabwean (**1.83**) and South African (**1.79**) mothers.

2.1 Getting the Best Start in Life

2.1.1 Maternal health

There is limited data and information on the maternal health of Kenyan mothers in the UK. Kenyan-born women have one of the lowest birth rates among African women who are resident in England and Wales. According to the 2011 Census, the 1,402 births amongst Kenya-born women yielded a total fertility rate of 1.89, a lower rate of birth than mothers from Somalia (4.19) and Nigeria (3.32) but a higher rate than Zimbabwean (1.83) and South African (1.79) mothers. More broadly, maternal health and morbidity among Black women are frequently raised in published research, recent research found Black women are statistically four times more likely to die during childbirth than White women in the UK[49].

The total fertility rate (TFR) is defined as the average number of children that a group of women would each bear throughout their childbearing lifespan. TFR provides an insight into the level of fertility in a particular year and does not necessarily represent the average number of children that a group of women will have over their lifetime[50]. Research[51] has found that TFR is higher among Black African women in the UK, compared to most other ethnic minority groups. In 2014, births to mothers born in Africa contributed 5% of all live births[52]. Based on the 2011 Census, among women living in England and Wales but born in Africa had a TFR of 2.76 – this was the highest TFR of women living in England and Wales but born in any world region[53].

Data on fertility rates show generally the largest migrant communities in the UK yield the highest rate of fertility. For example, the 5,654 births among Somali-born women yielded a TFR of 4.19, the second highest in sub-Saharan Africa.

Table 5: Total fertility rate for women with an African country of birth, living in England and Wales

Mothers' country of birth	Total Fertility Rate (TFR)	Number of births in 2011 (England and Wales)
Somalia	4.19	5,654
Nigeria	3.32	7,476
Uganda	2.52	916
Kenya	**1.89**	**1,402**
Zimbabwe	1.83	2,837
South Africa	1.79	4,430

Source: 2011 Census and Aspinall et al.[54]

MBRRACE-UK provides an insight into maternal morbidity rates and racial disparities present in maternal healthcare. The MBRRACE-UK 'Enquiries into Maternal deaths and morbidity' 2020 report provides some useful insight[55] [56]. It highlights several disparities in maternal outcome statistics, including race, geography and socio-economic positioning. It has found reports of Black women being ignored or told they were overreacting when complaining of pain[57]. Similarly, other emerging themes from the lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2017-19 report[58] include feeling unsafe, ignored or dismissed, denial of pain relief due to racial stereotypes, and pervasive microaggressions causing harm or distress[59].

As there is a high percentage of Kenyan citizens that are of Indian heritage, information from Indian born mothers can be helpful for ascertaining risks experienced by Kenyan mothers. There has been a positive trend in terms of relative risk of maternal mortality to mothers born in India. From 2016 to 2018 mothers born in India were at a 2.16 times the risk compared to women born in the UK, with this figure seeing a drop to 0.86 times the risk from 2017 to 2019.

The MBRRACE UK Maternal report found when analysing the maternal mortality rates according to mother's country of birth, from 2017 to 2019 there were 7.42 per 100,000 maternal mortalities in the UK among mothers born in India, compared to 8.66 deaths per 100,000 of women born in the UK.

The 2011 Confidential Enquiries into Maternal Deaths in the UK[60] identified pregnant migrants who may not be familiar with the British language or culture as potentially vulnerable. It found just under a quarter of women who died in 2017-19 (23%) whose place of birth was known were born outside the UK, 22% of these women were known not to be UK citizens and citizenship was not recorded for a further 20%[61]. Overall, 6% of the women who died were not UK citizens, although this may be an underestimate since citizenship was not recorded for 7%.[62] This insight is particularly useful for recent migrant women from Kenya.

2.1.2 Stillbirths and Infant Mortality

There is limited information on stillbirths and infant mortality in the Kenyan community. However, considering a high proportion of Kenyans identify as Asian (69%), compared to as Black (16%), and overall around 60% of Kenyans in Britain are Hindu, Muslim, and Sikh, this section uses proxies such as data for both the Black African and Indian groups to provide some insight into issues of stillbirths and infant mortality within the Kenyan community.

Published research has found, that from 2014 to 2019, adjusted absolute differences[63] in stillbirth rates were highest for babies of Black African ethnic group (3.83) and lowest among Indians (1.71)[64]. Higher proportions of babies of Black African (39%) ethnic group were from the most deprived areas, which were associated with an additional risk of 1.50 stillbirths per 1000 births. The proportion of stillbirths of unknown cause was higher in babies of Indian (52%) ethnicity.

2.1.3 Childhood obesity

In absence of Kenyan-focused data, using statistics on the Black African group as a proxy shows that in both 4 to 5-year-olds and 10 to 11-year-olds, Black African children were the most likely to be overweight in 2017/18. Almost a third (30.8%) of those in the 4 to 5 age group were overweight, and 46%[65] of those in the 10 to 11 age group were overweight, the greatest proportion of all ethnic groups.

In comparison, the percentage of overweight children aged 4 to 5 decreased in the Indian ethnic group (from 14.9% to 13.8%)[66]. Around 13.8% of those in the 4 to 5 age group were overweight, the lowest proportion of all ethnic groups and 36.5% of those in the 10 to 11 age group were overweight[67]. Given the majority of Kenyans ethnically identify as Asian, it is likely the data on the Indian ethnic group captures the proportion of Kenyan children who are overweight or obese.

2.1.4 Childhood vaccination

The UK has a universal childhood immunisation programme with overall high vaccine coverage rates[68]. The childhood immunisation programme currently includes a 5-in-1 vaccine that protects against diphtheria, tetanus, pertussis, polio and Haemophilus influenzae type b (DTaP/IPV/Hib) offered at 2, 3 and 4 months of age (primary course) and a preschool booster between 3 years 3 months and 5 years of age (DTaP/IPV or DTaP/IPV)[69].

There is no data specifically on vaccine uptake for the Kenyan community, however, data on vaccine uptake in London by the African and Indian communities may provide some insight. To note, London has lower rates of vaccine uptake compared to UK-wide vaccine coverage. This is likely due to its increasingly ethnically diverse population, similar to Birmingham which is also a highly multi-ethnic city (vaccine uptake for primary immunisations of DTaP/IPV/Hib/HepB is 87.7% in London, similar to the West Midlands where vaccine uptake for the dose is 87.9%[70]). As a proxy, uptake of childhood vaccination among Africans[71] in London between 2006/7 and 2010/11 shows a high coverage at 90% and over 90% of the two primary vaccinations, respectively. However, coverage drops to around 65% for the pre-school booster offered at 5 years of age[72].

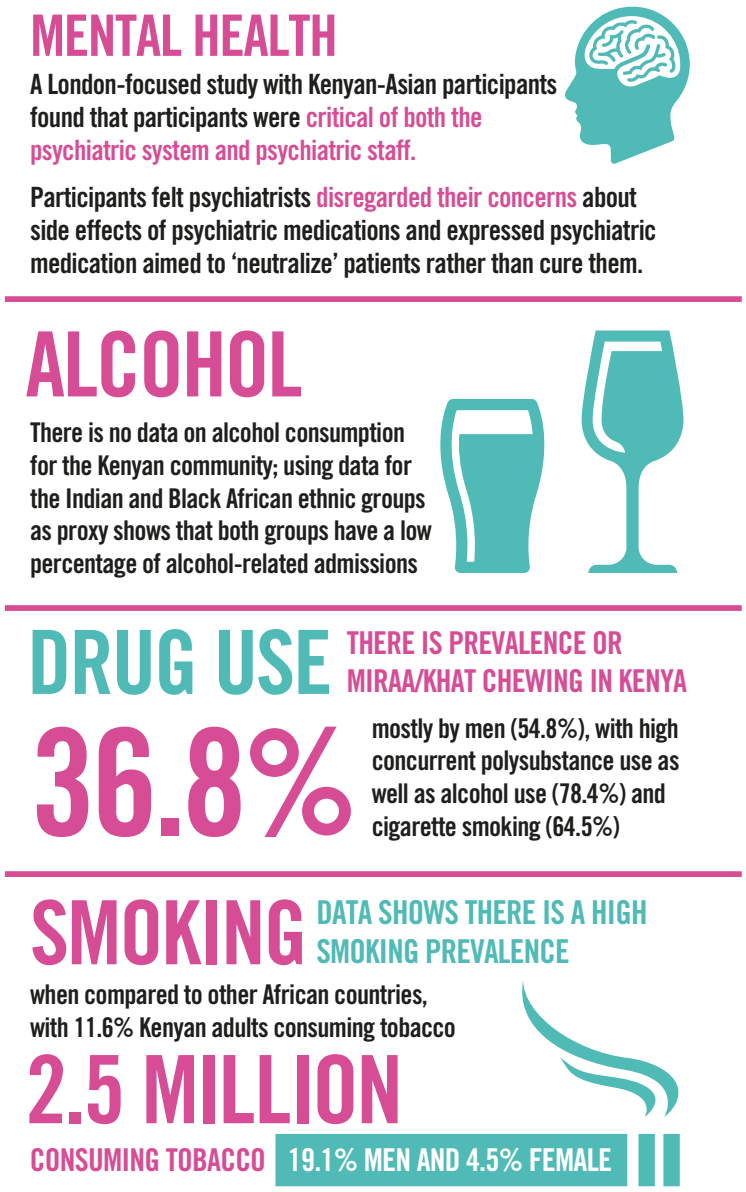
As the majority of Kenyans identify as Asian, it is worth noting that Indians have the highest vaccine uptake, at more than 90% for both primary vaccinations, and 75% vaccine coverage of the primary course and pre-school booster offered at 5 years of age[73].

2.1.5 Child poverty

In absence of Kenyan-specific data, viewing statistics on the Black ethnic group as a proxy shows that 30% of children living in Black households were living in low-income families, ten percentage points higher than the national average[74]. Indian households, which are reflective of a high percentage of the total Kenyan households, were the least likely to live in low income and material deprivation compared to all ethnic groups (17%; three percentage points lower than the national average)[75].

2.1.6 School readiness and educational attainment

Using the Black African and Indian ethnic categories as a proxy to gain an insight into the Kenyan community on educational attainment reveals, that Black African pupils achieved Progress 8 scores higher than average (0.17). Proxy data on Indian pupils can be used to build the picture of Kenyan children, due to the high percentage of Kenyan's that are of Indian ethnicity. Indian pupils achieved the second highest Progress 8 score (0.71) - the ethnic group least likely to experience both low income alone, and low income and material deprivation combined. It is likely the educational attainment of Kenyan pupils is captured in both these categories.



2.2 Mental Wellness and Balance

Key findings

- Research on perceptions of miraa/khat use among Kenyans in Kenya shows multiple substance use among khat chewers, specifically alcohol (78.4%) and cigarette smoking (64.5%).
- The prevalence of smoking in Kenya is high compared to other African countries, with 11.6% or 2.5 million Kenyan adults consuming tobacco (19.1% men and 4.5% female).
- Kenyan smoking prevalence is than the UK; 13.8% in 2020, of. It is likely the UK Kenyan community have lower smoking rates than their White counterparts.
- A London-focused study with Kenyan-Asian participants found that participants were critical of both the psychiatric system and psychiatric staff.
- Black African and Indian men have lower alcohol-specific admissions than White British men (0.5% and 2% vs 79%)

2.2.1 Mental Health

A London-focused study[76] with participants including Kenyan-Asian, Black African, Black Caribbean, Indian, and Somali people (n=103) reported that participants were critical of both the psychiatric system and psychiatric staff. Participants felt psychiatrists disregarded their concerns about the side effects of psychiatric medications and also that psychiatric medication aimed to 'neutralize' patients rather than cure them[77].

Research[78] on the impact of immigration and mental health issues among Kenyans in the United States also provides some useful insights. The Kenyan participants in the study reported discrimination, alienation, shame[79], overcompensation[80], acculturative stress[81], discrimination, feeling of exploitation[82], language barriers, intergenerational family conflict, and socioeconomic barriers, all of which place immigrants at a higher risk of developing mental health problems[83]. It also argues the combination of living with mental health disorders, adjusting to a new unfamiliar environment with few supportive social contacts, and limited economic resources could potentially hinder progress and engagement with services[84]. Kenyan immigrants expressed the integration process as "challenging", with the loss of cultural identity and displacement with one participant expressing "I was frustrated, I was depressed and to say the least, I thought of going back home, I thought of buying a ticket and taking the next plane back home"[85]. Looking only at older adult immigrants, the study found reduced use of formal mental health services when compared with both the general immigrant population and non-immigrant older adults, with language being a barrier[86].

2.2.2 Drug Use

There is no information on the Kenyan community and drug use in the UK. However, research on perceptions of miraa/khat use among Kenyans is available.

Research[87] has found the prevalence of miraa/khat chewing in Kenya is 36.8% (n= 306), mostly by men (54.8%). Some participants in the study reported at least one psychotic symptom (16.8%), with a greater prevalence of these episodes among women (19.5%)[88]. It also highlights high concurrent polysubstance use among khat chewers, specifically alcohol use (78.4%) and cigarette smoking (64.5%)[89]. As these figures are for activities in Kenya, it is not valid to assume that the picture is similar in the UK Kenyan population. Using data for the UK Black African community as a proxy, the British Crime Survey (BCS) combined three-year dataset (2006-09), shows levels of drug use among adults from a Black or Black British background were lower than those in White or Mixed groups[90]. Those from a Black Caribbean background had higher levels of cannabis and any drug use (7.9% and 8.7% respectively) than adults with a Black African background (2.7% and 3.5% respectively)[91].

2.2.3 Smoking

There is no data or information about smoking prevalence within the Kenyan community in the UK. However, ASH[92] has found when people immigrate to the UK, many come from countries with a different legal framework for tobacco control, a different cultural approach to tobacco use and potentially a higher smoking rate..

Data[93] shows that the prevalence rate of smoking in Kenya is high when compared to other African countries, with 11.6% or 2.5 million Kenyan adults consuming tobacco (19.1% men and 4.5% female). Though this is lower than in the UK; in 2020, 13.8% of people aged 18 years and above smoked cigarettes[94]. It is therefore likely the Kenyan community in the UK has a lower smoking prevalence than the White ethnic group.

This conclusion is further supported by published research from the United States. The study included six African migrant communities, including Kenyan participants (n=51) and found that 96.1% of the Kenyan participants had never smoked[95]. In terms of the cultural context of the Kenyan community, Kenya is a key manufacturer of tobacco and has strong links with the tobacco industry with a high smoking prevalence[96]. Data from the University of Bath which is based on the Kenyan Ministry of Health's statistics shows that 11.6% of the adult population (2.5 million adults, mostly men) use tobacco products, and 10% of 13-15-year-olds (nearly 13% of boys and 7% of girls)[97]. Among adults aged 18-69 years, 13% use tobacco with a higher prevalence among men (23%) than women (4%). In 2007, the Kenyan Parliament passed the Tobacco Control Act 2007 (TCA), to domesticate the Framework Convention on Tobacco Control (FCTC)[98].

Using the UK data[99] for the Black ethnic group, statistics from 2017 reveal Black men and women have lower smoking prevalence compared to their White counterparts (15% and 7%, compared to 22% and 14%, respectively). This finding mirrors ONS data which shows smoking prevalence is lower in most ethnic minority groups than in the White group[100]. Similarly, using data for those born in India as a proxy to understand smoking prevalence among the Kenyan community, shows that India-born residents have the lowest proportion of 'current smokers' (4.3%) as well as the highest proportion of those who have 'never smoked' (87.5%)[101].

2.2.4 Alcohol

While there is no data or information on alcohol consumption for the Kenyan community in the UK, using data for the Indian and Black African ethnic groups as proxy shows that both groups have a low percentage of alcohol-related admissions. Harmful use of alcohol is one of the main factors contributing to premature deaths and disability and has a major impact on public health[102]. Alcohol misuse is estimated to cost the NHS about £3.5 billion per year and society as a whole £21 billion annually[103].

According to 2014/15 data for England, Black African and Indian men accounted for 0.5% and 2% of alcohol-specific admissions, respectively, both of which are significantly lower than White British (79%)[104]. Similarly, both Black African and Indian women accounted for 0.4% of alcohol-specific admissions in England, significantly less than White British women (84.5%)[105]. It is therefore highly likely alcohol consumption and alcohol-related hospital admissions within the Kenyan community in the UK are low.

2.3 Healthy and affordable food

Key findings

- Research from the United States with Kenyan participants (n=51) found **56.9%** were overweight or obese.
- There is no data or published research on the diet of the Kenyan community in the UK. Research from the United States with Kenyan participants (n=51) found **82.4%** of the participants made a conscious effort to eat a healthy diet.
- According to the Kenyan STEPS survey 2015, **only 6%** (male 6.8%, female 5.2%) of Kenyans have a the recommended five servings of fruits and vegetables daily, while **23%** of adults add salt to food at the table.

2.3.1 Obesity

There is no data or information on the Kenyan community in the UK focusing on obesity prevalence. However, published research from the United States with Kenyan participants (n=51) found that 56.9% were overweight or obese[106]. Of the six African immigrant groups, this was more than Somalis (49.5%) and Sudanese (27.4%), but less than Liberians (74.1%) and Ethiopians (59.9%)[107]. Overweight and obesity are associated with increased rates of chronic disease and are major risk factors for non-communicable diseases such as cardiovascular diseases, diabetes, and some types of cancer.

While there is no data or information on the obesity rate in the Kenyan ethnic group in the UK, a study from 2018 found in Kenya the prevalence of overweight and obesity among women is high and may be growing[108].

The prevalence of overweight was 20.5%, and the prevalence of obesity was 9.1%, indicating a high proportion of Kenyan women are overweight or obese[109]. It also found women in urban areas with high socioeconomic status make up the largest proportion of those who are overweight or obese[110]. Overall, in Kenya, the prevalence of overweight and obesity was higher among women than men (at a rate of 17.5% for men and 38.5% for women being overweight, and 4.7% for men and 13.7% for women being obese, respectively)[111].

Using data from the Health Survey England 2004 on Black Africans as a proxy to understand obesity prevalence in Britain's Kenyan community shows the prevalence of overweight in Black Africans, including obesity (BMI over 25 kg/m2), was 61.8% among men (61.8 %). Prevalence of overweight, including obesity, was higher than the general population in Black African women (69.8%), the highest of all groups. Mean waist circumference was 90.6cm in Black African men (lower than the general population: 96.5cm) and 90.2 cm in Black African women (higher than the general population: 86.4cm).

2.3.2 Diet

There is no data or published research on the diet of the Kenyan community in the UK. Published research from the United States with Kenyan participants (n=51) found 82.4% of the participants made a conscious effort to eat a healthy diet[112]. This was more than most other African migrant groups, including Somalis (77.6%), Ethiopians (80.1%) and Sudanese (55.4%). The research also found participants that were older and reported understanding English well were more likely to report making a conscious effort to eat a healthy diet. It is therefore worth noting that 96.1% of the Kenyan participants reported understanding English well[113].

A healthy diet has a key function in preventing non-communicable diseases. While there is no published research on the diet of the Kenyan community in the UK, using data on the Indian and Black African ethnic groups as proxies may provide some useful insight. According to the HSE 2004, the recommended guidelines of consuming five or more portions of fruit and vegetables a day were met by 23% of men and 27% of women in the general population. 31% of Black African men met the five-a-day recommendation, and 32% of Black African women met the recommendation. Over a third of Indian men and women met the five-a-day recommendation (37% and 36%, respectively).

Data from Kenya also provides some useful insight. According to the Kenyan STEPS[114] survey 2015, only 6% (male 6.8%, female 5.2%) of Kenyans have a minimum of the recommended five servings of fruits and vegetables daily, while 23% of adults add excessive salt to food at the table and 28% use excessive amounts of sugar in beverages[115]. The survey also found a high awareness among Kenyans of the health risks associated with having a high salt and sugar intake (87.7% and 91.3% respectively), however only about half of the respondents regarded reduction of the same as very important[116].

PHYSICAL ACTIVITY

There is no data or published research on physical activity levels of the Kenyan community in the UK

HOWEVER, PUBLISHED RESEARCH FROM THE UNITED STATES WITH KENYAN PARTICIPANTS FOUND

76.5% of the Kenyan participants made a conscious effort to exercise, 30.6% did at least 5 days of moderate activity

2.4. Active at Every Age and Ability

Key findings

- There is no data or published research on physical activity levels of the Kenyan community in the UK.
- Research from the United States with Kenyan participants (n=51) reports 76.5% of the Kenyan participants made a conscious effort to exercise and 30.6% did at least 5 days of moderate activity.

2.4.1 Physical activity

There is no data or published research on physical activity levels of the Kenyan community in the UK. However, published research from the United States with Kenyan participants (n=51) provides a useful insight: 76.5% of the Kenyan participants made a conscious effort to exercise and 30.6% did at least 5 days of moderate activity[117]. This was more than the Somali participants (50.3% and 26.7%, respectively) and Ethiopians (51% and 24.7%, respectively)[118]. The study also found that individuals that reported understanding English well were 3 times more likely to report making a conscious effort to exercise[119]. Participants that never or rarely had trouble meeting expenses were less likely to report making a conscious effort to exercise[120].

The Kenyan STEPS survey 2015[121] found that 6.5% of adults do not engage in the recommended level of physical activity. All of these findings imply Kenyans are culturally more physically active, particularly compared to other ethnic groups.

ACADEMIC ATTAINMENT

Using the black and Indian ethnic categories as proxy to gain an insight into the Kenyan community on education attainment reveals, that black African pupils achieved Progress 8 scores higher than average (0.31). Indian pupils achieved the

SECOND HIGHEST PROGRESS 8 SCORE (0.72)

ECONOMIC INACTIVITY

18.9% 30.5%

HOUSING

MAJORITY OF THOSE FROM KENYA

78.9%

resident in the West Midlands own a property: ether the property is owned outright or with a mortgage/ loan or shared ownership.

UNEMPLOYMENT

5.9% 4.4%

A BOLDER HEALTHIER BIRMINGHAM

2.5. Working and Learning Well

Key findings

- In 2020/21 there were **2,640** students from Kenya in the UK, accounting for 6% of all students from Africa.
- The top three universities for Kenyan students were Coventry University, the University of Kent and Brunel University.
- The majority of Kenyan-born residents in the UK are in professional occupations.
- In the West Midlands, **48%** of Kenyan-born males are in full time employment, compared to **34.1%** Kenyan-born females.
- **21.7%** of Kenyan-born females in the West Midlands are in part-time work, compared to **7%** of male.
- Also, **18.9%** of Kenyan-born males and **30.5%** of females are economically inactive, and **5.9%** males and **4.4%** of females are unemployed.
- The majority of those from Kenya (**78.9%**) resident in the West Midlands own a property.
- **71.8%** of West Midlands residents from Kenya felt they have very good or good health, slightly lower than **76.6%** in England and Wales. **8.8%** felt they have bad or very bad health, more than those living across England and Wales (**6.7%**).

2.5.1 Education

In 2020/21 there were 2,640 students from Kenya, accounting for 6% of all students from Africa. The top three universities with the highest number of Kenyan students were Coventry University, the University of Kent and Brunel University (table 6).

A survey of Kenyan students (n=300) pursuing higher education in the UK found many of the students had a positive study and living experience, though some shared negative aspects as well. These included leaving the UK without an award, inability to complete the course and not being able to socially adapt to the UK[122]. It found that respondents chose the UK as a study destination to acquire globally recognised qualifications, have access to quality education and acquire skills that open up better employment prospects in a competitive job market[123].

Many of the respondents experienced financial difficulties because they could not secure work despite being legally allowed to work for twenty hours. Others found it difficult managing unexpected costs such as foreign exchange fluctuations, the unanticipated levies charged by universities, the cost of breaking contracts and living expenses[124]. Other challenges included practical issues such as food, transport, immigration and balancing work and study, all of which affected their study progress and outcome[125].

In another study, a Kenyan student expressed that upward mobility is possible while living in the UK but emphasised the importance of securing a professional role as opposed to an odd job[126].

Table 6: Number of students from Kenya in England universities, 2020/ 2021

Region of Higher Education Provider	Number of students
TOTAL	**2,235**
North East	**75**
North West	**210**
Yorkshire and The Humber	**200**
East Midlands	**295**
West Midlands	**280**
East of England	**160**
London	**460**
South East	**385**
South West	**170**
Open University in England	**5**

Source: HESA[127]

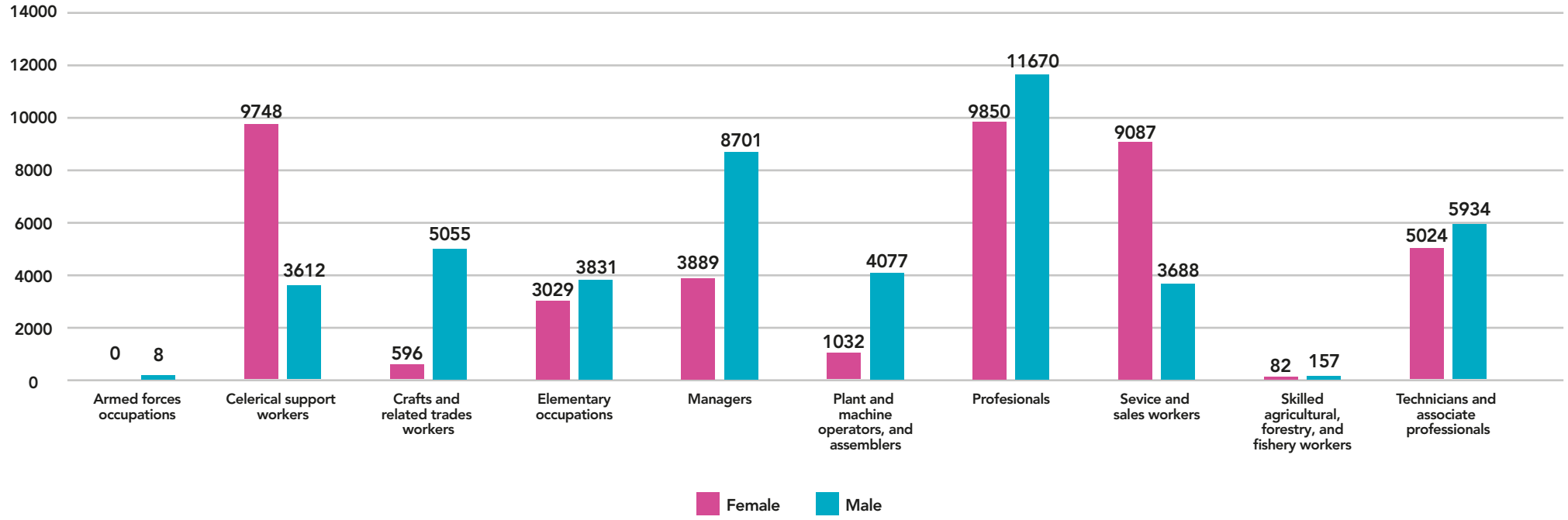
2.5.2 Economic Activity

Majority of Kenyan-born residents in the UK are in professional occupations, with most Kenyan men and women working in a professional occupation (figure 7). In the West Midlands, 48% of Kenyan-born males are in full-time employment, compared to 34.1% of Kenyan-born women. 21.7% of Kenyan-born females in the West Midlands are in part-time work, compared to 7% of males. Also, 18.9% of Kenyan-born males and 30.5% of females are economically inactive, and 5.9% of males and 4.4% of females are unemployed[128] (figure 8).

There is a sizeable presence of Kenyans in the healthcare sector, with the main wave of newly registered Kenyan nurses occurring from 2001-to 2004. According to NHS Digital, as of March 2021, 894 Kenyans were working for the NHS[129]. Over the years the British and Kenyan governments have worked closely to build health partnerships. In July 2021, the British government announced[130] that unemployed nurses and health workers from Kenya will have a chance to work in the UK as part of a new scheme requested by the Government of Kenya[131]. However, the deal was halted due to health and social care workforce shortages in Kenya[132].

As revealed in Figure 8 below, there are a significantly higher number of Kenyan-born females within the West Midlands who are economically inactive (1,470) than Kenyan-born males (908). There are more Kenyan-born males employed full time than females, while females are more likely to be hired part-time. Rates of students are similar across genders, while there are more than triple the number of full-time self-employed males, as females.

Figure 7: Occupation of Kenyan-born residents across the UK, by gender (persons)



Source: 2011 Census, Table CT0255

Figure 8: Economic activity by gender, as recorded in the 2011 Census for those born in Kenya; data for West Midlands

2011 Census CT0566

2.5.3 Housing

According to the 2011 Census[133], the majority of those from Kenya (78.9%) who are resident in the West Midlands own a property, either the property is owned outright or with a mortgage/ loan or shared ownership (36.9% of residents from Kenya own their property outright, and 42% own their property with a mortgage/ loan or shared ownership[134]). This can be compared to England and Wales where 33.5% of residents from Kenya own their property outright and 41.9% own their property with a mortgage/ loan or shared ownership.

According to the 2011 Census, Kenyan households do not have challenges with overcrowding. Around 55.8% of Kenyan households have "up to 0.5 persons per room", 40.3% "over 0.5 and up to 1.0 person per room", and only 0.8% have "over 1.5 persons per room". This can be compared with Somali households where the statistics were 28.9%, 42.9% and 10.6%, respectively[135].

2.5.4 General health

In terms of general health, 71.8% of residents from Kenya surveyed in the West Midlands felt they have very good or good health, slightly lower than 76.6% in England and Wales. In the West Midlands, 8.8% felt they have bad or very bad health, more than those living across England and Wales (6.7%)[136]. Of those from Kenya in the West Midlands, 13.1% of 55-64-year-olds felt they have bad or very bad health, compared to 10.1% across England and Wales in that age group.

2.5.5 Long-standing health impairment, illness or disability

According to the Long-term Health Problem or Disability survey, 76% of those from Kenya living with a long-term health problem or disability in the West Midlands felt it did not impact their day-to-day activities, compared to 23.5% who felt it did[137]. In slight contrast, in England and Wales, 80% of those from Kenya living with a long-term health problem or disability felt it did not impact their day-to-day activities, higher than in the West Midlands, 20% felt it did impact their day-to-day activities, less than in the West Midlands. Findings in sections 2.5.4. and 2.5.5 indicate the Kenyan community in the West Midlands generally express feeling more poorly than their counterparts across England and Wales. It would be valuable to conduct a qualitative study to determine the reason for this finding.

CANCER SCREENING

There is no data or information on the Kenyan community's take up of screening in the UK. However, research on uptake of Pap smear testing among Kenyan migrants in the Netherlands found willingness to participate was hindered by barriers such as

LANGUAGE,
PREFERENCE FOR FEMALE GPs,
ACCULTURATION,
VIEWS ABOUT THE HEALTH CARE SYSTEM

SEXUAL HEALTH

Research has found the communities in Britain most affected by the AIDS/HIV pandemic were nationals of

KENYA, UGANDA, ZAMBIA, ZIMBABWE, AND CONGO

TUBERCULOSIS (TB)

IN 2020, PEOPLE BORN IN KENYA ACCOUNTED FOR 46 CASES

1.1% of the UK's TB cases with a median time of 17 years from entry to notification since arrival to the UK

2.6 Protect and Detect

Key findings

- There is no data or information on the Kenyan community's take-up of screening in the UK. Uptake of Pap smear testing among Kenyan migrants in the Netherlands found willingness to participate was hindered by perceived barriers such as language, views about the health care system, preference for female GPs and acculturation.
- The Kenyan STEPS survey 2015 reported low levels of cervical cancer screening among women between 25-49 years at 14.2%.
- Research has found the communities in Britain most affected by the AIDS/HIV pandemic were nationals of Kenya, Uganda, Zambia, Zimbabwe, and Congo.
- In 2020, people born in Kenya accounted for 1.1% of the tuberculosis cases in the UK (46 cases).
- Published research on breast cancer screening uptake among women from different ethnic groups in London found that 61% of Indian women attended their first call, and 74% attended their routine recall, compared to 49% of Black African women who attended their first call and 64% attended routine recall.

2.6.1 Screening

There is no data or information on the Kenyan community's take-up of screening in the UK. However, research[138] on the uptake of Pap smear testing among Kenyan migrants in the Netherlands found willingness to participate was hindered by perceived barriers such as language, views about the health care system, preference for female GPs and acculturation.

Cervical cancer caused by HPV (Human Papillomavirus) is one of the most manageable and treatable cancers, provided it is diagnosed early. Pap smear testing is a highly effective procedure used to detect cervical cancer. The uptake of Pap smears among migrant communities is particularly low. The study identified barriers such as language, views about the health care system, preference for female GPs and acculturation[139]. However, the fact that the STEPS survey 2015[140] (conducted in Kenya) reported very low levels of cervical cancer screening among women between 25-49 years at 14.2% indicates that rather than language barriers or preference for female GPs, the barrier among Kenyan women is likely the invasive and intimate nature of the screening. The Danish study proposes three suggestions: letters of invitation to be made available in multiple languages other than the Dutch language, the introduction of an awareness week on cervical cancer, and, enhanced awareness programmes about screening and mandatory vaccinations and pap smears for newly arrived migrants[141].

Using UK-based research[142] on the Black African group as a proxy to understand screening uptake in the Kenyan community reveals Black African men are two to three times more likely to be diagnosed with prostate cancer compared with White men, and some appear to have little knowledge of the disease. Research has found a lack of knowledge and understanding of prostate cancer among the study sample, who were also sometimes exposed to misinformation within the Black community, including herbal remedies. Some participants believed their racial features were a barrier to how limited information was shared with them by healthcare professionals. The study concluded the need to raise awareness about prostate cancer in Black communities to educate men about the disease and its effects. Additionally, evidence-based information about the disease is required to educate Black men and to reduce the effects of misinformation and herbal remedies on their well-being.

In addition, as the majority of Kenyans identify ethnically as Asian, it would be valuable to understand screening uptake within the Indian community.

Published research[143] on breast cancer screening uptake among women from different ethnic groups in London found that 61% of Indian women attended their first call, and 74% attended their routine recall, compared to 49% of Black African women who attended their first call and 64% attended routine recall. These statistics likely capture breast screening uptake within the Kenyan community.

It is projected that incidence of cancer will increase by 62.7% to about 77,894 cases annually by 2030 at the current population growth. The Kenyan STEPS survey 2015 reported low levels of cervical cancer screening among women between 25-49 years at 14.2%[144]. Early detection ensures a favourable outcome and prognosis of most cancers. About 70% of reported cases in Kenya are detected at an advanced stage when little can be achieved, and outcomes are very poor[145]. It would be valuable to research and assess cancer screening take-up among the British Kenyan community to better understand potential barriers to testing and screening.

2.6.2 Sexual Health

There is no data on the sexual health of the Kenyan ethnic group in the UK. However, research has found the communities in Britain most affected by the AIDS/HIV pandemic were nationals of Kenya, Uganda, Zambia, Zimbabwe, and Congo[146]. In Kenya, there is particular stigma for with women living with HIV, who have been disproportionately affected by the epidemic. While women are viewed as needing to be monogamous, it is culturally acceptable for men to practice polygamy.[147]

Studying Kenya to understand STIs in the diaspora in Britain reveals that HIV prevalence dropped from 7.1 % in 2007 to 5.6 % in 2012, although new infections remain high, at nearly 100,000 per year. The HIV prevalence among the 15 to 24 cohort was 2.1 % in 2012, a decrease from 3.8 % in 2007. Within this age group, girls are at four times higher risk of HIV infection than boys[148].

The highest rates of sexually transmitted infections (STI) diagnoses (genital warts, gonorrhoea, genital herpes, and syphilis) are found among persons of Black ethnicity, and the majority of these cases were among persons living in areas of high deprivation, especially in urban areas[149]. Research[150] on the African diaspora highlights the limitation in establishing the incidence of STIs in the Black African population is that data are reported by Public Health England for an aggregate 'Black' group, while it is known that rates vary across the different Black groups.

2.6.3 Tuberculosis

Tuberculosis (TB) is a bacterial disease caused by Mycobacterium tuberculosis (M.tb), which most commonly affects the lungs[151]. TB can affect any part of the body, but a risk of transmission only arises where the disease is in its active form in the lungs. Migrants and ethnic minorities in the UK have higher rates of TB compared with the general population[152].

The higher burden of TB observed among foreign-born individuals in the UK could be due to arrival of migrants with active TB, reactivation, post-arrival to the UK, of remotely-acquired latent tuberculosis infection (LTBI), or transmission in the UK, several studies suggest a prominent role of reactivation of remotely-acquired LTBI post-arrival[153] in our TB rates. While there are signs of a decreasing trend in new TB cases, the UK still has high rates compared to most other European countries[154].

There is considerable variation by country of birth in the median time between a person's first entry into the UK and the time of a TB diagnosis and notification. In 2020, people born in Kenya accounted for 1.1% of the tuberculosis cases in the UK (46 cases), with a median time of 17 years since entry to UK[155]. This is a decline from 2013 when Kenyan-born residents accounted for 84 cases in the UK, 1.6 % of all cases, and a median time since entry of 22 years[156].

It is worth noting that the incidence of TB is growing faster in Birmingham[157]. Cases grew by 107% between 1999 and 2009 in Birmingham which is higher than national figures, where it grew by 57% between 1987 and 2008[158]. TB admissions in Birmingham have been concentrated in wards with a higher proportion of ethnic minority groups.

DIABETES

Published research from the United States with Kenyan participants (n=51) found that among six African immigrant groups, Kenyans were more likely to report having diabetes

7.8%

CARDIOVASCULAR DISEASE

IT IS ESTIMATED THAT MORTALITY DUE TO CVD IN KENYA IS

13.8%

The leading CVD deaths are stroke (6.1%, male 5.8%, female 6.4%) and Ischemic Heart diseases (4.6%, male 47%, female 4.6%)

CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

There is an absence of statistics on the prevalence of COPD within the Kenyan community in the UK. In Kenya, chronic respiratory diseases are responsible for approximately

1.73%

OF THE DEATHS

1.92% 1.5%

THE MAIN DRIVERS OF COPD INCLUDE TOBACCO SMOKING, INDOOR AIR POLLUTION, OUTDOOR AIR POLLUTION, OCCUPATIONAL DUST AND CHEMICALS

END OF LIFE

Research which included Kenyan participants (8%) in the study sample found that people with dementia and their carers usually begin help-seeking from close family and then follow this up by consulting primary care physicians

DEMENTIA

Black African and Caribbean elders (BACE) have a higher prevalence and earlier onset of dementia compared with the indigenous white UK population

2.7 Ageing well and dying well

Key findings

- Among six African immigrant groups, Kenyans were more likely to report having diabetes.
- People of Black African origin in the UK are more likely to have hypertension detected in community health settings compared to other ethnic groups.
- In Kenya, COPD is estimated to cause approximately 1.7% of deaths.
- It is estimated that cancer is the second leading cause of Noncommunicable diseases (NCD)-related deaths in Kenya after cardiovascular diseases and accounting for 8% of overall national mortality.
- Black African and Caribbean elders (BACE) have a higher prevalence and earlier onset of dementia compared with the indigenous White UK population.
- Research which included Kenyan participants (8%) in the study sample found that people with dementia and their carers usually begin help-seeking from close family and then follow this up by consulting primary care physicians.

Kenya is experiencing an epidemiological transition in its disease burden from predominantly communicable diseases to a rapidly rising burden of non-communicable diseases (NCDs) and injuries, resulting in a "triple burden of disease" which is increasingly straining the health system.

Approximately 39% of deaths in the country were as a result of NCDs, up from 27% in 2014. It is projected that deaths from NCDs will increase by 55% in Kenya while those from injuries will increase by 25% by 2030[159]. The four major NCDs: CVDs, Cancers, Diabetes and Chronic Respiratory Diseases comprise 57% of all the NCD deaths[160].

2.7.1 Diabetes

Published research from the United States with Kenyan participants (n=51) found that among six African immigrant groups, Kenyans were more likely to report having diabetes (7.8%)[161]. It also found increasing age was associated with greater odds of reporting diabetes, while participants who never or rarely had difficulty meeting family expenses were less likely to report either diabetes or hypertension, after adjustment for other factors[162]. One possible explanation for this is that those individuals that can meet their daily expenses are more likely to visit a healthcare provider and are more likely to get regular health assessments. Other studies[163] have found the prevalence of diabetes appears to be substantially higher in African-origin populations living abroad than in indigenous Africans.

A study[164] on the use of herbal remedies among diabetes patients in Kenya found that 12.4% of those interviewed admitted to using herbal remedies as part of their management of diabetes. Recommendations made following the study were: the government of Kenya through the Ministry of Health should encourage rigorous screening of clients and population in general for diabetes to ensure diabetes is diagnosed early and put under appropriate management and that the government of Kenya through the Ministry of Health should put up a campaign educating diabetic patients on the potential dangers associated with combining herbal remedies with contemporary medicines due to their interactions.

The number of adults with diabetes in the UK has risen from 2.3 million (1980) to 4.7 million[165] (2019), with 1 million people undiagnosed[166], of which type 2 diabetes contributes to 90.4% (prevalence, 4.5%)[167]. Diabetes is a long-term condition that can cause serious secondary complications and premature death if it is not well managed. It causes a person's blood sugar level to become too high which can damage blood vessels and nerves causing blindness, cardiovascular disease, amputations and pain.

There are 2 main types of diabetes, type 1 diabetes is where the body's immune system attacks and destroys the cells that produce insulin. Insulin helps the body use glucose for energy and controls blood glucose levels. Type 1 diabetes is not linked with age or being overweight and is usually diagnosed in childhood or adolescence. Type 2 diabetes is where the body does not produce enough insulin, or the body's cells do not react to insulin properly and is usually diagnosed in adulthood.

Increasing age, being overweight, abdominal obesity and physical inactivity are risk factors for type 2 diabetes.

The prevalence of diabetes is higher among South Asian and Black groups than in the White population and people in these groups develop the condition at a younger age. A cohort study of 1.9 million individuals extracted data from the CALIBER programme found people with type 2 diabetes were twice as likely to be of either Black or South Asian origin compared to those without diabetes[168]. The Health Survey for England (HSE) found the prevalence of doctor-diagnosed diabetes increased noticeably with age, in both men and women.

While there is no data and information on diabetes within the Kenyan community, looking at adults from Kenya, the nationally adjusted prevalence of diabetes was estimated to be 3.1% in 2019 and is projected to rise to 4.4% in 2035 if nothing is done.[169] More than 8,700 diabetes-related deaths were registered in Kenya in 2015, almost all under 60 years of age. This rise in diabetes is associated with demographic and social changes such as globalization, urbanization, an ageing population and

adoption of unhealthy lifestyles such as consumption of unhealthy diets and physical inactivity[170]. The Kenyan STEP survey 2015 reported that more than 88% (male 88%, women 87%) of Kenyans have never had their blood sugar tested, preventing early diagnosis of diabetes. This late diagnosis contributes to the high morbidity and mortality burden, which occurs at a younger age before the age of 60[171]. IDF estimates that Kenya has one of the highest proportions of deaths from diabetes for persons below age 60 years among the East African countries, at 88.4%[172].

2.7.2 Cardiovascular disease

Cardiovascular disease (CVD) is a leading cause of death nationally and in ethnic minority groups, causing 24% of all deaths in England and Wales in 2019. Cardiovascular disease (CVD) is the collective term for diseases affecting the circulatory system, i.e., heart, arteries, and blood vessels. Diabetes increases the risk of CVD almost two-fold.

There is no data and information on cardiovascular diseases within the Kenyan community in the UK, however using research on the African ethnic group as a proxy[173] shows that relative to White European populations, people of African origin have a high incidence of stroke and end-stage renal failure, whereas coronary heart disease (CHD) is less common – around half the rate found in the general population for men and two-thirds of the rate for women.

Cardiovascular disease (CVD) is the collective term for diseases affecting the circulatory system, i.e., the heart, arteries, and blood vessels. The main forms of CVD are heart disease and stroke. It is a significant contributor to inequalities in life expectancy and a risk factor for poor outcomes from Covid-19. Diabetes increases the risk of CVD almost two-fold. Cardiovascular disease (CVD) is the most common and yet one of the most preventable causes of death in the Western World. Economic development in Asia and rapid urbanization in Africa are associated with rapid changes in lifestyle and environmental exposures so the burden of CVD is rising rapidly in developing countries. 80% of all CVD-related deaths occur in low and middle-income countries. These include, hypertension, chronic ischemic heart disease (Heart attack), cerebrovascular disease (stroke), cardiomyopathy, valvular heart disease and pericarditis. It is estimated that mortality due to CVD in Kenya is 13.8%. The leading CVD deaths are stroke (6.1%, Male 5.8%, female 6.4%) and Ischemic Heart diseases (4.6%, male 4.7%, female 4.6%)[174].

There are no research studies on the Kenyan community and cardiovascular disease in the UK. A US-based study found that East African immigrants had a low prevalence of cardiovascular risk factors (hypertension or diabetes) after adjustment for other factors. These results are consistent with some prior studies showing that African immigrants have a low prevalence of chronic diseases such as hypertension and diabetes compared to U.S.-born Whites[175].

2.7.3 Hypertension

Hypertension is diagnosed in people who have consistently raised blood pressure. Over time, uncontrolled hypertension can increase the risk of heart disease, stroke and kidney disease.

Published research from the United States with Kenyan participants (n=51) found that among six African immigrant groups, Kenyans were more likely to report having diabetes (7.8%) or hypertension (15.7%)[176]. There is consensus[177] that among people of African origin hypertension is three to four-fold more prevalent than in the UK White European population. This is the case for men and women and is present at any age, at least in adulthood. This observation fits with the excess risk of stroke and renal disease in these populations. Hypertension has also been associated with all-cause mortality in rural Africa and with vascular and renal complications.

People of Black African origin in the UK are more likely to have their hypertension detected in the community when compared to other ethnic groups[178]. This may indicate greater awareness among patients and doctors of the importance of controlling hypertension in Black populations. However, Black populations tend not to achieve good BP control. This may indicate either a greater severity of hypertension, inadequate drug therapy owing to individual sensitivity to different drugs, lack of concordance with therapy, doctors' perceptions and organizational pitfalls. Hypertension is an important risk factor for CVD and remains the single biggest risk factor for stroke. The prevalence of hypertension has increased over the last decade with the STEPs survey 2015 showing that close to a quarter of Kenyans had hypertension. This prevalence increased with age with more than half of those above 40 years being hypertensive[179].

2.7.4 Chronic Obstructive Pulmonary Disease (COPD)

Chronic respiratory diseases (CRDs) are diseases of the airways and other structures of the lung. Some of the most common is COPD, asthma, occupational lung diseases and pulmonary hypertension. Chronic Obstructive Pulmonary Disease (COPD) alone accounts for 30,000 deaths a year.

There are no research studies on the Kenyan community and COPD in the UK. The risk factors for COPD are exposure to tobacco smoke, air pollution, occupational chemicals and dust, and frequent lower respiratory infections during childhood[180].

Globally, over 3 million people die each year from COPD, an estimated 6% of all deaths worldwide, 235 million people suffer from asthma, a common disease among children and 90% of COPD deaths occur in low-income and middle-income countries. In Kenya, chronic respiratory diseases are responsible for approximately 1.73% of the deaths (male 1.92%, female 1.5%). One of the common diseases in this category is Chronic Obstructive Pulmonary Disease (COPD) which is often under-diagnosed, life-threatening lung disease that may progressively lead to death. In Kenya, COPD is estimated to cause approximately 1.7% of deaths. The main drivers of COPD in Kenyan citizens include tobacco smoking, indoor air pollution (from the use of biomass fuel for cooking and heating), outdoor air pollution and occupational dust and chemicals[181]. Stopping smoking improves symptoms and slows disease progression.

2.7.5 Cancer

The incidence of cancer is generally lower among ethnic minority groups in England than in White groups. Asian, Chinese and Mixed groups have a significantly lower risk (of 20–60%) of getting cancer than the White group, smoking rates are generally lower in these groups. Cancer incidence is also lower among Black women compared with White women but similar in Black and White men.

It is estimated that cancer is the second leading cause of non-communicable disease-related deaths in Kenya after cardiovascular diseases and accounting for 8% of overall national mortality[182]. Existing evidence shows that the annual incidence of cancer is close to 42,116 (male 15,556, female 26,550) cases causing over 27,092 deaths per year (male 10,466 female 16,626).[183] The most common cancers in women are breast, cervical and oesophagus accounting for 25.6%, 19.7%, and 6.1% of all cancers, while in men, prostate cancer, oesophageal, and colorectal accounting for 21.9%, 8.7% and 8.3% of all cancers, respectively[184].

2.7.6 Dementia

According to Alzheimer's Society, dementia and Alzheimer's was the 2nd highest cause of all deaths in the year 2020, contributing to 11.5% of all deaths. Although often pneumonia and strokes are the direct causes of death for people with dementia or Alzheimer's disease, doctors have been able to report dementia or Alzheimer's as the main cause of death since 2011 to reflect guidance from the World Health Organisation.

Black African and Caribbean elders (BACE) have a higher prevalence and earlier onset of dementia compared with the indigenous White UK population[185]. Research[186] has found that dementia was viewed as a White person's illness. Participants felt there was little point in consulting a doctor for forgetfulness. Many thought that seeing a GP was only for severe problems. Some said that their culture was secretive and highly valued privacy of personal affairs and therefore did not want to discuss what they regarded as a private and stigmatising problem with a GP. Some also expressed concern about harm from medication and compulsory institutionalisation.

2.7.7 End of life

Research[187] which included Kenyan participants (8%) in the study sample found that people with dementia and their carers usually begin help-seeking from close family and then follow this up by consulting primary care physicians. People from BME populations as a whole have been reported to present later for several reasons[188]. These include normalisation of memory problems, concerns about stigma related to dementia, belief that families rather than services are the appropriate resource, previous negative experiences of health services, concern about the threat of receiving a diagnosis, language barriers and lack of knowledge[189].

A literature review[190] on palliative care services found that low uptake of palliative and end of life care services was commonly reported among minority ethnic groups. The review argues this to be due to a lack of referrals, the lack of knowledge about services, religious traditions and family values in conflict with the idea of palliative/ hospice care. It also found other factors to be structural barriers such as the geographical location of inpatient hospices, social segregation and previous negative experiences of care[191].

DEPRIVATION AS ALMOST 80%

of Kenyans in the West Midlands either fully own a property or have a mortgage, and also have very low levels of unemployment, it is unlikely the Kenyan community in the UK faces deprivation

2.8. Closing the gaps

Key findings

- Migration is a factor that impacts on people's health. In the UK resident population, there is some association between ethnicity and being born abroad. In the period 21 March to 8 May 2020, the number of death registrations from all causes for people in England was 1.7 times higher than in the same period for the average of the years 2014 to 2018.
- For people born in 4 other groups of countries, deaths in 2020 were more than 3 times higher than the equivalent period in 2014 to 2018: the Caribbean (3.5), South East Asia, which includes Malaysia, the Philippines and Vietnam (3.4), the Middle East (3.2) and South and Eastern Africa, which includes South Africa, Zimbabwe and Kenya (3.1).

2.8.1 Life expectancy

Being born outside of the UK does not necessarily mean a person is a vulnerable migrant, but migration is a factor that impacts people's health. In the UK resident population, there is some association between ethnicity and being born abroad. In the period 21 March to 8 May 2020, the number of death registrations from all causes for people in England was 1.7 times higher than in the same period for the average of the years 2014 to 2018.[192]

The biggest relative increase in deaths was for people born in Central and Western Africa (4.5 times higher in 2020 than in 2014 to 2018). This group of countries includes Nigeria, Ghana and Somalia. For people born in 4 other groups of countries, deaths in 2020 were more than 3 times higher than the equivalent period from 2014 to 2018: the Caribbean (3.5), South East Asia, which includes Malaysia, the Philippines and Vietnam (3.4), the Middle East (3.2) and South and Eastern Africa, which includes South Africa, Zimbabwe and Kenya (3.1).[193]

2.8.2 Deprivation

As almost 80% of Kenyans in the West Midlands either fully own a property or have a mortgage[194], and also have very low levels of unemployment, it is unlikely the Kenyan community in the UK faces deprivation. However, these conclusions are speculative, thus further and more detailed data would be required to truly understand whether Kenyans are living in deprivation within Birmingham and the West Midlands.

3.0 Conclusion

This report has sought to find the inequalities that are experienced by the Kenyan community within the UK and in Birmingham. Due to a lack of available data specific to the Kenyan community, many of the information provided from the profile included information on Black African and Indian populations in the UK, with the latter used due to the high percentage of Keynan-Indian migrants. This shows the lack of data that exists specifically within Kenyan populations, as well as the complexity of analysing information on ethnicities and nationalities.

However, as identified within the Birmingham and Lewisham African and Caribbean Health Inequalities Review (BLACHIR), measurements of Black ethnic people may not always consider the needs of Black African individuals. Services could consider evidence-based ethnic differences in outcome measures, such as using BMI versus waist-to-height measures. By ensuring that data collection is more reflective of the communities' needs and with help of this community health profile, we will have a greater understanding of the inequalities that exist within individuals from the Kenyan community, which may strengthen the methods that we use to address such inequalities.

4.0 Appendix

Appendix 1: Search strategy

Getting the best start in life	Mental wellness and balance	Healthy and affordable food	Active at every age and ability	Working and learning well
General: "Kenyan" and "children" or "young people" or "youth" or "child" or "babies" or "childhood" **Specific:** "Kenyan" and "vaccination" or "measles" or "obesity" or "health check" or "maternity care" or "breast feeding" or home visits" or "rituals" or "vaccine" or pertussis vaccine" or "belonging" or "bullying" or "fostering" or "care"	**General:** "Kenyan" and "mental health" or "mental" or "health" or "wellbeing" or wellness" or "access" or "balance" **Specific:** "Kenyan" and "mental illness" or "depression" or "suicide" or "shame" or "stigma" or "stress" or "racial harassment" or "honour" or "disability" or "alcohol" or "drinking" or "abstention" or "drinking frequency" or "drinking intensity" or "alcohol problem" or "alcohol support" or "alcohol consumption" or "substance abuse" or "addiction" or "tobacco" or "cannabis" or "recreational drugs" or "drugs" or "smoking" or drug use"	**General:** "Kenyan" and "food" or "diet" or "obesity" or "meat" or "vegetarian" **Specific:** "Kenyan" and "common food" or "festival food" or "dietary laws" or "food practices" or "traditional food" or "obesity" or "physical activity" or "overweight" or "BMI" or "weight" "Waist Height Ratio"	**General:** "Kenyan" and "physical activity" or "activity" or "exercise" **Specific:** "Kenyan" and "vigorous exercise" or "moderate exercise" or "walking" or "running" or "sports" or "cardiovascular" or "elderly exercise" or "health promotion"	**General:** "Kenyan" and "working" or "education" or "housing" or "living" or "economic activity" or "general health" or "health" or "illness" or "disability" or "long term disability" or "long standing health" **Specific:** "Kenyan" and "apprenticeships" or "Level 1,2,3,4 qualifications" or "degree" or "NEET" or "secondary school" or "primary school" or "full time education" or "profession" or "career choice" or "household income" or "home ownership" or "Bad health" or "learning disability" or "hearing impairment" or "communication impairment"

Appendix 2: Raw Data Table of Figure 1: Migration pattern from Kenya to England and Wales, 2011

Date Arrived	Total
2010-2011	2,219
2007-2009	5,744
2004-2006	6,455
2001-2003	7,972
1991-2000	18,459
1981-1990	13,907
Before 1981	82,736

Appendix 3: Raw Data Table of Figure 2: Top 20 areas with Kenyan-born residents across Britain, 2011

Area	Total
Charnwood	1149
Manchester	1192
Leeds	1281
Wandsworth	1323
Buckinghamshire	1423
Luton UA	1479
Coventry	1829
Enfield	2152
Newham	2155
Slough UA	2183
Croydon	3390
Hillingdon	3612
Redbridge	3800
Ealing	3988
Hounslow	4404
Barnet	4480
Leicester UA	7118
Brent	7382
Harrow	11706

Appendix 4: Raw Data Table of Figure 4: Age profile of Kenya-born residents in England and Wales, 2011

Age	Male: England and Wales: Kenya	Female: England and Wales: Kenya	Male: England and Wales: United Kingdom	Female: England and Wales: United Kingdom
0 to 4	0%	0%	7.26%	6.73%
5 to 9	1%	1%	6.31%	5.84%
10 to 15	2%	2%	7.79%	7.21%
16 to 19	2%	2%	5.49%	5.13%
20 to 24	3%	3%	6.73%	6.39%
25 to 29	4%	4%	6.13%	5.86%
30 to 34	5%	5%	5.68%	5.50%
35 to 39	6%	7%	5.68%	5.97%
40 to 44	8%	9%	7.14%	7.07%
45 to 49	13%	13%	7.36%	7.28%
50 to 54	18%	17%	6.46%	6.33%
55 to 59	15%	14%	5.76%	6.33%
60 to 64	10%	9%	6.31%	5.60%
65 to 69	5%	5%	4.96%	6.24%
70 to 74	3%	4%	3.87%	4.15%
75 to 79	2%	2%	3.049%	6.06%
80 or over	1%	2%	3.66%	6.06%

Appendix 5: Raw Data Table of Figure 5: Migration pattern from Kenya to the West Midlands, 2011

Date Arrived	Total
2010-2011	207
2007-2009	473
2004-2006	390
2001-2003	614
1991-2000	949
1981-1990	769
Arrived before 1981	7,697

Appendix 6: Raw Data Table of Figure 6: Age profile of Kenya-born residents in West Midlands, 2011

Age	Male: England and Wales: Kenya	Female: England and Wales: Kenya	Male: England and Wales: United Kingdom	Female: England and Wales: United Kingdom
0 to 4	0%	0%	7.25%	6.73%
5 to 9	0%	0%	6.94%	6.03%
10 to 15	2%	2%	8.06%	7.44%
16 to 19	2%	2%	5.69%	5.32%
20 to 24	4%	4%	6.78%	6.42%
25 to 29	2%	3%	6.01%	5.80%
30 to 34	3%	4%	5.47%	5.40%
35 to 39	4%	6%	6.03%	5.94%
40 to 44	7%	8%	7.22%	7.79%
45 to 49	15%	15%	7.34%	7.22%
50 to 54	21%	19%	6.27%	6.12%
55 to 59	18%	16%	5.69%	5.55%
60 to 64	11%	10%	6.18%	6.08%
65 to 69	4%	5%	5.14%	5.16%
70 to 74	3%	4%	3.92%	4.18%
75 to 79	2%	1%	2.98%	3.5%
80 or over	1%	1%	3.48%	5.92%

Appendix 7: Raw Data Table of Figure 7: Occupation of Kenyan-born residents across the UK, by gender (persons)

Occupation:	Total: Female	Total: Male
Armed force occupations	0	8
Clerical support workers	9748	3612
Craft and related trade workers	596	5055
Elementary occupations	3029	3831
Mangers	3889	8701
Plant and machine operators and assembler	1032	4077
Professionals	9850	11670
Service and sales workforce	9087	3688
Skilled agricultural, forestry and fishery worker	82	157
Technicians and associate professionals	5024	5934

Appendix 8: Raw Data Table of Figure 8: Economic activity by gender, as recorded in the 2011 Census for those born in Kenya; data for West Midlands

Type	Total: Female	Total: Male
Economically Inactive	1470	908
Full-time student – employed	41	58
Full-time student – in employment	82	76
Unemployed	211	286
Full-time self-employed	186	652
Part-time self-employed	139	164
Full-time employee	1648	2318
Part-time employee	1047	346

5.0 Acknowledgements

Contributors:

Ricky Bhandal –Service Lead, Birmingham City Council

Caroline Chioto –Senior Officer, Birmingham City Council

Alice Spearing – Senior Officer, Birmingham City Council

Joseph Merriman – Senior Officer, Birmingham City Council

Rhys Boyer – Officer, Birmingham City Council

Alexander Robinson – Support Officer, Birmingham City Council

Jordan Francis – Graduate Officer, Birmingham City Council

Tariro Mandisodza - Graduate Officer, Birmingham City Council

Manuela Engelbert - Graduate Officer, Birmingham City Council

Nazmin Khanom - Graduate Officer, Birmingham City Council

Dr. Justin Varney – Director of Public Health, Birmingham City Council

Tessa Lindfield – Assistant Director of Public Health, Birmingham City Council

Modupe Omonijo - Assistant Director of Public Health, Birmingham City Council

Alan Davis – Head of Marketing, Birmingham City Council

Carl Madden – Designer, Birmingham City Council

Barques Design – Production of Artwork/Typesetting

6.0 References

1 *ONS 2011 Census Table number QS213EW, [internet] [cited 25 April 2022] Accessed here: https://webarchive.nationalarchives.gov.uk/ukgwa/20160105160709/http://www.ons.gov.uk/ons/rel/census/2011-census/quick-statistics-for-england-and-wales-on-national-identity--passports-held-and-country-of-birth/rft-qs213ew.xls*

2 *2011 Census: Key Results from Releases 2A to 2D, [internet] [cited 25 April 2022] Accessed here: https://www.scotlandscensus.gov.uk/documents/2011-census-key-results-from-releases-2a-to-2d/*

3 *Northern Ireland Statistics and Research Agency, Northern Ireland- Country of Birth QS206NI, [internet] [cited 25 April 2022] Accessed here: http://www.ninis2.nisra.gov.uk/Download/Census%202011_Excel/2011/QS206NI.xls*

4 *Population of the UK by country of birth and nationality, Annual Population Survey Table 1.3, ONS, July 2020 to June 2021, [internet] [cited 25 April 2022] Accessed here: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/datasets/populationoftheunitedkingdombycountryofbirthandnationality*

5 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

6 *BBC Born Abroad: Kenya, BBC, [internet] [cited 23 March 2022] Accessed here: http://news.bbc.co.uk/1/shared/spl/hi/uk/05/born_abroad/countries/html/kenya.stm*

7 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

8 *BBC Born Abroad: Kenya, BBC, [internet] [cited 23 March 2022] Accessed here: http://news.bbc.co.uk/1/shared/spl/hi/uk/05/born_abroad/countries/html/kenya.stm*

9 *BBC Born Abroad: Kenya, BBC, [internet] [cited 23 March 2022] Accessed here: http://news.bbc.co.uk/1/shared/spl/hi/uk/05/born_abroad/countries/html/kenya.stm*

10 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

11 *Rathore-Nigsch, Claudia; Schreier, Daniel (2016). 'Our heart is still in Africa': Twice migration and its sociolinguistic consequences. Language in Society, 45(2), 163–191.*

12 *Constitution of Kenya, National, Official And Other Languages - Kenya Law Reform Commission (KLRC), [internet] [cited 23 March 2022] Available at: https://www.klrc.go.ke/index.php/constitution-of-kenya/108-chapter-two-the-republic/173-7-national-official-and-other-languages*

13 *CT0341 - Religion by ethnic group by main language*

14 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan. pp. 79. Data based on 2011 Census, Tables CT0341 (Religion by ethnic group by main language) and CT0517 (Sex by age by ethnic group by main language).*

15 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan. pp. 79. Data based on 2011 Census, Tables CT0341 (Religion by ethnic group by main language) and CT0517 (Sex by age by ethnic group by main language).*

16 *ONS Top ten main 'Other' languages in England and Wales, 2011. [Internet]. [Cited 2022 March 7]. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/language/articles/languageinenglandandwales/2013-03-04*

17 *Wambugi J. Essential dishes to understand the history of Kenya's Swahili Coast, Matador Network, 13 June 2019. [Internet] [Cited 23 March 2022] Available here: https://matadornetwork.com/read/essential-kenya-dishes-swahili-coast/*

18 *Wambugi J. Essential dishes to understand the history of Kenya's Swahili Coast, Matador Network, 13 June 2019. [Internet] [Cited 23 March 2022] Available here: https://matadornetwork.com/read/essential-kenya-dishes-swahili-coast/*

19 *Wambugi J. Essential dishes to understand the history of Kenya's Swahili Coast, Matador Network, 13 June 2019. [Internet] [Cited 23 March 2022] Available here: https://matadornetwork.com/read/essential-kenya-dishes-swahili-coast/*

20 *UN Migration Stock by Origin and Destination, United Nations,Table 16: figures for 2015. [Internet] [cited 23 March 2022] Accessed here: https://www.un.org/en/development/desa/population/migration/data/estimates2/data/UN_MigrantStockByOriginAndDestination_2015.xlsx*

21 *UN Migration Stock by Origin and Destination, United Nations. [Internet] [cited 23 March 2022] Accessed here: https://www.un.org/en/development/desa/population/migration/data/estimates2/data/UN_MigrantStockByOriginAndDestination_2015.xlsx*

22 *Migrant Remittances to and from the UK, 11 May 2020, [internet] [cited 23 March 2022] Accessed here: https://migrationobservatory.ox.ac.uk/resources/briefings/migrant-remittances-to-and-from-the-uk/*

23 *Kenya-UK Relations: Diplomatic relations, Kenya High Commission [internet] [cited 23 March 2022] Accessed here: https://www.kenyahighcom.org.uk/kenya-uk-relations*

24 *BBC Born Abroad series: Kenya, [internet] [cited 25 April 2022] Available here: http://news.bbc.co.uk/1/shared/spl/hi/uk/05/born_abroad/countries/html/kenya.stm*

25 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan, pp. 12-13. Quoting 2011 Census CT0263 [internet] [cited 23 March 2022] Accessed here: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/adhocs/003485ct02632011censuscountryofbirthbyyearofarrivalbyethnicgroupenglandandwales*

26 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

27 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

28 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

29 *O'Brien R, Potter-Collins A. 2011 Census analysis: Ethnicity and religion of the non-UK born population in England and Wales, ONS, [internet] [cited 23 March 2022] Accessed here: https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/ethnicity/articles/2011censusanalysisethnicityandreligionofthenonukbornpopulationinenglandandwales/2015-06-18*

30 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

31 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

32 *Table DC2208EWr 2011 Census, Office for National Statistics, non-UK countries of birth with the highest and lowest proportions holding a UK passport on census day, indicating how many people born in these countries have now acquired British citizenship, Available from: https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/detailedcountryofbirthandnationalityanalysisfromthe2011censusofenglandandwales/2013-05-13/3802b5fb.xls*

33 *Population of the UK by country of birth and nationality, Annual Population Survey Table 1.3, ONS, July 2020 to June 2021, [cited] [Accessed 25 April 2022] Available here: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/datasets/populationoftheunitedkingdombycountryofbirthandnationality*

34 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

35 *African Union, Diaspora Mapping and Research Study in Five European Countries, [internet] 2019 [cited 25 April 2022] Available here: https://www.giz.de/de/downloads/2018%20Diaspora%20Mapping%20Study%20Europe%20ENG.pdf*

36 *2011 Census CT0265 Country of birth by year of arrival by religion, England and Wales, [internet] [cited 23 March 2022] Accessed here: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/adhocs/003486ct02652011censuscountryofbirthbyyearofarrivalbyreligionenglandandwales*

37 *2011 Census CT0265 Country of birth by year of arrival by religion, England and Wales, [internet] [cited 23 March 2022] Accessed here: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/adhocs/003486ct02652011censuscountryofbirthbyyearofarrivalbyreligionenglandandwales*

38 *U.S. Department of State, 2020 Report on International Religious Freedom: Kenya, [internet] [cited 23 March 2022] Available from: https://www.state.gov/reports/2020-report-on-international-religious-freedom/kenya/*

39 *U.S. Department of State, 2020 Report on International Religious Freedom: Kenya, [internet] [cited 23 March 2022] Accessed here: https://www.state.gov/reports/2020-report-on-international-religious-freedom/kenya/*

40 *U.S. Department of State, 2020 Report on International Religious Freedom: Kenya, [internet] [cited 23 March 2022] Available from: https://www.state.gov/reports/2020-report-on-international-religious-freedom/kenya/*

41 *2011 Census, Table CT0562*

42 *Table QS203EW [internet] [cited 23 March 2022] Accessed here: http://www.ons.gov.uk/ons/rel/census/2011-census/key-statistics-for-local-authorities-in-england-and-wales/rft-table-qs203ew.xls*

43 *Population and Migration Topic Report, Birmingham City Council, [internet] [cited 23 March 2022] Accessed here: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjgmqXWwrH3AhXGfMAKHXwRBrsQFnoECAcQAQ&url=https%3A%2F%2Fwww.birmingham.gov.uk%2Fdownload%2Fdownloads%2Fid%2F4564%2F2011_census_birmingham_population_and_migration_report.pdf&usg=AOvVaw0AUG-XcpYSvxn1_viw4jTu*

44 *2011 Census: Birmingham Population and Migration Topic Report, [internet] [cited 23 March 2022] Available from: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwix64yatcj2AhVToVwKHbI-DB4QFnoECAcQAQ&url=https%3A%2F%2Fwww.birmingham.gov.uk%2Finfo%2F50265%2Fsupporting_healthier_communities%2F2438%2Fethnic_communities%2F2&usg=AOvVaw04PrUpTHJAKybPVdBz9GU2*

45 *2011 population and migration profile for small areas, Birmingham City Council, [internet] [cited 23 March 2022] Available from: https://www.birmingham.gov.uk/downloads/file/9841/2011_population_and_migration_profile_for_small_areas*

46 *2011 Census QS204EW, [internet] [cited 23 March 2022] Available from: https://www.nomisweb.co.uk/census/2011/QS204EW/view/1946157186?rows=cell&cols=rural_urban*

47 *2011 Census QS204, pp.10.*

48 *2011 Census Country of Birth- Population Pyramid Tool, Commissioned Table CT0561, [internet] [cited 23 March 2022] Available from: https://data.london.gov.uk/dataset/country-of-birth---population-pyramid-tool*

49 *Black women are five times more likely to die in childbirth than White women. Why?, NPEU University of Oxford, 15 July 2019 [internet] [cited 23 March 2022] Accessed here: https://www.npeu.ox.ac.uk/news/1741-Black-women-are-five-times-more-likely-to-die-in-childbirth-than-White-women-why?highlight=WyJibGFjayJd*

50 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan. Based on ONS Reference Table 1: referencetable1_tcm77-350670.xls TFRs for non-UK born women living in England and Wales, by mother's country of birth.*

51 *ONS, Reference Table 1: referencetable1_tcm77-350670.xls, in Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan. pp.23*

52 *ONS, Reference Table 1: referencetable1_tcm77-350670.xls, in Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan. pp.23*

53 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan. pp.22*

54 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan. Based on ONS Reference Table 1: referencetable1_tcm77-350670.xls TFRs for non-UK born women living in England and Wales, by mother's country of birth.*

55 *Knight M, Bunch K, Tuffnell D, Patel R, Shakespeare J, Kotnis R, Kenyon S, Kurinczuk JJ. Saving Lives, Improving Mothers' Care: Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2017-19, MBRRACE-UK, November 2021, pp.i, [internet] [cited 23 March 2022] Accessed here: https://www.npeu.ox.ac.uk/assets/downloads/mbrrace-uk/reports/maternal-report-2021/MBRRACE-UK_Maternal_Report_2021_-_FINAL_-_WEB_VERSION.pdf*

56 *Warrender E. Is childbirth more dangerous for Black women in the UK? Open Access Government, 23 August 2021. [internet] [cited 23 March 2022] Accessed here: https://www.openaccessgovernment.org/childbirth-Black-women-uk/117437/*

57 *Nuffield Department of Population Health. MBRRACE-UK: Saving Lives, Improving Mothers' Care Rapid report: Learning from SARS-CoV-2-related and associated maternal deaths in the UK March-May 2020 [internet] [cited 23 March 2022] Accessed here: https://www.npeu.ox.ac.uk/mbrrace-uk/reports.*

58 *Knight M, Bunch K, Tuffnell D, Patel R, Shakespeare J, Kotnis R, Kenyon S, Kurinczuk JJ. Saving Lives, Improving Mothers' Care: Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2017-19, MBRRACE-UK, November 2021, pp.i, [internet] [cited 23 March 2022] Accessed here: https://www.npeu.ox.ac.uk/assets/downloads/mbrrace-uk/reports/maternal-report-2021/MBRRACE-UK_Maternal_Report_2021_-_FINAL_-_WEB_VERSION.pdf*

59 *New MBRRACE report shows Black women still four times more likely to die in pregnancy and childbirth, Birthrights, 11 November 2021, [internet] [cited 23 March 2022] Accessed here: https://www.birthrights.org.uk/2021/11/11/new-mbrrace-report-shows-Black-women-still-four-times-more-likely-to-die-in-pregnancy-and-childbirth/*

60 *Nuffield Department of Population Health. MBRRACE-UK: Saving Lives, Improving Mothers' Care Rapid report: Learning from SARS-CoV-2-related and associated maternal deaths in the UK March-May 2020 [internet] [cited 23 March 2022] Accessed here: https://www.npeu.ox.ac.uk/mbrrace-uk/reports.*

61 *Nuffield Department of Population Health. MBRRACE-UK: Saving Lives, Improving Mothers' Care Rapid report: Learning from SARS-CoV-2-related and associated maternal deaths in the UK March-May 2020 [internet] [cited 23 March 2022] Accessed here: https://www.npeu.ox.ac.uk/mbrrace-uk/reports.*

62 *Nuffield Department of Population Health. MBRRACE-UK: Saving Lives, Improving Mothers' Care Rapid report: Learning from SARS-CoV-2-related and associated maternal deaths in the UK March-May 2020 [internet] [cited 23 March 2022] Accessed here: https://www.npeu.ox.ac.uk/mbrrace-uk/reports.*

63 *Adjusted disparities in rates of stillbirth for ethnic groups, deprivation quintile and maternal age for births in the UK: 2014–2019*

64 *Matthews RJ, Draper ES, Manktelow BN, et al. Understanding ethnic inequalities in stillbirth rates: a UK population-based cohort study. BMJ Open 2022;12:e057412. doi:10.1136/ bmjopen-2021-057412. [internet] [cited 23 March 2022] pp. 3 Accessed here: https://bmjopen.bmj.com/content/bmjopen/12/2/e057412.full.pdf*

65 *Overweight children, GOV.UK: Ethnicity facts and figures, 2014/15 to 2017/18, [internet] [cited 26 April 2022] Accessed here: https://www.ethnicity-facts-figures.service.gov.uk/health/diet-and-exercise/overweight-children/latest*

66 *Overweight children, GOV.UK: Ethnicity facts and figures, 2014/15 to 2017/18, [internet] [cited 26 April 2022] Accessed here: https://www.ethnicity-facts-figures.service.gov.uk/health/diet-and-exercise/overweight-children/latest*

67 *Overweight children, GOV.UK: Ethnicity facts and figures, 2014/15 to 2017/18, [internet] [cited 26 April 2022] Accessed here: https://www.ethnicity-facts-figures.service.gov.uk/health/diet-and-exercise/overweight-children/latest*

68 *Wagner KS, van Wijgerden JCJ, Andrews N, et al. Childhood vaccination coverage by ethnicity within London between 2006/2007 and 2010/2011, British Medical Jounal, 2014; 99:348–353. [internet] [cited 23 March 2022] Accessed here: https://adc.bmj.com/content/99/4/348*

69 *Wagner KS, van Wijgerden JCJ, Andrews N, et al. Childhood vaccination coverage by ethnicity within London between 2006/2007 and 2010/2011, British Medical Jounal, 2014; 99:348–353. [internet] [cited 23 March 2022] Accessed here: https://adc.bmj.com/content/99/4/348*

70 *Cover of vaccination evaluated rapidly (COVER) programme, Public Health England, 2020/21, Report_table tab: Table 1. Completed UK primary immunisations at 12 months by country and English Local Teams: July to September 2020 (April to June 2020) [internet] [cited 23 March 2022] Accessed here: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj24vfrpLT3AhVlmVwKHXNFAdEQFnoECBEQAQ&url=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fgovernment%2Fuploads%2Fsystem%2Fuploads%2Fattachment_data%2Ffile%2F946616%2FCOVER_data_tables_Q20-21_Q2b.ods&usg=AOvVaw0y2xwrQu8hp-PTyCrHCNPT*

71 *Statistic excludes Somalis, Nigerians, Other, Mixed and unspecified*

72 *Wagner KS, van Wijgerden JCJ, Andrews N, et al. Childhood vaccination coverage by ethnicity within London between 2006/2007 and 2010/2011, British Medical Jounal, 2014; 99:348–353. [internet] [cited 23 March 2022] Accessed here: https://adc.bmj.com/content/99/4/348*

73 *Wagner KS, van Wijgerden JCJ, Andrews N, et al. Childhood vaccination coverage by ethnicity within London between 2006/2007 and 2010/2011, British Medical Jounal, 2014; 99:348–353. [internet] [cited 23 March 2022] Accessed here: https://adc.bmj.com/content/99/4/348*

74 *Khaliq M, Child poverty and education outcomes by ethnicity, ONS, 25 February 2020, [internet] [cited 23 March 2022] Accessed here: https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/compendium/economicreview/february2020/childpovertyandeducationoutcomesbyethnicity*

75 *Khaliq M, Child poverty and education outcomes by ethnicity, ONS, 25 February 2020, [internet] [cited 23 March 2022] Accessed here: https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/compendium/economicreview/february2020/childpovertyandeducationoutcomesbyethnicity*

76 *Shefer G, Rose D, Nellums L, Thornicroft G, Henderson C, Evans-Lacko S. 'Our community is the worst': the influence of cultural beliefs on stigma, relationships with family and help-seeking in three ethnic communities in London. Int J Soc Psychiatry. 2013 Sep;59(6):535-44. doi: 10.1177/0020764012443759. Epub 2012 May 15. PMID: 22588248.*

77 *Shefer G, Rose D, Nellums L, Thornicroft G, Henderson C, Evans-Lacko S. 'Our community is the worst': the influence of cultural beliefs on stigma, relationships with family and help-seeking in three ethnic communities in London. Int J Soc Psychiatry. 2013 Sep;59(6):535-44. doi: 10.1177/0020764012443759. Epub 2012 May 15. PMID: 22588248. pp.540*

78 *Kabuiku J, Immigration's Impact on Emerging Mental Health Issues Among Kenyans in the Northeast United States, Walden University, March 2016, [internet] [cited 23 March 2022] Accessed here: https://core.ac.uk/download/pdf/147837989.pdf*

79 *Shame for not being able to repay relatives who loaned them money to migrate.*

80 *The research explains this as while the Kenyan immigrant is trying to secure meaningful work, they are the only income earners for their families in the United States, and often times also for the extended family back home. Some participants in the study reported that they had to work harder to prove they were deserving of the opportunities of coming abroad and employment they have secured.*

81 *Acculturative stress results from negative stereotypes and insolence held by the host culture about the immigrant population, as defined by author on pp. 21.*

82 *Kabuiku J, Immigration's Impact on Emerging Mental Health Issues Among Kenyans in the Northeast United States, Walden University, March 2016, pp. 52 [internet] [cited 23 March 2022] Accessed here: https://core.ac.uk/download/pdf/147837989.pdf*

83 *Kabuiku J, Immigration's Impact on Emerging Mental Health Issues Among Kenyans in the Northeast United States, Walden University, March 2016, pp. 13 [internet] [cited 23 March 2022] Accessed here: https://core.ac.uk/download/pdf/147837989.pdf*

84 *Kabuiku J, Immigration's Impact on Emerging Mental Health Issues Among Kenyans in the Northeast United States, Walden University, March 2016, pp. 14 [internet] [cited 23 March 2022] Accessed here: https://core.ac.uk/download/pdf/147837989.pdf*

85 *Kabuiku J, Immigration's Impact on Emerging Mental Health Issues Among Kenyans in the Northeast United States, Walden University, March 2016, pp. 52 [internet] [cited 23 March 2022] Accessed here: https://core.ac.uk/download/pdf/147837989.pdf*

86 *Kabuiku J, Immigration's Impact on Emerging Mental Health Issues Among Kenyans in the Northeast United States, Walden University, March 2016, pp. 27 [internet] [cited 23 March 2022] Accessed here: https://core.ac.uk/download/pdf/147837989.pdf*

87 *Ongeri L, Kirui F, Muniu E, Manduku V, Kirumbi L, Atwoli L, Agure S, Wanzala P, Kaduka L, Karimi M, Mutisya R, Echoka E, Mutai J, Mathu D, Mbakaya C. Khat use and psychotic symptoms in a rural Khat growing population in Kenya: a household survey. BMC Psychiatry. 2019 May 7;19(1):137. doi: 10.1186/s12888-019-2118-3. PMID: 31064338; PMCID: PMC6505064.*

88 *Ongeri L, Kirui F, Muniu E, Manduku V, Kirumbi L, Atwoli L, Agure S, Wanzala P, Kaduka L, Karimi M, Mutisya R, Echoka E, Mutai J, Mathu D, Mbakaya C. Khat use and psychotic symptoms in a rural Khat growing population in Kenya: a household survey. BMC Psychiatry. 2019 May 7;19(1):137. doi: 10.1186/s12888-019-2118-3. PMID: 31064338; PMCID: PMC6505064.*

89 *Ongeri L, Kirui F, Muniu E, Manduku V, Kirumbi L, Atwoli L, Agure S, Wanzala P, Kaduka L, Karimi M, Mutisya R, Echoka E, Mutai J, Mathu D, Mbakaya C. Khat use and psychotic symptoms in a rural Khat growing population in Kenya: a household survey. BMC Psychiatry. 2019 May 7;19(1):137. doi: 10.1186/s12888-019-2118-3. PMID: 31064338; PMCID: PMC6505064.*

90 *British Crime Survey, Nationally representative estimates of illicit drug use by ethnicity 2006/7-2008/9, [internet] [cited 23 March 2022] Accessed here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/116323/hosb13101-annex1.pdf*

91 *British Crime Survey, Nationally representative estimates of illicit drug use by ethnicity 2006/7-2008/9, [internet] [cited 23 March 2022] Accessed here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/116323/hosb13101-annex1.pdf*

92 *Tobacco and Ethnic minorities, ASH, August 2019, [internet] [cited 23 March 2022] Accessed here: https://ash.org.uk/wp-content/uploads/2019/08/ASH-Factsheet_Ethnic-Minorities-Final-Final.pdf*

93 *Magati P, Drope J, Mureithi L, Lencucha R. Socio-economic and demographic determinants of tobacco use in Kenya: findings from the Kenya Demographic and Health Survey 2014. PanAfrican Medical Journal, 2018 [internet] [cited 23 March 2022] Accessed here: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6235476/pdf/PAMJ-30-166.pdf*

94 *Nasir R and Brookman A. Smoking prevalence in the UK and the impact of data collection changes: 2020, ONS, December 2021, [internet] [cited 23 March 2022] Accessed here: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/drugusealcoholandsmoking/bulletins/smokingprevalenceintheukandtheimpactofdatacollectionchanges/2020*

95 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3*

96 *Tobacco Tactics from University of Bath, Kenya Country Profile, September 2021, [internet] [cited 23 March 2022] Accessed here: https://tobaccotactics.org/wiki/kenya-country-profile/*

97 *Tobacco Tactics from University of Bath, Kenya Country Profile, September 2021, [internet] [cited 23 March 2022] Accessed here: https://tobaccotactics.org/wiki/kenya-country-profile/*

98 *Tobacco Tactics from University of Bath, Kenya Country Profile, September 2021, [internet] [cited 23 March 2022] Accessed here: https://tobaccotactics.org/wiki/kenya-country-profile/*

99 *Tobacco and Ethnic minorities, ASH, August 2019, [internet] [cited 23 March 2022] Accessed here: https://ash.org.uk/wp-content/uploads/2019/08/ASH-Factsheet_Ethnic-Minorities-Final-Final.pdf*

100 *Adult smoking habits in the UK 2019, [internet] [cited 23 March 2022] Accessed here: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/adultsmokinghabitsingreatbritain/2019*

101 *ONS. Adult smoking habits in the UK 2019 [Internet]. 2020 [cited 2022 March 7]. Available here: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/adultsmokinghabitsingreatbritain/2019*

102 *Jovanovic M and Antunovic M (2016) Person- and People-Centered Integrated Health Care for Alcohol Dependence – Whether It Is Real in the Present Moment. Front. Public Health 4:264. doi: 10.3389/fpubh.2016.00264*

103 *Public Health England. Public Health Outcomes Framework: Health Equity Report [Internet]. 2017 [cited 2022 March 7]. Available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/733093/PHOF_Health_Equity_Report.pdf*

104 *Public Health England. Public Health Outcomes Framework: Health Equity Report [Internet]. 2017 [cited 2022 March 7]. pp. 57, Available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/733093/PHOF_Health_Equity_Report.pdf*

105 *Public Health England. Public Health Outcomes Framework: Health Equity Report [Internet]. 2017 [cited 2022 March 7]. pp. 57, Available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/733093/PHOF_Health_Equity_Report.pdf*

106 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3*

107 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3*

108 *Mkuu RS, Epnere K, Chowdhury MAB. Prevalence and Predictors of Overweight and Obesity Among Kenyan Women. Prev Chronic Dis 2018;15:170401. https://www.cdc.gov/pcd/issues/2018/17_0401.htm*

109 *Mkuu RS, Epnere K, Chowdhury MAB. Prevalence and Predictors of Overweight and Obesity Among Kenyan Women. Prev Chronic Dis 2018;15:170401. https://www.cdc.gov/pcd/issues/2018/17_0401.htm*

110 *Mkuu RS, Epnere K, Chowdhury MAB. Prevalence and Predictors of Overweight and Obesity Among Kenyan Women. Prev Chronic Dis 2018;15:170401. [internet] [cited 23 March 2022] Accessed here: https://www.cdc.gov/pcd/issues/2018/17_0401.htm*

111 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

112 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3*

113 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3*

114 *The Kenyan STEPS survey is a nationally representative survey to collect comprehensive information on risk factors for NCDs and injuries.*

115 *National Non-Communicable Diseases Strategic Plan 2021/22-2025/26, Republic of Kenya: Ministry of Health, [internet] [cited 23 March 2022] Accessed here: https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

116 *National Non-Communicable Diseases Strategic Plan 2021/22-2025/26, Republic of Kenya: Ministry of Health, [internet] [cited 23 March 2022] Accessed here: https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

117 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3*

118 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3*

119 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3. pp.5*

120 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3. pp.5*

121 *National Non-Communicable Diseases Strategic Plan 2021/22-2025/26, Republic of Kenya: Ministry of Health, [internet] [cited 23 March 2022] Accessed here: https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

122 *Gichura SW, Experience and study outcomes of Kenyan students pursuing higher education in the UK, Coventry University, July 2010, [internet] [cited 23 March 2022] Accessed here: https://curve.coventry.ac.uk/open/file/a39a4cd2-5460-2cfc-c8c6-19afb462b37a/1/gichuracomb.pdf. pp. iv.*

123 *Gichura SW, Experience and study outcomes of Kenyan students pursuing higher education in the UK, Coventry University, July 2010, [internet] [cited 23 March 2022] Accessed here: https://curve.coventry.ac.uk/open/file/a39a4cd2-5460-2cfc-c8c6-19afb462b37a/1/gichuracomb.pdf. pp. 269.*

124 *Gichura SW, Experience and study outcomes of Kenyan students pursuing higher education in the UK, Coventry University, July 2010, [internet] [cited 23 March 2022] Accessed here: https://curve.coventry.ac.uk/open/file/a39a4cd2-5460-2cfc-c8c6-19afb462b37a/1/gichuracomb.pdf. pp. 266.*

125 *Gichura SW, Experience and study outcomes of Kenyan students pursuing higher education in the UK, Coventry University, July 2010, [internet] [cited 23 March 2022] Accessed here: https://curve.coventry.ac.uk/open/file/a39a4cd2-5460-2cfc-c8c6-19afb462b37a/1/gichuracomb.pdf. pp. 266.*

126 *Oucho LA, Migration Decision-Making of Kenyan and Nigerian Women in London: The Influence of Culture, Family and Networks, University of Warwick, November 2011 [internet] [cited 23 March 2022] Accessed here: http://wrap.warwick.ac.uk/50235/1/WRAP_THESIS_Oucho_2011.pdf*

127 *Non-UK domiciles students, HESA, [internet] [cited 23 March 2022] Accessed here: https://www.hesa.ac.uk/data-and-analysis/students/where-from*

128 *2011 Census, Table CT0566*

129 *Baker C, NHS staff from overseas: statistics, Parliament Research Briefings, 20 September 2021, [internet] [cited 23 March 2022] Accessed here: https://researchbriefings.files.parliament.uk/documents/CBP-7783/CBP-7783.pdf*

130 *GOV.UK, Unemployed Kenyan nurses given chance to work in the UK under new Kenya-UK health agreements, [internet] [cited 23 March 2022] Accessed here: https://www.gov.uk/government/news/unemployed-kenyan-nurses-given-chance-to-work-in-the-uk-under-new-kenya-uk-health-agreements*

131 *GOV.UK, Unemployed Kenyan nurses given chance to work in the UK under new Kenya-UK health agreements, [internet] [cited 23 March 2022] Accessed here: https://www.gov.uk/government/news/unemployed-kenyan-nurses-given-chance-to-work-in-the-uk-under-new-kenya-uk-health-agreements*

132 *Active international recruitment to stop from Kenya, NHS Employers, 11 November 2011, [internet] [cited 23 March 2022] Accessed here: https://www.nhsemployers.org/news/active-international-recruitment-stop-kenya*

133 *2011 Census, Table CT0565*

134 *2011 Census, Table CT0565*

135 *2011 Census, Table CT0565*

136 *2011 Census, Table CT0565*

137 *2011 Census, Table CT0565*

138 *Omolo D. The uptake of pap screening among Kenyan migrants in the Netherlands: A qualitative study, International Institute of Social Studies - The Hague, December 2019, [internet] [cited 23 March 2022] Accessed here: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjkt--n1rX3AhUOQUEAHUd2C14QFnoECBMQAQ&url=https%3A%2F%2Fthesis.eur.nl%2Fpub%2F51368%2FOmolo-Deborah_MA2018_19_SJP.pdf&usg=AOvVaw2Nith_9uM7nPCRl5p2rfjT*

139 *Omolo D. The uptake of pap screening among Kenyan migrants in the Netherlands: A qualitative study, International Institute of Social Studies - The Hague, December 2019, [internet] [cited 23 March 2022] Accessed here: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjkt--n1rX3AhUOQUEAHUd2C14QFnoECBMQAQ&url=https%3A%2F%2Fthesis.eur.nl%2Fpub%2F51368%2FOmolo-Deborah_MA2018_19_SJP.pdf&usg=AOvVaw2Nith_9uM7nPCRl5p2rfjT*

140 *National Non-Communicable Diseases Strategic Plan 2021/22-2025/26, Republic of Kenya: Ministry of Health, [internet] pp. 12 [cited 23 March 2022] Accessed here: https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

141 *Omolo D. The uptake of pap screening among Kenyan migrants in the Netherlands: A qualitative study, International Institute of Social Studies - The Hague, December 2019, [internet] [cited 23 March 2022] Accessed here: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjkt--n1rX3AhUOQUEAHUd2C14QFnoECBMQAQ&url=https%3A%2F%2Fthesis.eur.nl%2Fpub%2F51368%2FOmolo-Deborah_MA2018_19_SJP.pdf&usg=AOvVaw2Nith_9uM7nPCRl5p2rfjT*

142 *Black African and Black Caribbean men's understanding and experiences of prostate cancer post-treatment in England: a qualitative study, https://journals.rcni.com/cancer-nursing-practice/evidence-and-practice/black-african-and-black-caribbean-mens-understanding-and-experiences-of-prostate-cancer-posttreatment-in-england-a-qualitative-study-cnp.2020.e1732/abs*

143 *Jack RH, Møller H, Robson T, et al Breast cancer screening uptake among women from different ethnic groups in London: a population-based cohort study BMJ Open 2014;4:e005586. doi: 10.1136/bmjopen-2014-005586 [internet] [cited 23 March 2022] Accessed here: https://bmjopen.bmj.com/content/4/10/e005586*

144 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

145 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

146 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

147 *Phyllis N, The Impact of Stigma on HIV/AIDS Testing among Kenyan Diaspora Women, Walden University, [internet] 2017 [cited 23 March 2022] Accessed here: https://www.proquest.com/openview/dce4a52fbf02b4f0cceca96fba8c9517/1?pq-origsite=gscholar&cbl=18750*

148 *UNFPA Kenya, [internet] [cited 23 March 2022] Accessed here: https://kenya.unfpa.org/en/topics/maternal-health-and-hiv*

149 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

150 *Aspinall PJ and Chinouya MJ. The African Diaspora Population in Britain: Migrant Identities and Experiences. 2016, London, Macmillan.*

151 *Hayward S, Harding RM, McShane H, Tanner R. Factors influencing the higher incidence of tuberculosis among migrants and ethnic minorities in the UK. F1000Res. 2018 Apr 13;7:461. doi: 10.12688/f1000research.14476.2. PMID: 30210785; PMCID: PMC6107974.*

152 *Hayward S, Harding RM, McShane H, Tanner R. Factors influencing the higher incidence of tuberculosis among migrants and ethnic minorities in the UK. F1000Res. 2018 Apr 13;7:461. doi: 10.12688/f1000research.14476.2. PMID: 30210785; PMCID: PMC6107974.*

153 *Hayward S, Harding RM, McShane H, Tanner R. Factors influencing the higher incidence of tuberculosis among migrants and ethnic minorities in the UK. F1000Res. 2018 Apr 13;7:461. doi: 10.12688/f1000research.14476.2. PMID: 30210785; PMCID: PMC6107974.*

154 *Public Health England. Local action on health inequalities [Internet]. 2018 [cited 2022 March 7]. Available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/730917/local_action_on_health_inequalities.pdf*

155 *UK Health Security Agency, Tuberculosis in England: 2020. UK Health Security Agency, London. [Internet] 2021 [cited 09 May 2022]. Available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1030165/TB_annual-report-2021.pdf*

156 *Tuberculosis Place of Birth, Public Health England, 2013, [internet] [cited 23 March 2022] Accessed here: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/358250/TB_place_of_birth_and_ethnic_group_UK_2013.pdf*

157 *Birmingham City Council. Tuberculosis in Birmingham [Internet]. 2012 [cited 23 March 2022] Accessed here: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjaqp3L-Ob2AhWPiVwKHfVrA8MQFnoECBkQAQ&url=https%3A%2F%2Fwww.birmingham.gov.uk%2Fdownload%2Fdownloads%2Fid%2F452%2Ftb_strategy_in_birmingham_january_2012.pdf&usg=AOvVaw3MTdL_qfkJvlH-xtnoAhhH*

158 *Birmingham City Council. Tuberculosis in Birmingham [Internet]. 2012 [cited 23 March 2022] Accessed here: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjaqp3L-Ob2AhWPiVwKHfVrA8MQFnoECBkQAQ&url=https%3A%2F%2Fwww.birmingham.gov.uk%2Fdownload%2Fdownloads%2Fid%2F452%2Ftb_strategy_in_birmingham_january_2012.pdf&usg=AOvVaw3MTdL_qfkJvlH-xtnoAhhH*

159 *https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

160 *https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

161 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3*

162 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3*

163 *Mwangi J and Gitonga L, Perceptions and Use of Herbal Remedies among Patients with Diabetes Mellitus in Murang'a North District, Kenya, Scientific Research, Pp.156 [Internet] 2012 [cited 23 March 2022] Accessed here: https://www.scirp.org/pdf/OJCD_2014091215454344.pdf*

164 *Mwangi, J. and Gitonga, L. (2014) Perceptions and Use of Herbal Remedies among Patients with Diabetes Mellitus in Murang'a North District, Kenya. Open Journal of Clinical Diagnostics, 4, 152-172. http://dx.doi.org/10.4236/ojcd.2014.43024*

165 *Hanif W, Khunti K, Bellary S, et al. Type 2 Diabetes in the UK South Asian Population. An update from the South Asian Health Foundation. Birmingham: South Asian Health Foundation; 2014*

166 *Diabetes UK – Know Diabetes, Fight Diabetes (The British Diabetic Association). Diabetes prevalence 2019 [internet] [cited 23 August 2022] Accessed here: https://www.diabetes.org.uk/professionals/position-statements-reports/statistics/diabetes-prevalence-2019*

167 *Holman N, Young B, Gadsby R. Current prevalence of Type 1 and Type 2 diabetes in adults and children in the UK. Diabet Med. 2015;32(9):1119-1120*

168 *Shah AD, Langenberg C, Rapsomaniki E, et al. Type 2 diabetes and incidence of cardiovascular diseases: a cohort study in 1.9 mil-lion people. Lancet Diabetes Endocrinol. 2015;3(2):105- 113*

169 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

170 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

171 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

172 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

173 *Lip, G., Barnett, A., Bradbury, A. et al. Ethnicity and cardiovascular disease prevention in the United Kingdom: a practical approach to management. J Hum Hypertens 21, 183–211 (2007). https://www.nature.com/articles/1002126#citeas*

174 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

175 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3*

176 *Sewali, B., Harcourt, N., Everson-Rose, S.A. et al. Prevalence of cardiovascular risk factors across six African Immigrant Groups in Minnesota. BMC Public Health 15, 411 (2015). https://doi.org/10.1186/s12889-015-1740-3*

177 *Lip, G., Barnett, A., Bradbury, A. et al. Ethnicity and cardiovascular disease prevention in the United Kingdom: a practical approach to management. J Hum Hypertens 21, 183–211 (2007). https://www.nature.com/articles/1002126#citeas*

178 *Lip, G., Barnett, A., Bradbury, A. et al. Ethnicity and cardiovascular disease prevention in the United Kingdom: a practical approach to management. J Hum Hypertens 21, 183–211 (2007). https://www.nature.com/articles/1002126#citeas*

179 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

180 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

181 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

182 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

183 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

184 *Republic of Kenya: Ministry of Health, National Non-Communicable Diseases Strategic Plan, [Internet]. 2021 [cited 2022 March 7]. Available here https://www.health.go.ke/wp-content/uploads/2021/07/Kenya-Non-Communicable-Disease-NCD-Strategic-Plan-2021-2025.pdf*

185 *Berwald S, Roche M, Adelman S, Mukadam N, Livingston G (2016) Black African and Caribbean British Communities' Perceptions of Memory Problems: "We Don't Do Dementia.". PLoS ONE 11(4): e0151878. doi:10.1371/journal.pone.0151878 [cited 2022 March 7]. Available here: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4821595/pdf/pone.0151878.pdf*

186 Berwald S, Roche M, Adelman S, Mukadam N, Livingston G (2016) Black African and Caribbean British Communities' Perceptions of Memory Problems: "We Don't Do Dementia.". PLoS ONE 11(4): e0151878. doi:10.1371/journal.pone.0151878 [cited 2022 March 7]. Available here: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4821595/pdf/pone.0151878.pdf

187 Berwald S, Roche M, Adelman S, Mukadam N, Livingston G (2016) Black African and Caribbean British Communities' Perceptions of Memory Problems: "We Don't Do Dementia.". PLoS ONE 11(4): e0151878. doi:10.1371/journal.pone.0151878 [cited 2022 March 7]. Available here: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4821595/pdf/pone.0151878.pdf

188 Berwald S, Roche M, Adelman S, Mukadam N, Livingston G (2016) Black African and Caribbean British Communities' Perceptions of Memory Problems: "We Don't Do Dementia.". PLoS ONE 11(4): e0151878. doi:10.1371/journal.pone.0151878 [cited 2022 March 7]. Available here: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4821595/pdf/pone.0151878.pdf

189 Berwald S, Roche M, Adelman S, Mukadam N, Livingston G (2016) Black African and Caribbean British Communities' Perceptions of Memory Problems: "We Don't Do Dementia.". PLoS ONE 11(4): e0151878. doi:10.1371/journal.pone.0151878 [cited 2022 March 7]. Available here: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4821595/pdf/pone.0151878.pdf

190 Public Health England. Local action on health inequalities [Internet]. 2018 [cited 2022 March 7]. Available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/730917/local_action_on_health_inequalities.pdf

191 Public Health England. Local action on health inequalities [Internet]. 2018 [cited 2022 March 7]. Available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/730917/local_action_on_health_inequalities.pdf

192 Disparities in the risk and outcomes from COVID-19, PHE [Internet]. 2018 [cited 2022 March 7]. Available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908434/Disparities_in_the_risk_and_outcomes_of_COVID_August_2020_update.pdf

193 Disparities in the risk and outcomes from COVID-19, PHE [Internet]. 2018 [cited 2022 March 7]. pp. 55, Available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908434/Disparities_in_the_risk_and_outcomes_of_COVID_August_2020_update.pdf

194 2011 Census: Key Statistics for England and Wales, March 2011, ONS [Internet]. 2012 [cited 2022 July 1], Available here: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/2011censuskeystatisticsforenglandandwales/2012-12-11