MENTAL HEALTH AND WELLNESS IN NIGERIA

IIPHRP Global Public Health Case Competition | Spring 2019

All characters, organizations, and plots described within the case are fictional and bear no direct reflection to existing organizations or individuals. The case topic, however, is a true representation of circumstances in Nigeria. The case scenario is complex and does not necessarily have a correct or perfect solution, and thus encourages a judicious balance of creative yet perceptive approaches.

The authors have provided informative facts and figures within the case to help teams. The data provided are derived from independent sources, may have been adapted for use in this case, and are clearly cited such that teams can verify or contest the findings within their recommendations, if it is pertinent to do so. Teams are responsible for justifying the accuracy and validity of all data and calculations that are used in their presentations, as well as defending their assertions in front of a panel of knowledgeable judges representing different stakeholders.

The information and data given in the following text is meant as a suggestive guide but is not considered all-inclusive. Teams may choose any area(s) of approach that they deem impactful and feasible.

INTRODUCTION

Iyabo is a young mother living in Makoko, an informal settlement (also referred to as a slum) located under the Third Mainland Bridge in Lagos, Nigeria. Iyabo's father brought the family to Nigeria's most populous city from her rural hometown five years ago, when Iyabo was 14 years old. Her father hoped to find work and better support his family. Without funds for housing, the family settled in Makoko, one of Lagos' most, crowded and unique settlements due to its precarious riverine structures. Iyabo's father has found only day-labor jobs that do not cover food for the family or funds to move out of Makoko. Iyabo and her siblings have attempted to earn money by selling fish they catch in the lagoon, but they have struggled to provide the family with basic living necessities.

Within 2 years of arriving in Makoko, Iyabo's 17-year-old sister, Ayowunmi, became pregnant. Ayowunmi was alone in their shack when she went into labor. Hearing Ayowunmi groaning in pain, a neighbor ran to get her sister Iyabo and the traditional birth attendant contracted to birth the baby, since there are no medical doctors in Mokoko. The birth attendant came an hour later and, realizing the baby was breech, knew that Ayowunmi needed urgent medical care. She estimated the time required to locate a doctor outside Mokoko and concluded that Ayowunmi stood a better chance if she tried managing the birth rather than wasting time finding transportation to a health facility for Ayowunmi. Unfortunately, without access to necessary health care, both Ayowunmi and her baby died during childbirth.

Now 19-years-old, Iyabo is the mother of her own one-year-old son, who has suffered from chronic diarrheal illnesses since birth due to lack of safe water and poor living conditions. Unable to find work to support her and her child, and compounded by the trauma of her sister's death, Iyabo has begun to suffer from severe depression and anxiety. She has withdrawn from social situations and seldom speaks. She also has not been eating well and has lost considerable weight. She struggles to sleep at night and feels tired all day. She has neither the energy nor interest in doing even routine activities. Iyabo's parents initially understood why she was distraught over the loss of her only sister, but when Iyabo stopped working and contributing to the family's finances, they lashed out at her. "Yes, you lost your sister, but we also lost our daughter," they said. Her mother went further, telling her that "emotional issues are for the lazy and idle" and "the women in my family are strong enough to withstand the hand dealt them by God." Her father called the elders in their family, saying Iyabo "was going mad" and needed a cleansing ritual to break the bond between Iyabo and Ayowunmi because he is sure that is why she is going mad. Iyabo's neighbor started avoiding her and stopped allowing her son to play with the other children for fear they will "go mad" like Iyabo.

Without access to basic health care or social services in Makoko, Iyabo is unsure where to turn to find immediate care for herself and to ensure the future health and wellbeing of her son.

BACKGROUND INFORMATION

Nigeria is located on the western coast of Africa, approximately 10° north of the equator, and borders the countries of Benin, Niger, Chad, and Cameroon. The country is 923,768 sq km, only 1.8% of which is water. Approximately 78% of the land is agricultural. The terrain is highly varied due to the size of Nigeria's landmass and includes southern lowlands, hills, mountains, plateaus, and plains.[26]

Nigeria is the most populous country in Africa and 7th most populous in the world, with a current population of 203.5 million people. The birth rate is currently 35.2 births/1000, but has a high mortality rates, which has resulted in a lower life expectancy of 59.3 years (population total). The median age for both women and men in Nigeria is 18 years old.[26]

Nigeria is divided into 36 states, each with its own governing body. Half of the national population lives in urban areas, the most populous of which is Lagos, which, according to the UN, currently has 13.5 million inhabitants. However, this number is heavily disputed and is widely assumed to be as high as 21 to 25 million due to the constant high influx of new residents from rural areas.[12] An estimated 2000 new residents arrive in Lagos every day.[17] Due to this increasing flood of people, the city of Lagos has a number of informal, low resource settlements (slums), many of which are riverine communities built on stilts.[17] Little credible population data exists for these settlements and it is estimated that anywhere from 40,000 to 300,000 people live in the settlement known as Makoko.[17]

In recent history, Nigeria's society has been heavily shaped by European imperialism. Pre-17th Century, the area southwest of Lake Chad (modern-day Nigeria) was controlled by the Kanem-Bornu Empire, which brought a heavily Islamic influence to the region and today, 50% of Nigerians identify as Muslim.[15, 26] In the 17th and 18th centuries, several European countries came to the Niger delta to establish a slave trade and Britain eventually established primary control over the area that would become Nigeria. Nigerian citizens began pushing for independence following the end of World War II, but differences between Christian and Muslim states within the country, in addition to the ongoing struggle for control over rich oil fields, led to a number of failed constitutions.[23] Additionally, traditional beliefs and medical practices from prior to the introduction of Islam and Christianity to the region continue to have significant cultural influence, particularly in low resource and rural areas.[25] Nigeria finally became fully independent of the British Commonwealth on October 1, 1960 and was admitted as a member of the UN on October 7, 1960.[15]

Since gaining independence, Nigeria has struggled internally due to various ethnic, religious, and political differences. From 1966 to 1999, several different dictatorial regimes fought for control of the country. In 1999, Nigeria adopted a new constitution restoring democracy to the country. However, widespread political and financial corruption continues to hinder Nigeria's development. Billions of dollars are drained from necessary social programs and infrastructure every year, including health care, primarily affecting Nigeria's most vulnerable populations.[21] The presidential elections in 2007 were marked by chaos, violence, and suspicions of election fraud. The 2011 elections also experienced protest and unrest in certain states, but were generally considered to be free and fair.[15]

SUMMARY OF THE ISSUE

Bloomberg currently ranks Nigeria as the most stressful country to live in the world, based on multiple factors in the living environment[i].[14] To an average Nigerian, stress is the norm; 'Just deal with it!' is the popular opinion.

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[i] Seven equally weighted variables were considered: homicide rates, GDP per capita on a purchasing-power-parity basis, income inequality, corruption perception, unemployment, urban air pollution and life expectancy. Income inequality was measured by the Gini Index, where a score of 0 represents perfect equality and 100 perfect inequality. Corruption perception refers to Transparency International's Corruption Perceptions Index, which scores countries on a scale of 0 to 100, with 0 being the most corrupt. Urban outdoor air pollution is the annual mean concentration of fine particles smaller than 10 microns, measured in micrograms per cubic meter…

From the non-existent power supply, poor road conditions, unemployment, and abysmal working conditions, stressful, poverty-driven lifestyles are rampant. It is estimated that 20-30% of Nigeria's population suffers from mental health challenges, although the number reported by the WHO World Mental Health (WMH) Surveys is extremely low, most likely due to biases and underascertainment.[7, 11, 19] With these issues in mind, mental health systems and access to mental health care remain highly underdeveloped. Mental health is now considered one of the most neglected areas of health in Nigeria with 60 million Nigerians at risk of depression and 30% reporting episodic depressive symptoms.[10,19] According to WHO, depression is now the leading cause of disability in the world and is highly correlated with other physical illnesses and chronic conditions.[28]

Unfortunately, mental disorders are still heavily stigmatized in Nigerian society[3]. This stigmatization is associated with beliefs in religious and supernatural influences and individuals living with mental health disorders may be subjected to inhumane treatment because 'madness' is believed to be infectious or caused by demonic possession[3]. Misconceptions about the cause of mental illness have also created stigma and misunderstandings about the possibilities of care have resulted in many communities believing that care outside of a hospital is impossible[6]. These biases influence the perceived severity and health seeking behaviors for common mental health issues in the country.

Although there does not appear to be much correlation between socio-economic status or education level and individuals affected by depressive symptoms, access to health care and potential for relapse are both heavily dependent on these two factors.[5,8] In Makoko, the living environment is rife with corruption, substance abuse problems, crime and delinquency, teenage pregnancies, low social development, and extreme poverty.[2,16] In fact, 20% of Lagos' population lives in or is at risk of poverty, despite Nigeria having the largest economy and highest GDP in sub-Saharan Africa (ranked #31 in the world).[29] Not only do these impoverished conditions prevent adequate access to mental health care, they also exacerbate the likelihood of developing mental health issues and correlating chronic physical conditions.

That being said, Lagos, and Nigeria in general, have much to offer in future prospects. Lagos currently serves as the economic and cultural hub for all of Western Africa and with a burgeoning young population, the available labor force and economic strength of the city will only continue to grow. The attitude toward Lagos amongst Nigerians is that it is a place where one can realize their ambitions. Provided the public and private sectors in Lagos can find ways to harness this young energy, this labor force could provide the resources needed to accomplish significant economic goals.[26] Aiding in this effort, the literacy rate amongst young men (age 15-24) in Nigeria is 75% and boys and girls attend primary school at rates of 72% and 68% respectively. Of those enrolled in primary school in Nigeria, 96% of students will graduate (see Appendix A table 2).[2, 24] Lagos' strong literary and art culture continues to attract young Nigerians to the city in search of creative and financial opportunities.

POTENTIAL AREAS FOR INTERVENTION

Health Care Systems: As a whole, the Nigerian health care system is underdeveloped and reactionary to health issues, lacking adequate surveillance systems for communicable diseases.[22] Nigeria is one of six

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[i. ...] Countries were allotted points for each variable based on their relative position in that category's ranking. The country with the least-stressful measure for each variable received 0 points, while the country with the highest stress level received 100 points. All other countries were scored on a percentile basis depending on their position between the two extremes. Points for the seven variables were averaged for a final score from 0 to 100, a higher score indicating a more stressful living environment. All data were the latest available. Only countries with data available for all seven variables were included. **Source(s)**: United Nations Office on Drugs and Crime, International Monetary Fund, Central Intelligence Agency World Factbook, Transparency International, World Health Organization.[14]

countries that is part of Emerging Mental Health Systems in Low and Middle Income Countries (Emerald), a research program aimed at strengthening mental health systems in developing countries. However, the current mental health system is still underdeveloped and lacking capacity and Nigeria only has two nationally recognized psychiatric hospitals.[1,22] (*see Appendix A: Table 1*)

Health Disparities: The Nigerian government currently offers a federally funded National Health Insurance Scheme (NHIS), but it only covers about 3% of the population, and is primarily available to those who are formally employed. Most individuals living below the poverty line continue to remain uninsured and unable to access any medical care. Nigeria's national government has declared a goal of implementing a Universal Health Care System by 2030, but has historically been unwilling to invest in health infrastructure and has some of the lowest health care spending in the region, causing many to doubt the feasibility of this goal.[9, 18]

Policy, Education, and Awareness: The state of Lagos outlined the first mental health policy in the country in 1991, but it was never enacted. Several NGOs, including the Beautiful Mind and Wellness Foundation (BMWF), operate in western Africa with the goal of generating mental health awareness in the region. Several states, including Lagos, have recently committed to policies combatting stigma and promoting general wellness, but commitment to acting on these policies is limited and political corruption has eroded much of the funding for these projects.[3, 21]

Environmental Factors: Many of the root causes of disease in Mokoko are related to the environment, which is characterized by poor housing conditions, lack of access to clean water, lack of commerce, and lack of educational facilities.[16, 17]

Traditional Medicine: Traditional medicine[ii] and community healers still play a large role in low resource communities throughout Nigeria. They are considered trusted sources for medicinal and mental health care by their communities, yet are largely disregarded by the larger health care systems.[25]

COMPLICATING ISSUES

Health Disparities: Access to mental health care across Nigeria is highly varied, due to the geography of the country, rural vs. urban divide, and diverse religious and ethnic identification[6]. Within Lagos and other urban areas, access to health care, social services, proper hygiene, and safe drinking water are all significantly reduced for those living in informal settlements and below the poverty line[2].

Income Disparity: Nigeria is a resource-rich country that has made a small portion of the population very wealthy. However, unemployment and poverty rates are high due to opportunities being highly concentrated within 5 commercial cities. In Lagos, 20% of the population currently lives in or is at risk of poverty.[20] This drastic disparity has contributed to the creation of settlements like Makoko in and around Lagos with some families even sleeping in boats and canoes.[13]

Politics/Corruption: Corruption is considered one of the greatest obstacles for achievement and advancement within Nigeria and the perception that Nigeria is one of the most corrupt countries in the

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[ii] Traditional medicine refers to the knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, used in the maintenance of health and in the prevention, diagnosis, improvement or treatment of physical and mental illness.[23]

world is widespread amongst Nigeria's own populous. This corruption exists within the government, as well as in several significant private sector industries. This corruption currently saps billions of dollars in potential funding from badly needed social services, such as mental health care.[21]

Diversity: As the most populous sub-Saharan country, Nigeria naturally encompasses a religious and ethnically diverse population. Each group may have different attitudes and external influencers relating to their perception of the causes and treatment of mental illness.[6]

Geography: The diverse geography in Nigeria influences each region's access to health care, with rural areas suffering the most.[26] Within Lagos, many of the low resources settlements, like Makoko, have been built out into the lagoon with all the structures existing on stilts and only accessible only by canoe.[17]

Stigmatization and Awareness: Mental health remains a highly stigmatized issue in Nigeria, stemming primarily from religious and supernatural beliefs. These beliefs may act as both the cause of and barrier to mental health awareness and engagement with existing mental health care and social services.[3] As such demand for and pathways to mental health care in Nigeria are low.[4]

Prioritization of Public Health Issues: Faced with other important and seemingly insurmountable challenges such as poverty, infectious diseases, high rates of preventable deaths, and civil conflicts, many governments and donor agencies have been dedicated to fighting these issues perceived to be more urgent. Thus, mental health problems have so far gone overlooked and underreported.

CONCLUSION

Iyabo feels stuck and overly stressed in her current living situation, which has led to a worsening in her overall health and precipitated a major depressive episode. She and her family do not recognize it as such and, even if they did, there is a lack of resources for her to seek treatment. Since stress is a major risk factor contributing to the development of chronic illnesses, there is a need to understand the determinants of health and wellbeing in Nigeria and to help foster positive coping strategies.

CASE GOAL

You are tasked with developing a systems-wide approach to address the health and wellness challenges of Iyabo and others in Lagos. Your systems-wide approach should focus on all aspects of health and wellness with an emphasis on improving mental health in Makoko and other low resources communities in Nigeria. You are encouraged to look for solutions that address both short-term approaches that would help individuals like Iyabo and long-term solutions to aid the wellbeing of her son and the larger community.

Your system should be innovative yet feasible and include clearly outlined measurable objectives.

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2019 CASE APPENDICES

Appendix A: Tables

Table 1: Indicators of development health resources and mental health system in the six Emerald countries (Semrau, et al., 2015).

Table 1

Indicators of development, health resources, and the mental health system in the six Emerald countries

	Ethiopia	India	Nepal	Nigeria	South Africa	Uganda
Administrative Health Units (AHU) in which Emerald is implemented	Sodo	Sehore (Madhya Pradesh)	Chitwan	Oshogbo	Kenneth Kuanda Dist. NW Province	Kamuli
Population of AHU	165,000	1,311,008	575,058	288,455	632,790	740,700
Country-level indicators						
Economic and financial						
World Bank resource category	Low	Lower-middle	Low	Lower-middle	Upper-middle	Low
% GDP spent on health	5.9	4.2 ♦	5.3 ♦♦	5.0	8.4	7.3
% Health budget spent on mental health	Not known	0.06 ♦	0.17 ♦♦	0.40	4.50	0.44
Service availability (per 100,000)						
Mental health outpatient facilities	0.06	0.33 ♦	0.08 ♦	0.03	6.85	0.08
Psychiatric beds in general hospitals	0.04	0.82 ♦	1.0 ♦♦	0.20	2.70	1.24
Beds in mental hospitals	0.35	1.47 ♦	0.20 ♦♦	2.53	19.50	1.48
Human resources (per 100,000)						
Psychiatrists	0.04	0.30 ♦	0.13 ♦♦	0.12	0.27	0.09
Nurses	0.59	0.17 ♦	0.27 ♦♦	0.60	9.72	0.76
Psychologists	0.02	0.05 ♦	0.02 ♦♦	0.02	0.31	0.02
Governance						
Mental health policy and/or legislation that is up-to-date (i.e., updated in last 10 years) and in accordance with international human rights	Yes (policy) No (legislation)	No	No	Yes	Yes	No
Workforce capacity and training						
Most primary health care doctors had mental health training in last 5 years	No	No	No	No	Not known	Yes
Primary care nurses can independently diagnose and treat mental disorders	No	No	No	Yes	No	Yes
Information systems						
Data on number of outpatients with mental disorders	Not known	No	Yes	No	No	Yes
Data on number of persons with mental disorders treated in primary health care	Yes	No	No	No	Yes	Yes

♦ Data taken from WHO's Mental Health Atlas (2011) [24].

♦♦ Data taken from WHO's AIMS (2006) [25].

Table 2: Demographic characteristic of respondents in three Lagos slums (Akinwale, et al, 2013).

Characteristics	Ijora Oloye (n=805)	Ajegunle (n=814)	Makoko (n=815)
Sex			
Male	348 (43.2%)	387 (47.5%)	417 (51.2%)
Female	457 (56.8%)	427 (52.5%)	398 (48.8%)
Ethnic Group			
Yoruba	746 (92.7%)	337 (41.4%)	634 (77.8%)
Igbo	17 (2.1%)	227 (27.9%)	125 (15.3%)
Hausa	19 (2.4%)	8 (1%)	4 (0.5%)
Others	23(2.8%)	242 (29.8%)	52 (6.4%)
Educational status			
No formal schooling	179 (22.2%)	86 (10.6%)	107 (13.1%)
Less than Primary school	33 (4.1%)	32 (3.9%)	33 (4%)
Primary school completed	224 (27.8%)	194 (23.8%)	201 (24.7%)
Secondary school completed	276 (34.3%)	417 (51.2%)	377 (46.3%)
Post secondary school completed	51 (6.3%)	70 (8.6%)	70 (8.7%)
Postgraduate degree	6 (0.7%)	9 (1.1%)	11 (1.3%)
Quranic	28 (3.5%)	0	8 (1%)
No response	8 (1.0%)	6 (0.7%)	8 (1%)
Annual household income			
Less than N50,000 (USD 320)	458 (56.9%)	109 (13.4%)	28 (3.4%)
N50,000≤ N100,000 (USD 640)	48 (6.0%)	23 (2.8%)	19 (2.3%)
N100,000≤ N200,000 (USD 1,280)	6 (0.7%)	8 (1.0%)	7 (0.9%)
N200,000≤ N300,000 (USD 2,560)	3 (0.4%)	2 (0.2%)	4 (0.5%)
N300,000≤ N400,000 (USD 5,120)	1 (0.1%)	3 (0.4%)	2 (0.2%)
Don't know	9 (1.1%)	45 (5.5%)	16 (2%)
No response	280 (34.8%)	624 (76.7%)	739 (90.7%)
Marital status			
Single	170 (21.1%)	226 (27.8%)	246 (30.2%)
Currently Married	559 (69.4%)	518 (63.6%)	496 (60.6%)
Separated	6 (0.7%)	13 (1.6%)	9 (1.1%)
Divorced	2 (0.2%)	9 (1.1%)	10 (1.2%)
Widowed	66 (8.2%)	45 (5.5%)	49 (6%)
Cohabitating	1 (0.1%)	3 (0.4%)	4 (0.5%)
No response	1 (0.1%)		3 (0.4%)
Religion			
Christianity	77 (9.6%)	564 (69.3%)	526 (64.5%)
Islam	715 (88.8%)	245 (30.1%)	276 (33.9%)
Traditional	11 (1.4%)	3 (0.4%)	11 (1.3%)
Others	1 (0.1%)	1 (0.1%)	
No response	1 (0.1%)	1 (0.1%)	2 (0.2%)
Occupational status			
Civil servant	34 (4.2%)	36 (4.4%)	32 (3.9%)
Private sector employee	46 (5.7%)	67 (8.2%)	85 (10.4%)
Trading	367 (45.6%)	362 (44.5%)	342 (42%)
Farming	14 (1.7%)	5 (0.6%)	2 (0.1%)
Artisan	133 (16.5%)	161 (19.8%)	130 (16%)
Fisherman	1 (0.1%)	1 (0.1%)	8 (1.0%)
Student	81 (10.1%)	54 (6.6%)	74 (9.1%)
Housewife	11 (1.4%)	25 (3.1%)	14 (1.7%)
Retiree	30 (3.7%)	26 (3.2%)	25 (3.1%)
Unemployed	22 (2.7%)	30 (3.7%)	19 (2.3%)
Others	63 (7.8%)	41 (5.0%)	83 (10.2%)
No response	3 (0.4%)	6 (0.7%)	2 (0.2%)

Table 3: Ten most commonly reported causes of mental illness in Nigeria (Gureje, et al, 2005)

Cause	Proportion endorsing cause	
	%	(s.e.)
Drug or alcohol misuse	80.8	(1.1)
Possession by evil spirits	30.2	(1.0)
Traumatic event or shock	29.9	(1.0)
Stress	29.2	(0.9)
Genetic inheritance	26.5	(0.9)
Physical abuse	14.7	(0.72)
Biological factors (other than brain disease or genetic inheritance)	11.1	(0.7)
God's punishment	9.3	(0.6)
Brain disease	9.2	(0.5)
Poverty	6.2	(0.5)

Appendix B: Maps

Map 1: Map of Lagos
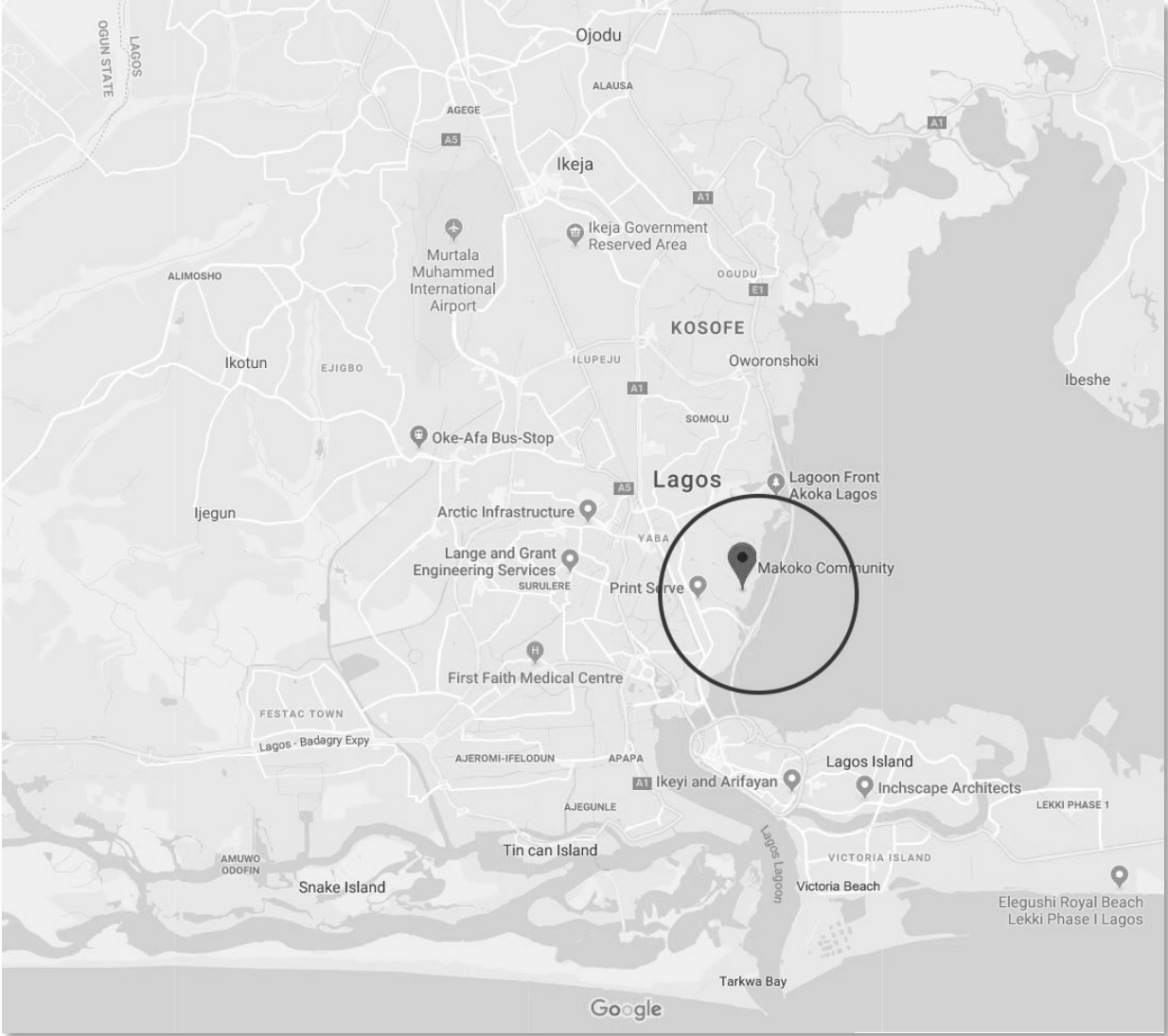
Map 2: Approximate Map of Makoko
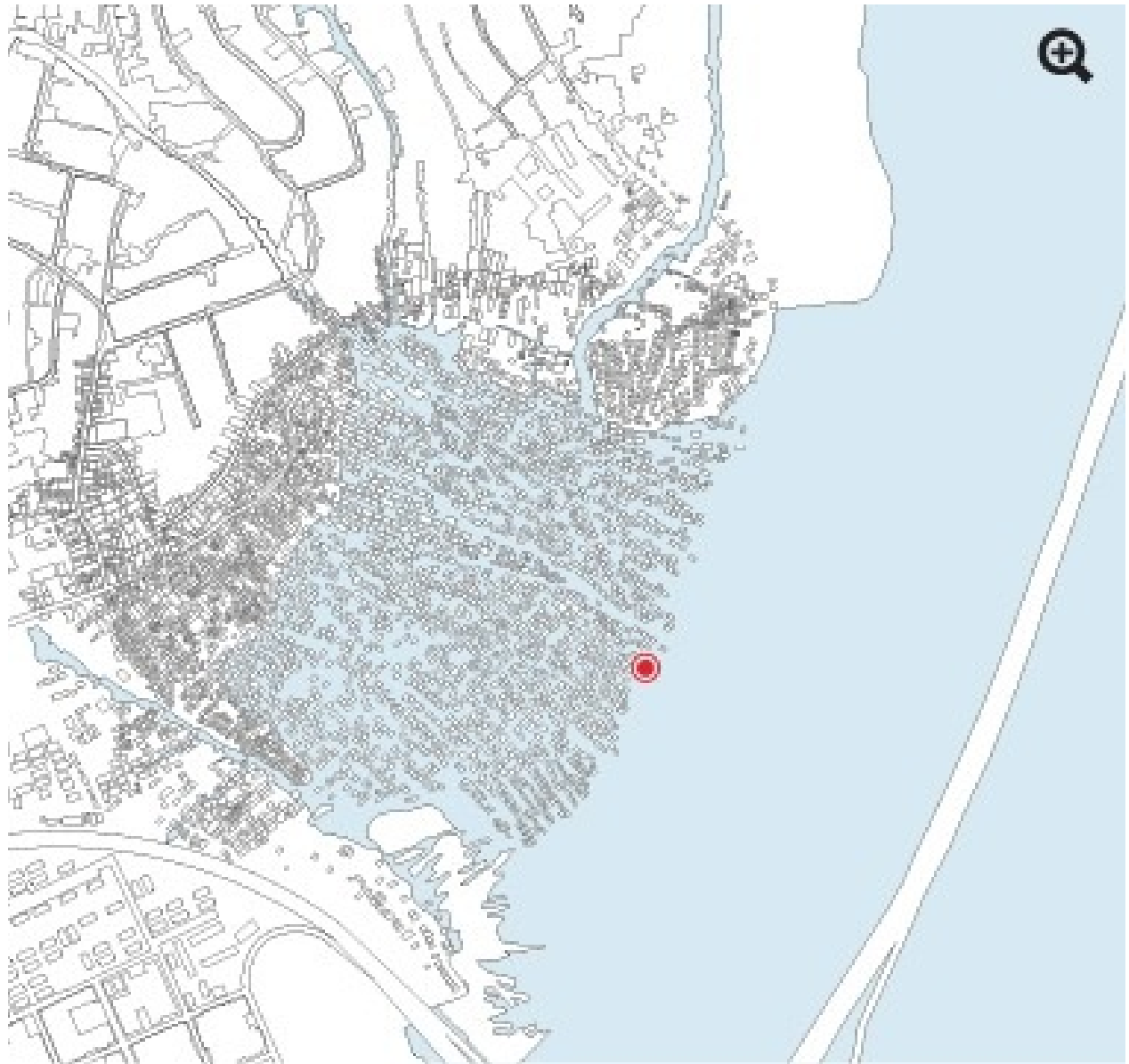
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