

Report

Eradication and Empowerment: Polio Vaccination in Internally Displaced Persons (IDP) Camps in Nigeria

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Abstract: Specific populations may have disadvantages such as elevated burdens of illness, injury, or lack of chance to attain good health. Such diverse populations may be defined by various factors, commonly including race or ethnicity, education, income, disability, geographic location, gender, or sexual orientation. It is vital that public health practitioners tackle preventable health disparities in underprivileged vulnerable populations, especially in communities where acts of violence inhibit Polio eradication efforts. One of the key preventable illnesses to consider when looking at the health status of Nigerians in the North is Polio. Cultural competency and understanding diversity are critical to developing effective and equitable public health interventions to meet such needs. According to the World Health Organization (WHO), Poliomyelitis more commonly known as “Polio” has been eradicated in most nations around the world; except 4 countries in recent years (Pakistan, Afghanistan, India, and Nigeria) and that is a shocking statistic. This fact causes a lot of “PAIN” to see individuals afflicted with a preventable disease that has already been eradicated in most countries in the world, but the good news is that eradication is possible. That means in our planning efforts we need to ensure the safety and security of our health care professionals charged to carry out immunization activities in these risky areas are priority-and can possibly overcome this insecurity challenge by using drone delivery of the polio vaccines in high risk communities in partnership with the Ministry of Defense. “Polio is a highly infectious disease caused by a virus and invades the nervous system, and can cause total paralysis in a matter of hours and is commonly found in the target group of children under the age of five”. Nigeria is the most populated country in Africa with a population of over 160 million people, and unfortunately the only African country on the continent left with active Polio cases. Results from the systemic reviews of evidence-based studies show that people need access to the right information and innovations, good quality affordable health care, and preventable immunization tools like polio vaccines. In conclusion, there is power in partnership with both public and private sector community partners, and parents of children-who are the most vulnerable, for targeted nationwide immunization days using innovative strategies that are very beneficial to protect children from Polio (See Figure 1: “The Fight to End Polio”).

Keywords: Polio Eradication, Nigeria, Impact Assessment, Partnership, Immunization and Innovation, Drone Delivery, Literature Review, Campaign and Communication

1. Introduction

The main mission of my Polio Eradication capstone project is to help propose a campaign intervention strategy that can ensure the eradication of Polio in Nigeria. Furthermore, Nigeria plays a significant role being the only African nation left with Polio; a vaccine preventable illness, and we need to examine the social determinants by analyzing existing

evidence-based interventions that have successfully eradicated polio in other nations, and contributing causes that prevent the success of eradication of Polio in our target population.

Ethical issues that stand out from community health disparities and structural barriers to implementing are critical to examine. According to Boutin-Foster et al. (2013) [4], through their analysis they wanted to determine the framework that is frequently utilized for health behavior

change and prevention research, denotes a convergence of many combined factors:

1. “intrapersonal factors such as the knowledge, attitudes, and behaviors of an individual;
2. interpersonal factors such as the provider–patient interaction and social network involvement;
3. organizational factors that dictate rules and regulations for operation;

4. community factors such as relationships among organizations, institutions, and informal networks; and
5. public or local policies that set standards for how different organizations and constituents operate or interact (Boutin-Foster et al., 2013)”

These factors need to be addressed at the community level and at an Internally Displaced Person (IDP) camp to eliminate these structural barriers and community health disparities.



Figure 1. Design Plan Proposed.

This project aims to understand how to eradicate Polio in high risk areas (IDP camps) and has a direct alignment with my PICOT question;

Would targeting parents with children 2 months – 4 years in an IDP camp in Abuja, Nigeria (P), with a culturally sensitive immunization campaign, (I) increase polio vaccinations coverage (O) over a three-month period (T)?

The eradication of Polio has been strategic to the mission of the Centers for Disease Control and Prevention since the 1950s [5]. In the final stages CDC in already published existing research I analyzed also uses the AFP surveillance system for detecting cases of poliomyelitis, and will continue its close collaboration with other global partners in the fight against Polio. I believe my project is relevant to Capella’s school of public health diverse approach to apply knowledge gained as a subject matter expert, and my capstone research topic attends to solve real world issues of Polio eradication in the field of public health which is timely and transformational. Furthermore, I have over fifteen years of experience as a subject matter expert (SME) working with both public and private sector agencies domestically (U.S) and internationally (Sub-Saharan Africa) in the field of public health focusing on

vaccine preventable illnesses like Polio, infectious disease and chronic disease prevention. I have expertise in helping to build the capacity of developing countries public health systems that serve all people, especially the most vulnerable. In addition, I was appointed as a CDC monitor for Polio immunization campaigns in partnership with other key implementing agencies (WHO, Ministry of Health, and Rotary), visiting Internally Displaced Persons (IDP) camps, orphanages, schools, religious institutions, and other community centers to ensure children were properly immunized. It is with great honor that I have had in depth experience in Polio eradication efforts in Nigeria, working hard with other experts in the field of public health to try to put an end to Polio.

In addition, Nigeria being a very religious society is imperative that as a leader and civilian we should all be our ‘brother’s/sister’s keeper’ as the good book states in *Genesis 4:9*. When you are a leader you should always serve and look out for the best interest of your neighbor, and implement the best evidence based programs and policies that will be acceptable to everyone in the community, to eradicate polio or any other type of preventable diseases which is possible from my proposed Polio eradication campaign intervention (see

Figure 2: On the Road to a Polio-Free Nigeria).



CDC (2017) Infographic retrieved from https://www.cdc.gov/globalhealth/infographics/rotary_polio_free_nigeria.htm

Figure 2. On the Road to a Polio-Free Nigeria.

Project Description

Polio is a vaccine preventable illness that has been eradicated in all the nations around the world except in 3 countries (Nigeria, Afghanistan, and Pakistan) will be a great capstone topic using the PICO (T) and evidence based practices (EBP) approach to address the fact that even though we have effective vaccines we are still struggling with closing the gap in practice to eradicate Polio in Nigeria and two other nations [2]. “Polio is a highly infectious disease caused by a virus and invades the nervous system, and can cause total paralysis in a matter of hours and is commonly found in the target group of children under the age of five” [2]. Nigeria, the most populated country in Africa with over 170 million individuals, and the only African nation on the continent left with active Polio cases [3]. The diversity of many various ethnic groups, cultures, religions, and languages also makes it challenging when communicating to all about stakeholders effective immunization and prevention Polio messages to all of these ethnic groups at high risk. With effective child immunization campaigns covering people living in risky communities, using appropriate prevention oral poliovirus vaccine (OPV) which involves four doses of the vaccine in the first year of life can help eradicate Polio in all three countries [2]. With dedicated leadership and committed collaboration of the community members using the action research methods strategies, we can eliminate polio.

2. Method

The research method in analyzing existing published evidenced based studies and successful interventions of polio

eradication in other countries that have eliminated Polio, formed the foundation of this capstone Polio eradication project. Most of these existing studies that were analyzed for this systemic review were conducted in an IDP camp setting. There are a variety of interventions and best practices that have already been implemented to help to eradicate Polio in other countries that were considered.

3. Results

3.1. Polio Eradication Is Possible

Many people can easily assume that Polio has been completely eradicated, since in many countries across the globe we have been successful in polio eradication, and evidence shows that polio eradication is possible. In addition, most health practitioners are shocked that we have not finally eradicated polio completely and are still struggling with only three countries left with Polio (Nigeria, Pakistan, and Afghanistan). However, most recently India has been able to celebrate a few years of being ‘Polio free’, using oral poliovirus vaccine (OPV) types 1 and 3 for their yearly consistent polio vaccination crusade days which were implemented 10 time each year, successfully tracking all children everywhere to get them vaccinated [6]. One of the keys to India’s success of ‘consistency’ and carrying out numerous vaccination campaigns through the year can be applied to the remaining three nations battling polio. Pakistan and Afghanistan are bordering nations close to India and the gains made in India eradication can be an issue if we don’t tackle the remaining boarding country due to migration.

When examining the three countries left with Polio it is

essential to examine the common barriers to achieving Polio eradication. According to Coelho (2014) [7], the top obstacles to Polio eradication is security challenges, especially for health practitioners and humanitarian workers in those nations, and a need to focus on improving “eradication standards, human rights, and safety enforcement.” Insecurity in the three nations needs to be tackled to ensure we are on the road to a Polio free world. Nevertheless, addressing these insecurity issues will take innovative strategies to make a significant impact.

3.2. Innovation, Immunization, Impact

Innovation, and using evidence-based interventions for our immunization campaign is vital to making substantial impact, and progress towards eradicating Polio. One of the consistent common themes among the three nations left with Polio is the high insecurity and state of emergency caused by extreme terrorist operations, and in Nigeria numerous public health practitioners involved in the Polio eradication activities have sadly lost their lives in the line of duty [8]. That is why it is important to deploy innovations that will help us achieve polio immunization in those high risk communities, and without putting our health care workers in harm’s way. According to Rosen [9] (2017), one of the proposed innovations that can be applied in high risk communities not easily accessible and not safe to access our target population is the new “Zipline” medical drone vaccine delivery innovation (See Figure 3: Zipline Drone) that has been piloted with successful results and impact in other African nations.



Figure 3. Zipline Drone-These Drones Deliver Vaccines.

Zipline Drone phone retrieved from <https://citinewsroom.com/2018/12/12/7-things-to-know-about-ghana-zipline-medical-drone-deal-infographic/>

Furthermore, these proposed innovations to eradicate Polio in the three remaining nations battling Polio is imperative to ensure we reach our target populations with effective immunization strategies that will make impact in a short amount of time partnering across ministry’s and sectors for an effective campaign. The ‘Emergency Operation Centers (EOC)’ provides an avenue to expand routine immunization campaigns, and use data as the GPS and to hold health workers accountable by using innovative technologies such as ‘geographic position systems, dashboards, and scorecards’ [8].

When Ebola broke out in Nigeria, it was able to be contained and eradicated using the insights and evidence based strategies that provided a solid sustainable foundation set by the Polio eradication efforts. So eradicating Ebola gives health practitioners hope that Nigeria can indeed become Polio free.

4. Discussion

4.1. Power of Partnership

There is power when people come together to drive a change, and effective partnership is one of the traits needed to eradicate Polio. According to Maher (2013) [10], we must take into consideration vital ‘human qualities’ that are essential to make progress and achieve polio eradication, and it is possible as smallpox has been eradicated globally. In addition, a great acronym to remember the ‘human qualities’ required is-“ERADICATION”;

1. Energy
2. Realism
3. Articulacy
4. Determination
5. Imagination
6. Collaboration
7. Adaptability
8. Tactical Awareness
9. Innovation
10. Openness
11. Nimbleness” [10]

Partnership is crucial for any public health program, but especially for vaccine preventable diseases like Polio. Also, partnering with key stakeholders local, national, and regional partners will help us make strides towards eradicating polio in the remaining three nations. It is also important to partner across agencies and sectors (e.g. Ministry of Health, Ministry of Education, and Ministry of Defense, et al.), and multilateral international partners (World Health Organization, Bill Gates Foundation, and Rotary International) who have various expertise, and financial and human resources that will help drive a new proposed successful immunization campaign and eventually eradicate Polio [11]. Similar, non-traditional partners are also needed to drive the Polio eradication programs. According to Warigon et al. (2016) [12], engaging journalist as key stakeholders for Polio Immunization to help circulate effective communication messages to our target population which can increase uptake of the polio vaccine in high risk communities in Nigeria is important. Engaging traditional and non-traditional partners is vital in the fight against Polio and to achieve eradication, it takes the power of people partnering on a purpose to achieve our desired outcome-to rid the world finally of Polio.

4.2. Partnering with Military Health Corps to Close the Polio Gap

Partnership is key to closing the gap and eventually eradicating Polio from Nigeria and the other two nations (Afghanistan, Pakistan) left with polio. Furthermore, it is also

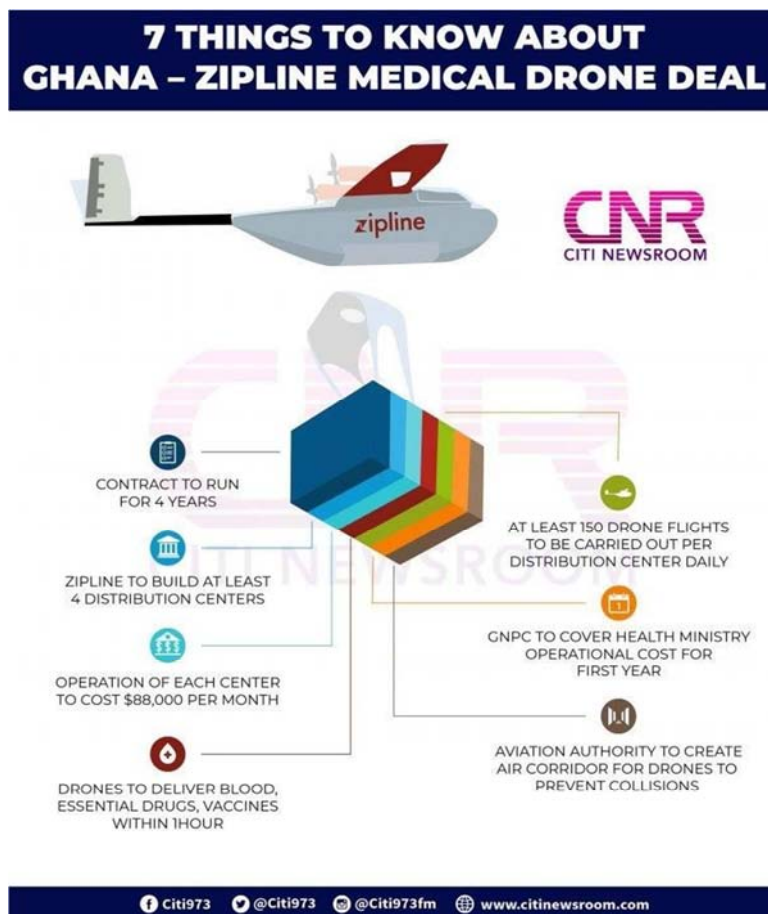
a way where many people can understand more about polio and play their parts to use their skills to assist in the eradication efforts. A key partner who has not been fully engaged in the Polio eradication efforts in Nigeria is the military, because under the Ministry of Defense (Army, Navy, Air Force) each of these military arms have a medical corps of health practitioners who can help lead the 'Zipline Drone' to deliver Polio vaccines at the IDP camps and high risk dangerous areas.

Military personnel are armed and trained to work in those high-risk areas, and unlike the community health extension workers (CHEWs) and other public health officers who have been killed in the line of duty during vaccination outreach as they are not armed to protect themselves- partnering with military will help overcome this shortfall. All three nations left with Polio have terrorist and high risk insecurity but partnering with military and other humanitarian UN armed forces we can use the power of partnership and innovations through the Zipline drone to finally close the gap and eradicate Polio. According to Ames (2012) [13], the "U.S Army Joint Task Force Homeland Defense's (JTF-HD)" partnered with the United States Coast Guards and Hawaiian Airlines to deliver excess influenza vaccines to their Pacific partners. It is crucial that health practitioners think outside of the box, and use evidence-based strategies with innovative tools like

Zipline -and key partnerships with the military medical officers to close the gap and ensure Polio is eradicated in IDP camps and surrounding high risk communities in Nigeria.

In Ghana, a neighboring West African nation near Nigeria they have already launched 'Zipline' (See Figure 4: 7 Things to Know About Ghana-Zipline Medical Drone Deal).

However, there are successes in other African nations-Tanzania and Uganda where the 'Zipline' startup innovative drone company first launched with funding award grant from Bill & Melinda Gates Foundation to pilot this medical supply drone delivery to serve a crucial global health need in Africa to reach the most vulnerable and hard to reach communities in need of medical supplies [14]. Since Zipline proved to be successful in Tanzania and Uganda, and now have secured a deal in Ghana, it will be great to reach out to them in partnership with our Nigerian military, and possibly applying grant funding from the Bill & Melinda Gates Foundation to ensure we can launch in Nigeria and the remaining two nations with Polio because the foundation has poured in a lot of funding the past to support other Polio immunization campaign efforts [14]. However, through the vital partnership with the military and Zipline there is a strong possibility that we can finally close the gap and eradicate Polio from the three (Nigeria, Afghanistan, and Pakistan) nations left with active Polio cases.



Zipline Infographic retrieved from <https://citinewsroom.com/2018/12/12/7-things-to-know-about-ghana-zipline-medical-drone-deal-infographic/>

Figure 4. 7 Things to Know About Ghana-Zipline Medical Drone Deal.

4.3. Rationale

The theoretical framework to this proposed Polio intervention campaign will require me to come up with a SMART (Specific, Measurable, Achievable, Realistic, Timely) plan to solve the challenging issues like polio, and draft and brainstorm solutions with various stakeholders in the community. According to Creswell (2013) [15], which refers to the framework as a model that is planned around the research question in this evidence-based research article, and for this capstone project the PICOT question is.

Would targeting parents with children 2months - 4years in an IDP camp in Abuja, Nigeria (P), with a culturally sensitive immunization campaign, (I) increase polio vaccinations coverage (O) over a three month period (T)?

Analyzing ethical theory is essential for the target audience proposed Polio health campaign targeting mothers and children in IDP camps. One of the key models which is applicable to Polio eradication is the 'Beattie's Model' that serves as a best practice incorporating all key actors.

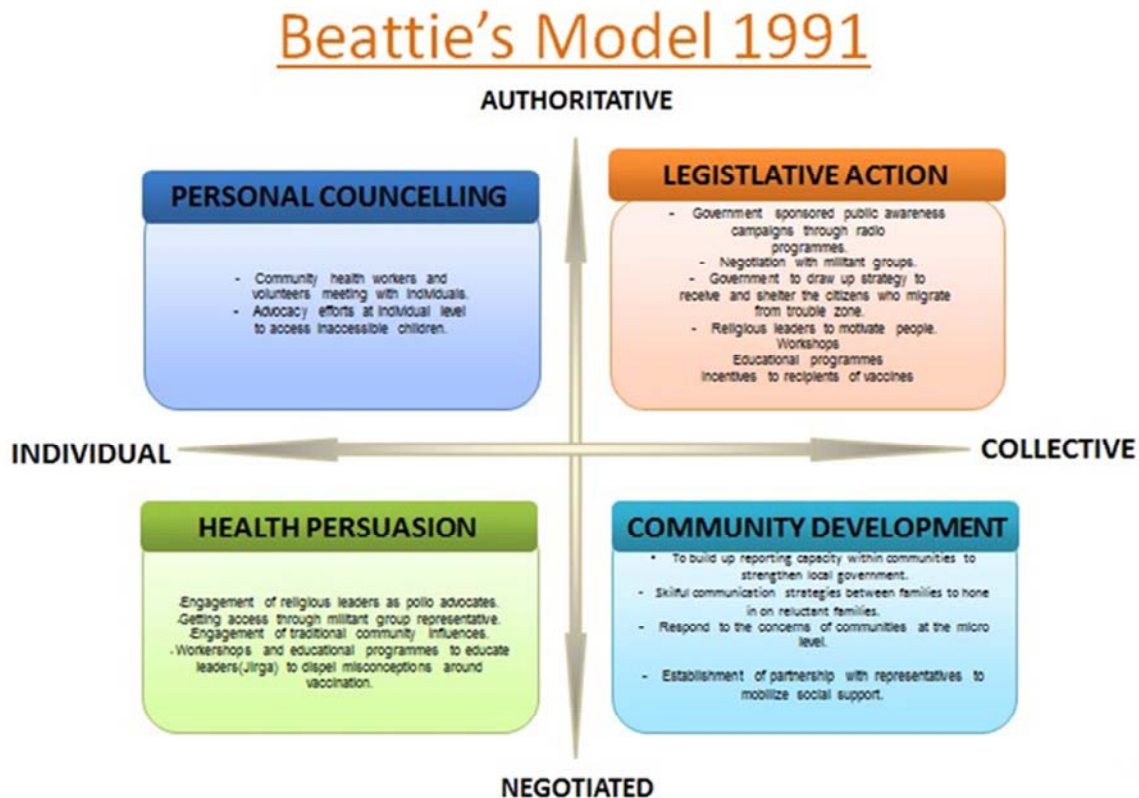


Figure 5. Beattie's Model.

*Infographic reference: Faizagul (2015). Challenges to Polio Eradication Programme in Pakistan. Beattie's Model 1991 infographic. Retrieved from <https://faizagul2014.wordpress.com/links-references-2/>

According to Faizagul (2015) [16], the four sections of the Beattie's Model show various ways to encourage good health and polio immunization by "individuals, governments, legislative action, health professionals, persuasion techniques, community development and personal counseling" methods. One thing that is common among all three countries left with Polio (Nigeria, Pakistan, and Afghanistan) is the high insecurity due to terrorist group and poor access to children living in remote areas, and to conquer this issue partnerships and communication at all levels is vital and the Beattie's Model is well fit for this strategy (Faizagul, 2015) [16].

Bringing all the key actors and influencers to the team is essential in eradicating Polio.

Using existing evidence-based practices and published research studies that have a family centered approach

targeting the parents and/or caregivers of children under the age of 5 who need to be immunized with the Polio vaccine to help eradicate Polio from Nigeria and the continent of Africa. It will be a joined venture and the proposed scheduled campaign will be during the immunization months which are already set to happen quarterly. During most immunization campaign volunteers from the state/federal government of Nigeria, non- governmental organization, and international organizations and donors come out to support, monitor, and supply the vaccines to the community health care workers to ensure they try and reach as many children. In the past year since most mothers, especially in villages and even urban areas prefer to use traditional birth attendants (TBA) and community health extension workers (CHEWs) our targeting approach has been going door to door, household, churches,

schools, and any place people reside to take the vaccines to them and not wait for them to come to a facility. These approaches have been helpful because they intend to target the population most at risk in their homes or internally displaced persons (IDP) camps and surrounding communities through other venues/tools that are commonly used at home (e.g. radio, internet, etc.) to ensure I get greater coverage and access to these recipients.

It is extremely essential for scholar-practitioners to incorporate theory to add credibility to their public health campaign. There is two ways I plan to incorporate theory into the proposed public health campaign. The first ethical theory that is proposed to adapt is the Health Behavior Model into the health promotion social media campaign promoting positive culturally sensitive messaging to increase the uptake of Polio vaccinations and motivate behavior which suggests that the target audience change their behaviors to start immunizing

their children and to make the right decisions of the health and well-being for their family and ensure their health actions leads to both short-term and long-term health benefits for the family (Glanz et al., 2008) [17].

Also, in regard to Behavior Change Communication (BCC) approach one of the best models to apply to the Polio eradication project is the “Social Ecological Model (SEM).” According to UNICEF (2015) [18], “the SEM is a framework model is frequently used by UNICEF to understand and address norms that influence individual and collective behaviors and societal norms, such as the acceptance or rejection of the polio vaccine.” Moreover, SEM highlights five sections of humanity (see infographic), and it is imperative to communicate and plan evidence-based interventions at all five levels using an innovative approach to target key influencers to improve policy and immunization programs to help eradicate Polio (UNICEF, 2015) [18].

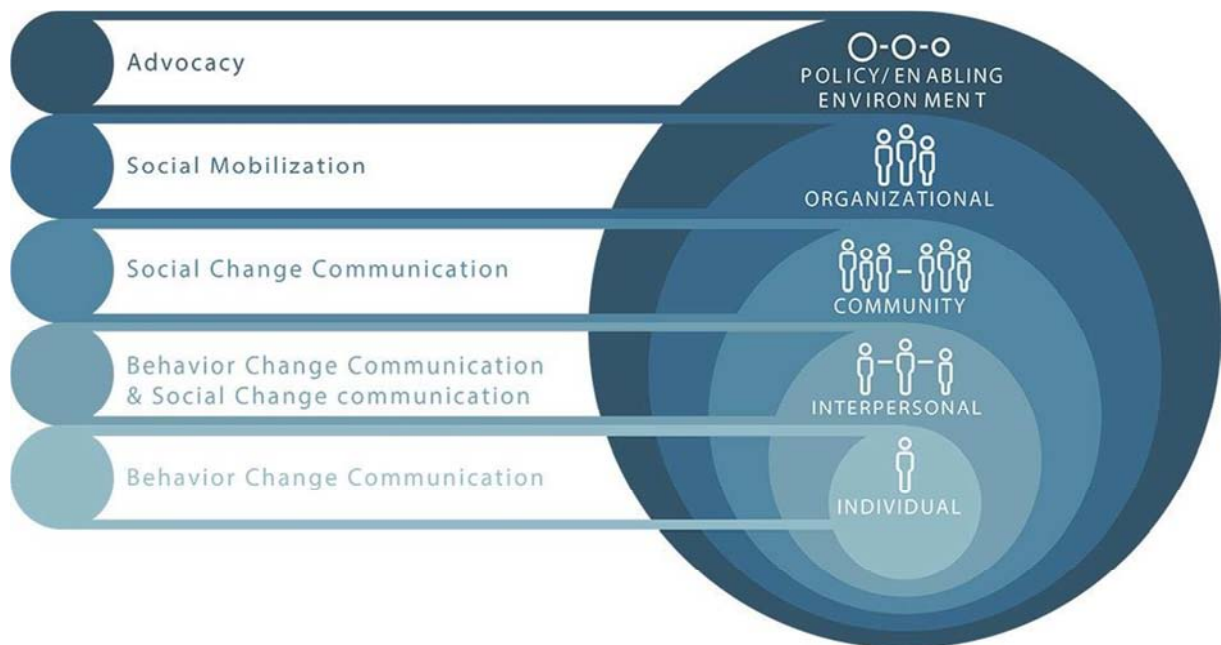


Figure 6. Social Ecological Model (SEM).

**Infographic Source:* UNICEF (2015). Communication for Development (C4D). Social Ecological Model (SEM). Social Analysis. MNCHN C4D GUIDE: Communication Strategy Guide for Maternal, Newborn, Child Health and Nutrition. Retrieved at https://poliok.it/c4d/understand/12-Social_Analysis and https://www.unicef.org/cbsc/index_65738.html

Secondly, the strategy for this project is geared towards using existing evidences-based innovations in published research studies that incorporate the trans-theoretical / stages of change ethical theory, because it will support the proposed design of a qualitative and effective health campaign that will reduce the rate of Polio infections due to the uptake of immunizations. In addition, the proposed campaign intends to help motivate parents to prevent Polio in their infants through the understanding of the uptake of the vaccine and the benefits based on their knowledge they will gain through the campaign to change their behavior [19]. When you compare and examine most societies in the world that have already eradicated this vaccine preventable chronic Polio virus, you notice that societies with a huge gap like Nigeria and the other

two countries with remaining active Polio cases do worse overall than societies with smaller gaps and richer societies who have implemented successful public health campaigns incorporating theory. Dedicated leadership, strong political will, and incorporating these theories into the proposed Polio eradication public health campaign we can now contribute to finally effectively ending polio in Nigeria.

Specific Aims

This project aims to understand how to eradicate Polio in high risk areas (IDP camps) and has a direct alignment with the PICOT question;

Would targeting parents with children 2 months – 4 years in an IDP camp in Abuja, Nigeria (P), with a culturally sensitive immunization campaign, (I) increase polio vaccinations

coverage, (O) over a three-month period (T)?

Understanding the major phases of action research ‘methods’ in existing published evidence based studies is very vital for implementing a successful action plan. For this Polio eradication action research project using existing published evidence-based studies, the plan is to analyze all 9 phases throughout the process, and really use existing pilot community level action research approach to apply to this capstone project;

“Planning Stage:

1. “Identify the Problem
2. Gather Information
3. Review Literature
4. Develop a research plan

Acting Stage:

1. Collect Data
2. Analyze Data

Developing Stage:

1. Develop an Action Plan

Reflecting Stage:

1. Share and Communicate Results
2. Reflect & Dialogue about the process” [28].

Furthermore, the major phases of action research from beginning to completion is broken down in 4 unique stages which need to be incorporated in any effective research project, “1) Planning Stage, 2) Acting Stage, 3) Developing Stage, and 4) Reflecting Stage” [20]. Public health policies influenced by action research focusing on these major phases mentioned above are likely to be more helpful because they reach broader sectors of the public and involve a smaller amount individual effort. In addition, as public health practitioners it is more impactful if we take action to implement policies using an integrated approach which can attain the greatest possible sustainable public health benefit for our people and eradicate Polio in our nation [21].

4.4. Ethical Considerations

In regards to the Polio eradication program it is vital to analyze the ethical challenges arising from community health disparities and structural hurdles to implementation of a participatory action research. According to Jamshidi et al. (2014) [22], through their review of the 4 Community Based Participatory Research (CBPR) in regard to ethical considerations in developing countries environment they found that most of the ethical challenges and responses from participants are the same type of issues. Furthermore, the predominant themes found in other countries “trust, transparency and accountability, equity and inclusion, power imbalance, et al.” were similar in the developing countries and these need to be addressed but also observe some of the local cultural sensitivity applicable to the community you are serving [22].

Ethical issues are a barrier to polio implementation of polio eradication campaigns that are contributing factors community health disparities and structural barriers to implementing are critical to examine. According to Boutin-Foster et al. (2013) [4], the framework that is

frequently utilized for health behavior change and prevention research denotes a combination of factors;

1. “intrapersonal factors such as the knowledge, attitudes, and behaviors of an individual;
2. interpersonal factors such as the provider–patient interaction and social network involvement;
3. organizational factors that dictate rules and regulations for operation;
4. community factors such as relationships among organizations, institutions, and informal networks; and
5. public or local policies that set standards for how different organizations and constituents operate or interact [4]”.

These factors need to be addressed at the community level to eliminate these structural barriers and community health disparities. The same ethical principles and practices standards considered in developed nations should also be universal and considered international standards in all public health settings. The challenges is that many of these ethical principles are not followed and properly monitored or implemented in developing countries, creating huge health disparities and gaps. More research needs to be done on the international level with researchers from both developed and underdeveloped nations working collectively to look for sustainable solutions to close these gaps in public health settings.

Public health leaders have a huge role to play in addressing ethical issues and public health fears. It takes collaboration for key stakeholders at multiple levels from the public and private sectors, community leaders, civil society organizations working and communicating effectively in partnership with the community health leaders to tackle the ethical issues and public concerns our people are facing. Former, unethical research studies like the famous ‘Tuskegee Study’ made many people have distrust and fear in the government and public health leaders and other unethical studies, especially those in developing nations when human subjects are used without informed consent for many unethical practices. At least in the past decades we have been making headway in closing the gaps and we have IRBs to monitor these challenges.

An effective Polio eradication program plan for participatory action research needs to have proper monitoring, evaluation, accountability, and learning (MEAL) components. It is very possible to eradicate Polio in Nigeria like other countries of the world but still a lot needs to be done. In Figure 1: Nigeria breaking down barriers to immunization barriers shows infographic shows that these disparities can be eliminated with the proper program plan and MEAL

4.5. Limitations

There were no limitations to this proposed project, because a lot of valuable data and studies exist, and innovative approaches for public health eradication efforts of Polio, and other vaccine preventable illness. Since Polio has been eradicated in every country of the world, except

three (Nigeria, Afghanistan, and Pakistan) we can leverage on existing evidence based strategies and new innovative tools to move forward and make progress in our Polio eradication efforts.

5. Conclusion

In conclusion, through the power of partnerships across Ministry of Health, Ministry of Defense and private sector agencies, using innovations for immunization outreaches in high security risk areas in Nigeria, they can make an impact and eradicate Polio for the proposed evidence based intervention [24]. Public health leaders need to be able to build the competency of a collaborative leaders and have the ability to communicate with their community members and a diverse set of stakeholders about any challenges like the polio epidemic, action plans, or recommendations requires an efficient and constant process of explaining, listening, and understanding [23].

6. Recommendation

Working together with public and private sector partners, and empowering the mothers in the Internally Displaced Camps (IDPs) to vaccinate their children with Polio vaccine drops when it is made available using the 'Zipline Drone' innovation tool through the Ministry of Defense partnership in those high-risk communities -can finally be the right proposed solution to the ongoing security challenges they face to finally eradicate Polio in Nigeria once and for all. Through my Action Community Developers (ACD) foundation working with vital partners-military, I will continue the fight against Polio and other preventable illness, and have hope that we can Nigeria can finally become Polio free (See Figure 8: ACD outreach to Abuja IDP camp & United Nations OCHA Map of IDP camps across Nigeria).

The power of partnership is key to improve immunization and surveillance, particularly among kids in remote high security risk areas, and with the right evidence-based interventions we can attain a Polio free Nigeria [11].

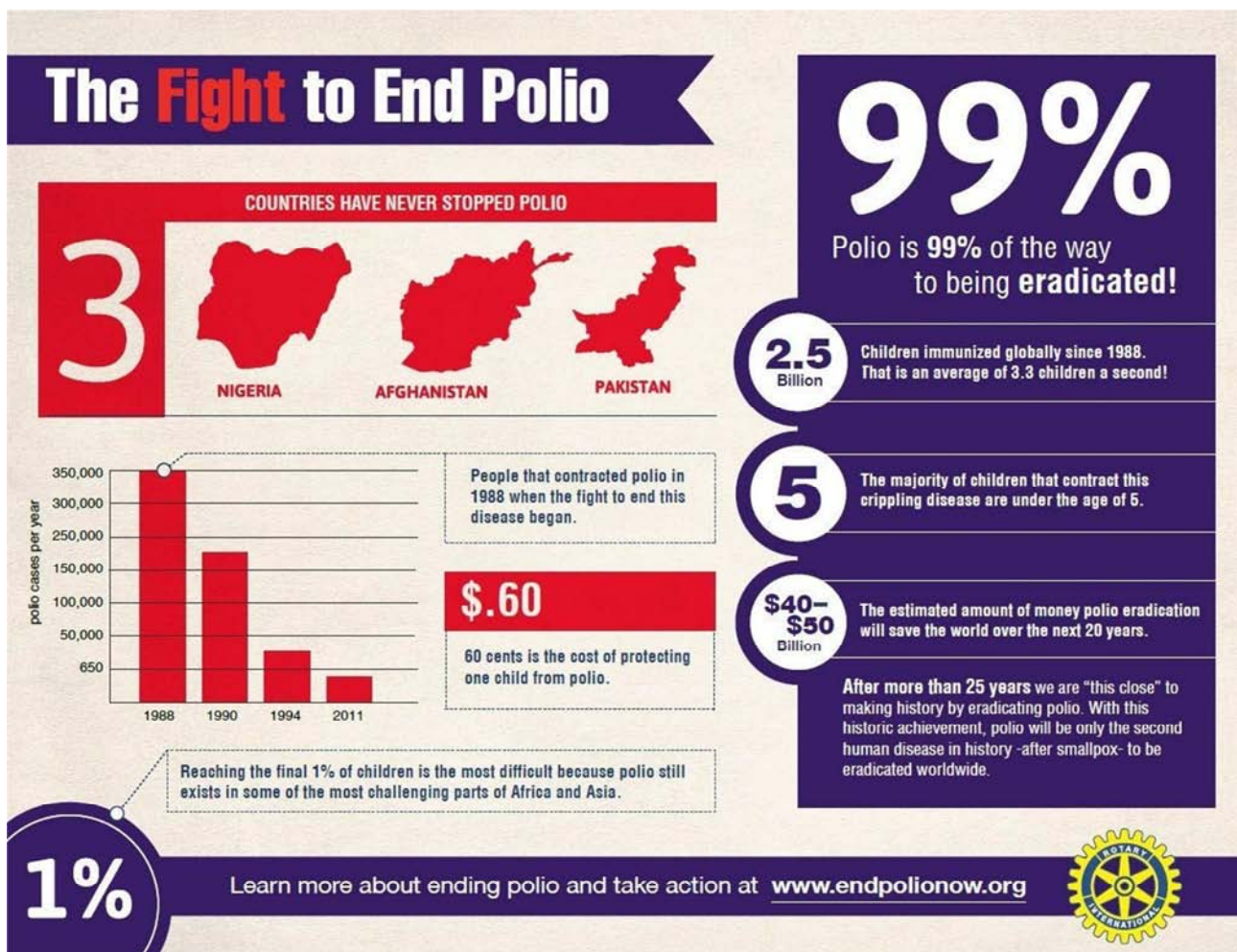


Figure 7. 'The Fight to End Polio'.

*Reference: Rotary (n.d.). The Fight to End Polio. Rotary International: End Polio Now initiative. Infographic source retrieved from www.endpolionow.org or <https://www.pinterest.com/pin/94646029642350194/?lp=true>

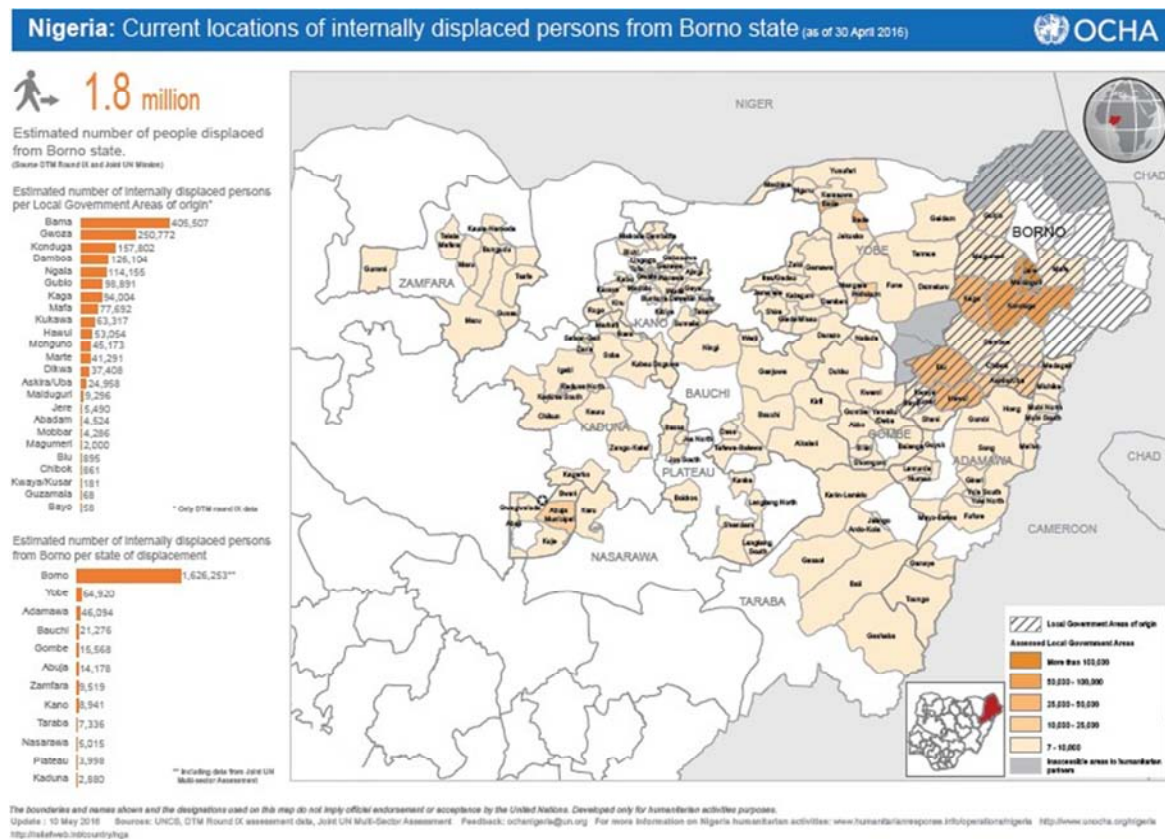


Figure 8. ACD Foundation outreach to Abuja IDP Camp & UN OCHA IDP Camp Map in Nigeria.

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Capella University's Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

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Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person's ideas, including another learner's, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

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Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

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I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the *APA Publication Manual*.

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