# **Distribution Agreement**

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:	
	11/29/2023
Alexa M. Taylor	<del></del>

# Delivering Community-based Programming in Rural Uganda: A Qualitative Program Evaluation

By

Alexa M. Taylor Master of Public Health Hubert Department of Global Health

> Kate Winskell, Ph.D. Committee Chair

# Delivering Community-based Programming in Rural Uganda: A Qualitative Program Evaluation

By Alexa M. Taylor Bachelor of Science in Nursing Georgia State University 2018

Thesis Committee Chair: Kate Winskell, Ph.D.

An abstract of
A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements for the degree of
Master of Public Health
in Global Health
2023

#### **Abstract**

Delivering Community-based Programming in Rural Uganda: A Qualitative Program Evaluation

By Alexa M. Taylor

<u>Purpose/Problem:</u> Uganda Village Project (UVP) is a grassroots community-based public health program in Iganga, Uganda, that unites international and national allied health students with Ugandan Village Health Teams (VHTs) every summer to implement the UVP Summer Internship Program with the objective of helping ease the health burden in Iganga. For organizations such as this to continue to be effective in their mission, regular program evaluations need to be completed incorporating feedback from their VHTs, community members, and program participants.

Methods: I used qualitative methods to assess the interns' and VHTs' perspectives of the 2022 Summer Internship Program to provide UVP with a participant-based program evaluation. Focus group discussions (FGDs) and in-depth interviews (IDIs) were used to gain the interns' and VHTs' emic perspectives on the quality of the program, including as it relates to working with people from different backgrounds, the perceived benefits gained by the surrounding community, and the perceived personal and professional skills gained from working with UVP.

**Results:** Findings revealed four primary themes: The need for better alignment/understanding of UVP's mission, structure, purpose, goals, activities, and definition of roles; community involvement in the program; the benefits and drawbacks of working with people from different backgrounds and how cultural sensitivity/ethics and equity relate to this; and the need for a more continuous and thorough M&E plan with sustainable ways to refine the program over time **Conclusion:** To better align with the current literature outlining the necessary components of successful community-based public health programs, UVP needs to update its M&E program to include feedback from its participants and community members to create more sustainable and equitable health gains in Iganga District.

# Delivering Community-based Programming in Rural Uganda: A Qualitative Program Evaluation

By

Alexa M. Taylor Bachelor of Science in Nursing Georgia State University 2018

Thesis Committee Chair: Kate Winskell, Ph.D.

A thesis submitted to the Faculty of the Rollins School of Public Health of Emory University in partial fulfillment of the requirements for the degree of Master of Public Health in Global Health 2023

#### Acknowledgments

To all of my RSPH faculty and fellow students, thank you for challenging me and providing a safe environment to learn and grow in. I have truly made some lifelong friends and will forever cherish my experience with you all and our time at Rollins.

To the Uganda Village Project staff, VHTs, and my fellow interns, I am so thankful for the experience we shared and the public health gains we were able to make in our villages. I will always hold that experience, the relationships formed, lessons learned, and memories made close to my heart! This thesis would not have been possible without all of you!

To all of my loved ones and friends, but especially my mom and dad, thank you for all of your love and support over the past two years. Without your listening ear, encouraging words, and care packages I would not have been able to make it this far, and I truly owe you the world.

A final grand thank you to my thesis advisor, Dr. Kate Winskell. Without all of your support and encouragement over the last two years, I may have given up on this project before it even got off the ground! You saw my passion for this project and were able to help me rein in all of my grand ideas along the way as well as provide me with encouraging words of wisdom that helped to see me through to the end! I am forever grateful to have you as a mentor.

# **Table of Contents**

Chapter 1: Introduction1	
1.1: Introduction & Rationale	
1.2: Problem Statement	
1.3 Purpose Statement	
1.4 Research Question5	
1.5 Significance Statement5	
1.6: Definition of Terms5	
Chapter 2: Literature Review7	
2.1: Importance of Community-Led Public Health Programs7	,
2.2: Interdisciplinary Teams in Global Public Health9	,
2.3: Community Benefit of this Approach:1	1
2.4: Facilitator Benefit of this Approach	3
2.5: Importance of Evaluation & Programming1	4
2.6: Known Gaps, Challenges, and Limitations	6
Chapter 3: Methods1	9
3.1: Introduction	9
3.2: Population and Sample1	9
3.3: Focus Group Discussions2	1
3.4: In-Depth Interviews	2
3.5: Plans for data analysis2.	2
3.6: Ethical Considerations2	4
3.7: Limitations and Delimitations2	1

hapter 4: Results	. 26
4.1 Results	. 26
Theme One: Purpose of UVP	26
Theme Two: Intern & VHT Roles in the Village	28
Theme Three: Perceived Community Experiences/Benefits	. 32
Theme Four: Benefits of working with UVP for the Interns & VHTs	37
Theme Five: Drawbacks of Working with UVP for Interns & VHTs	40
Theme Six: Working with People From Different Backgrounds	4
Theme Seven: Review of/Advice for UVP	47
hapter Five: Discussion, Recommendations & Conclusion	<b></b> 51
5.1: Discussion	51
5.1.1 Community Involvement in the Program	.51
5.1.2 The Benefits & Drawbacks of Working with People from Different	
Backgrounds	.53
5.1.3 The Need for Bette Alignment/Understanding of UVP's Organization	n,
Purpose, Goals, Activities, & Definition of Roles	.55
5.2: Recommendations & Conclusion	.58
eferences	.60
ppendicies	.63
Appendix A	63
Appendix B	66

#### **Chapter 1: Introduction:**

#### 1.1 Introduction and Rationale

Located in Eastern Africa, Uganda is home to a population of nearly 35 million people distributed across 146 districts in over 58,000 villages (Uganda Bureau of Statistics, 2023). Uganda's health system is largely based on a multilevel decentralized referral system that places Village Health Teams (VHTs) as the first point of contact for most people in need of health services (UBOS, 2015). In Uganda, VHTs are community volunteers who work alongside other healthcare officials to provide health services in the villages. Once a person meets with a VHT, they will be referred to the nearest health center that can manage their health issue, while the most serious cases are sent to one of the National Referral Hospitals (NRH) in the capital city of Kampala (UBOS, 2015). While this system seems like a valuable way to utilize and prioritize health resources, it proves a life-threatening challenge for the majority of Ugandans since most of the population lives in rural villages that can be as far as 120 km from the nearest health center.

In Uganda, over half of the health-related morbidity and mortality is related to malaria, and the second major contributor to death and disease is pneumonia and respiratory infections which are complicated by water, sanitation, and hygiene (WASH) related issues (UBOS, 2015). According to the World Health Organization (WHO), malaria is a "preventable and curable" disease that disproportionately affects African countries which account for 95% of the world's malaria cases and 96% of the world's deaths due to malaria (WHO, 2023). Although Uganda does not rank in the four countries with the highest disease burden for malaria, the primary prevention strategies remain the same, namely, the use of insecticide treated nets (ITN), minimizing mosquito breeding grounds, and the use of antimalarials (WHO, 2023 & UNICEF Uganda, 2018). While all of these strategies are available, many are not sustainable or affordable

for people living in remote villages far from NRHs and other free or reduced resources. There are also competing local knowledge and priorities surrounding the use of these methods. For example, there is debate about how to use bed nets, if antimalarials are safe, and the most efficient low-cost way to maintain homes and latrines free from mosquitos.

Although significant progress has been made in addressing these factors, there is still a large knowledge and practice gap in some of the more remote villages. In order to reach villages in the most remote parts of Uganda to address this and other health needs, governmental and non-governmental organizations (NGOs) have had to step in to try and fill this gap. However, they often run into issues of sustainability, feasibility, and community buy-in.

#### 1.2 Problem Statement

Uganda Village Project (UVP) is a grassroots community-based public health program in 2 Iganga, Uganda, that unites international and national allied health students with Ugandan VHTs every summer to implement the UVP Summer Internship Program as a way to help ease the health burden in Iganga. International students can come from any country outside of Uganda but have historically originated from the United States. National interns are comprised of Ugandan college students or recent college graduates. VHTs consist of four to five community members who serve as health liaisons for the villages they live in - similar to the role played by a CHW in other countries. Each VHT is appointed by local village leadership and has a responsibility to their village to provide their communities with updated health knowledge and services. As an NGO in Uganda, UVP works closely with the Village Head to use the VHTs as a resource for their summer programming. While working with UVP, the VHTs' primary role is to collaborate with the intern teams to accomplish whatever health goals the teams come up with for the summer. Currently, UVP's primary philosophy regarding the internship program is for

the interns to assess and design culturally appropriate health interventions for the villages they are living in for the summer. This requires close collaboration with the VHTs and with the village leadership. It is important to note that the term VHT can apply to an individual as well as to a group of four to five individuals who make up the team.

Annually, this program seeks to "facilitate community health and well-being through access, education, and prevention" in the rural villages of the Iganga District (Uganda Village Project, 2022). For the Summer Internship Program specifically, UVP brings in teams of international interns to assist in community development and engagement activities in five program areas: HIV/STI, malaria, reproductive health, obstetric fistula, and WASH (Uganda Village Project, 2022). Once a village is identified by UVP for the Healthy Villages Initiative, they will partner with the village for three years providing health programming by way of either a launch team or a monitoring and evaluation team (Uganda Village Project, 2022). It is intended that summer interns on launch teams assist the VHTs with the development and implementation of educational sessions, mobilization, baseline surveys, and other health and wellness-related interventions in the six program areas. Interns on monitoring and evaluation-based teams, assist VHTs with follow-up surveys and educational sessions.

As a participant in UVP's 2022 Summer Internship program, the need for a clearer vision became evident to me early on during the orientation process. Since I had direct access to the UVP Directors and Staff I was able to develop relationships with them to further assess this need. From these discussions, it was apparent that outside of a lack of funding, which many small grassroots NGOs struggle with intermittently, there seemed to be a lack of a process for implementing feedback into the continual refinement of the program. From this information, I offered to conduct a qualitative study to assess the opinions of the summer interns and the VHTs

regarding UVP. At the direction of the U.S.-based directors, the decision to include former interns in this study as well was made. At the start of the Summer Program, the interns and VHTs were under the impression that we would be providing UVP's entire advertised list of programs, however, halfway through the program we were notified that our activities would primarily consist of collecting baseline survey data, conducting sensitizations and mobilization for these sessions, and the building of tippy taps. Once this announcement was made it became self-evident that this would affect the responses given by the current UVP interns versus the former UVP interns as they were able to provide the full program activities as intended.

Some of the challenges identified were the lack of community/participant feedback incorporated into the program, lack of organization regarding the structure/expectations of the program, and the need for additional funding for a more comprehensive provision of health services to complete the expected activities of the program. Some of these challenges can be assessed through comprehensive program evaluations assessing the strengths, weaknesses, and opportunities for program improvement, and subsequently mitigated.

#### 1.3 Purpose Statement

For small grassroots community-based public health organizations to continue to be effective in their mission, regular program evaluations need to be completed incorporating feedback from their Community Health Workers (CHW), community members, and program participants. Despite UVP's presence in Iganga District for 20 years, there is still much progress to be made towards sustainable and measurable health gains for the area. While this is a multifactorial issue involving many other processes, political complexities, and organizations, UVP needs a program evaluation to determine how their organization should evolve to best meet the needs of the communities they serve in the Iganga District.

#### 1.4 Research Question

The following overarching question guided this project: *In what ways can UVP's Summer Internship be improved?* 

# 1.5 Significance Statement

Comprehensive program evaluations are important for the continual refinement of a program's activities and are often an important component in the process of securing funding for the program. While the results of this study will not be generalizable to other study populations, it still aims to support the notion that more research is needed on appropriate ways to design CHW-led public health programming as well as provide a basis for UVP to refine their Summer Internship Program (Agarwal et al., 2019).

### 1.6 Definition of Terms:

**Boda-Boda:** A motorcycle taxi commonly used for transportation of people and goods in Uganda.

**CAM:** Complexity Awareness Modeling; monitoring techniques that take into account the complexities of situations.

**GHLC:** Global Health Leadership Curriculum; A set of topics used to facilitate conversations surrounding leadership in global health among interns.

**International intern:** UVP interns coming from countries outside of Uganda; typically undergraduate and graduate-level public/allied health students.

**National intern:** UVP interns coming from Uganda; typically, undergraduate and graduate-level public/allied health students.

**NRH:** National Referral Hospital; Large and well-equipped medical facilities that serve patients across the country. Are often better equipped to serve specialized medical needs

as compared to the District Hospitals in Uganda.

**UVP:** Uganda Village Project; A small 501c3 organization in Iganga, Uganda that works to promote public health and sustainable development in rural villages in the Iganga District.

**VHT:** Village Health Team; Five individuals make up a health team to help bring health services to rural communities in Uganda; similar to that of community health workers in other countries. In these communities, a VHT refers to an individual person as well as a part of the entire team of VHTs.

**Village Clock:** The culture, customs, and norms that are known among village members that help to establish the timing of various community activities such as working times, time for prayer, and family time among others.

**Village Head:** The leader of the village. This person has leadership over all other community officials in the village and is the point person for all things occurring in the village.

#### **Chapter 2: Literature Review:**

Given the history of UVP's work in the Iganga District over the last 18 years, it is important to continually monitor and evaluate the program's progress. This can be done in many ways, but one keyway to assess and monitor the success and sustainability of the program is by collecting direct feedback from the program participants, including the interns and VHTs. For the purpose of this evaluation, five themes will be used to assess the current literature as it relates to other community-based public health programs and their relevance to the evaluation of UVP. Those themes are: key components of community-based public health programs; multidisciplinary teams in global public health work; the benefits of these approaches for the community and the participants; and the importance of evaluation in public health programming. This literature review serves to provide a scientific basis for the findings presented and assertions made in this evaluation of UVP's Summer Internship Program.

# 2.1 Key Components of community-led public health programs:

Community involvement in the governing and assessment of healthcare needs in a community is crucial, especially in low-resource settings (Baptiste et al., 2020). Baptiste and colleagues conducted a review of published articles and gray literature from 2009-2020 to "identify community-led monitoring mechanisms and best practices" (p. 415) among healthcare users, patients with HIV, and those in high-risk groups seeking rights-based care in West and South Africa. Their key findings suggest that monitoring methods such as health facility committees, community scorecards, citizen report cards, health advocates, and community treatment/health observatories are beneficial ways to assist community members in evaluating health interventions and systems which ultimately can produce feedback that improves health outcomes and health infrastructure. Another key finding of this study is that there are certain

requirements needed to provide a mutually beneficial relationship among the community members, community health workers, and the health system. Those requirements are that the program/intervention needs to be "community-led, continuous and systematic, collaborative, and incorporate elements of community education and evidence-based advocacy" (p. 420). The people that make up a community have their own culture, history, and values that help to form their own community identity including those that affect individual health and thus the overall health of the community. Without being from that community it would be difficult to assess the healthcare needs of that community and tailor an intervention approach to those needs without gaining insight from community members. Baptiste and colleagues further assert that the idea of community monitoring cannot only help to improve the delivery of health services but can also work to identify important community healthcare gaps. Programming that is focused on using community members' assessment of the programs needed as well as the value of existing programs can help to improve the health of individual communities, ensuring that their specific needs are being met.

Another pivotal aspect of quality community-centered health programming is identifying ways to motivate the community and CHWs to participate in such programming as well as provide them with valuable information regarding their community's current health needs and knowledge (Muluya et al., 2022). Often in smaller or low-resource settings, the communities are very protective of their people, values, and traditions, making it difficult for outsiders to effectively implement change without the support of the community members and CHWs. To increase participation, community members often need some form of compensation. In a two-arm non-randomized control trial, Muluya and colleagues investigated how "incentives for mothers, health workers, and boda–boda riders can improve the community-based referral

process and rate of deliveries in the rural community of the Busoga region in Uganda" (p. 1). This study outlines the importance of assessing what is important to the community members before developing health interventions, and then incorporating that feedback into the intervention design. In this study, the researchers learned what was needed to get the mothers and key stakeholders to readily use formal antenatal care. By first educating the mothers, VHTs, and boda-boda riders about the importance of antenatal care, and then by assisting them in finding some sustainable solutions to the barriers to receiving formal antenatal care, the researchers were able to find that when the community members could use their own resources to solve these issues in a more equitable manner for all involved, the health benefits were more sustainable over time. This method is mutually advantageous as it invests in the resources of the community and works to expand and cultivate them, thereby creating a true sense of empowerment and ownership within the community so that the sustainability of the program will be far-reaching (Baptiste et al., 2020). The benefits of community-led public health programs are many, but when designed intentionally, these types of interventions ultimately lead to more ethical, equitable, specific, and sustainable health outcomes.

#### 2.2 Interdisciplinary teams in global public health work:

In many low-resource settings, like that of the Iganga district, communities require support from outside organizations to help them cultivate the resources they do have and transform them into sustainable health gains. In many cases, this means that governmental organizations or outside non-governmental organizations (NGOs) come into communities and attempt to administer interventions using a top-down approach, often leaving the true needs of its members unmet (Peters et al., 2022). Another approach involves partnerships, or interdisciplinary teams, collaborating with community members in a bottom-up fashion to foster

health promotion. In a review by Musoke et al. (2016), a team of students from a university in Uganda and a university in the United Kingdom partnered with VHTs, community leaders, and the Ugandan Ministry of Health to create sustainable health interventions in rural Uganda. The study looked to gain the perspectives of the students about the program and the effects of an interdisciplinary team on the VHTs' public health training.

One key finding in this study was that by implementing an interdisciplinary approach, as well as an international vs. local approach, the students were able to gain knowledge and share ideas they otherwise would have been unable to, which led to improved outcomes and interventions within the community. They found that the exchange of "local knowledge and international expertise" led to more diverse and expansive public health interventions (Musoke et. al, 2016). While this study was able to leverage the perspectives of the students and bring about significant health gains in the communities, one aspect that was left out was the perspectives of the community members and VHTs who were also affected by the programming. By collecting these key perspectives, the program would have been able to ascertain how the community benefited from the program directly which in turn would help increase the sustainability and scalability of the program by providing interventions that the community felt they needed and could realistically maintain.

When working in interdisciplinary teams, the topics of equity, equality, and ethics are of key importance as there will be people from varying backgrounds, communities, and education levels working together. These differences are likely to create power struggles if training is not implemented carefully and intentionally. Community-level public health interventions are often carried out by CHWs in middle/low-income countries, so the perspectives of this group of people, as they pertain to the ethics surrounding certain programs and interventions, are of the

utmost importance. In another study done by Musoke and colleagues (2020), their team used Photovoice to gain the VHTs' perspectives regarding the ethics surrounding their roles in the community as well as the interventions being carried out for their communities. This study included ten VHTs and took place in Wakiso District, Uganda, where they took photos of various healthcare delivery points in their communities that, from their perspective, constituted an ethical concern, and then participated in monthly discussions regarding those concerns over the next five months. The five themes that were derived from the photos and their discussions were: maintaining professional integrity and abiding by ethical principles of practice; ethical responsibility in patient care; maintaining confidentiality while handling clients; respect for persons and communities; and enhancing knowledge and skills (Musoke et. al, 2020).

All of the themes derived from the Photovoice sessions in this study represent key ethical principles in public health service delivery and should be kept at the forefront when entering a community to promote overall health and well-being - especially as an outsider. As members of and volunteers to their community, the CHWs found it to be of great importance to begin implementing these ethical considerations into their daily practice, therefore, making it of even greater importance for outside members of interdisciplinary teams to hold these values with high regard as well. When Musoke and colleagues' earlier work is paired with the latter, a solid framework about how to implement public health work as an interdisciplinary team results. Ideals such as using a community-led framework that places the needs and values of the community first while continually threading in the core concepts of ethics and equity are essential in producing sustainable ethical health gains.

### 2.3 Community benefit of this approach:

Attempting to distribute health resources among communities needing them most as well as promoting health literacy, sustainability, and innovation are important concepts for members of interdisciplinary teams coming from developed countries. However, what is often forgotten is what the community members themselves believe to be of true benefit to them. Peters and colleagues go as far as to challenge community-led approaches that do not focus on gaining feedback from key community members as being "tasking" for communities since their often-limited resources are being used without any evidence of sustainable change (Peters et al., 2022). While it is not inherently bad to enter a team with large ideas and ways to promote health in a community, it would be a great disservice to the wide range of opportunities that could be created by truly working with the community members as well as a vast disservice to those community members themselves since they are the ones who will be left with the task of trying to maintain those interventions over time. Communities benefit from the outcomes produced by interdisciplinary teams when they are seen "as partners and leaders" in strengthening their community's health (Peters et al., 2022).

Qualitative methods such as interviews, focus group discussions, ethnography, and more creative methods such as body mapping and Photovoice allow researchers to gain feedback from community members. In a study by Zheng et al, research was conducted to gain the community's perspective on the VHTs and their work in Kisoro District Uganda (Zheng et al., 2021). This study utilized a mixed methods approach to gain the communities' perceptions of VHTs as individuals and of the VHT program in Kisoro District. Across eleven villages, 658 community members were randomly selected to participate in door-to-door surveys, and of those, 97 participants were selected to participate in FGDs. Through the analysis and interpretation of the surveys and FGDs, the researchers identified many key themes the community members

believed should be requirements of VHTs. Some of these were ideals such as being hardworking, responsible, able to provide medical aid to people in need, being an active member of the community, trustworthy, and educated. One of the themes that especially stood out was the belief, held by 90% of those surveyed, that VHTs should be chosen and assessed by community members versus government or hospital staff (Zheng et al., 2021). The article goes on to discuss how participants felt that while VHTs deserved to be paid for their services, it was also necessary for them to be held accountable by the community they are serving and that their status should be revoked if they are not consistently performing to community standards. These themes reinforce the ideas emphasized by Peters et al. regarding the community benefit of public health programs - community members must be highly involved in the creation of such programs and seen as key players and contributors to the interventions created for them to gain any true benefit (Peters et al., 2022).

# 2.4 Facilitator benefit of this approach:

While much research in the area of interdisciplinary public health programs has highlighted the importance of the ethicality and value of public health programming for the community members it affects, there is limited research outlining the value of such programming for international facilitators. Large internationally based research studies often enlist help from research volunteers or students who assist in facilitating the study. Volunteers/students experience a myriad of learning opportunities and emotions while participating in such experiences and in a study done by Buregyeya and colleagues (2021), these researchers looked to dive deeper into the benefits experienced by students participating in a "community-based interdisciplinary learning experience" in two villages in Western Uganda. This study utilized FGDs and in-depth interviews (IDIs) to elicit perceptions of the students participating in

Uganda's One Health Initiative from 2016-2018. The three benefits reported on most by the students were appreciation and further understanding regarding the benefit of a collaborative and interdisciplinary approach to addressing public health issues, a further appreciation for the role of community involvement in such work and learning how to best use and delegate resources. Other learned skills among these students included negotiation skills, the importance of stakeholder involvement, conflict resolution, and respect. Regarding the use of community resources, one FGD participant described how the task of having to innovatively and appropriately utilize community resources led not only to a newly learned skill for himself but also to more sustainable interventions for the community that could continue to be utilized after the end of the program. The skills gained by these students can be used in future projects they work on in their careers, which ultimately helps to advance the field of public health, especially in a world that is continually becoming more interdependent and connected (Buregyea et al., 2021).

Although the students from the previous study were all from one University in Western Uganda, similar experiences can be gathered from students participating in such programs internationally. The study conducted by Musoke and colleagues in 2016 also assessed the lessons learned by international student participants. Students from the United Kingdom-based portion of the program can be cited as bringing increased global knowledge back to their home institution, increased personal levels of cultural competence and resilience, and experience in creating trusting relationships with key stakeholders involved in the public health sector (Musoke et al., 2016). The potential benefits for communities in these partnerships are many, but the benefits for the facilitators of such programs are also great and can be of benefit to individual growth and the growth of the public health field at large.

#### 2.5 Importance of evaluation of programming:

As demonstrated, international community-level public health programming involves the interdisciplinary collaborative involvement of community members, facilitators, and stakeholders working together to create equitable, culturally relevant, and sustainable health solutions. Such programs are sustained by the communities they serve and as such require continual evaluation and refinement to ensure their values and needs are being upheld over time and that intended project goals and outcomes are being met. Traditional monitoring and evaluation (M&E) programs are primarily utilized to satisfy donor requirements and used as a way for researchers to track the outcomes of their interventions (Roberton & Sawadogo-Lewis, 2022). M&E programs should additionally be utilized to uphold accountability by providing valuable progression and impact data to key stakeholders and local communities. M&E of community-based programming can be challenging to implement in the field. Additionally, the data it produces may have limited value in assessing and improving public health programs, especially when considering the expenses often associated with conducting a comprehensive M&E plan (Roberton & Sawadogo-Lewis, 2022).

In an article for John Snow International, Mandal and Stammer (2021) assert that M&E of programming is so imperative to the communities being served that the challenges M&E can bring need to be approached with more "holistic" methods to provide communities with the data they need to gain sustainable health changes. The article describes the use of complexity awareness monitoring (CAM) approaches, such as resource mapping and other participatory and qualitative approaches, to secure direct feedback from communities about the program. This allows for more personalized, relevant, and accurate program modification ultimately leading to a greater program impact. In a program evaluation conducted by Concern Worldwide, CAM methods were used to evaluate a social and behavioral change project involving maternal and

child health in Western Ghana (Concern Worldwide, 2016). This study found that through the involvement of community members and key stakeholders in the evaluation of the program, community enthusiasm and commitment to the project goals were increased and that by incorporating community feedback throughout the program, the project implementation team was able to make necessary changes to program implementation positively affecting the program's impact and reach (Concern Worldwide, 2016). While the importance of M&E in global health programming is widely recognized, the methods by which it can be performed vary, and the choice of such methods should be individualized for each program evaluation to promote the best data for stakeholders, program facilitators, and the communities affected.

#### 2.6 Known Gaps, Challenges, and Limitations:

Many of the articles reviewed described challenges regarding the ethicality and equity of how CHW programs are designed/structured and the use of multidisciplinary teams, their feasibility due to several factors, and the effect such programs have on the communities participating. For example, while there is sufficient evidence promoting the use of CHWs/VHTs as a valuable way to promote community-focused public health programming and strengthen communities as a whole, there seems to be a gap in knowledge about how to best design and implement these programs. In a review, Agarwal et al. (2019) looked at identifying the factors that make CHW programs more effective. The primary purpose was to provide a basis for further research with specific questions addressing the construction of effective CHW programs. In this study, a total of 30 systematic and overview reviews, published since 2000, were included that addressed knowledge gaps in CHW program implementation. The study also held a focus group in South Africa with various Ministry of Health (MOH) country representatives, and members of the Integrating Community Health (ICH) program led by USAID, to develop priority research

areas that would assist in the scalability of each country's own CHW program. The final installment of this study included another focus group consisting of key stakeholders who met in Washington DC to rate the importance of the themes identified from the literature review as well as those discussed during the focus group session in South Africa (Agarwal et al., 2019).

Ultimately, these researchers were able to identify 32 themes and questions extracted from the literature review and focus groups specifying key areas for further research on this topic. The themes identified were: the selection and training of CHWs, community involvement, the institutionalization of CHW programs, meeting the needs of CHWs, performance and quality of care in these programs, and the cost-effectiveness of community-led programs (Agarwal et al., 2019). While it was acknowledged that CHW programs are effective, this group of researchers were able to identify key areas for further research to ensure that CHW programs are the most effective, equitable, and sustainable for their communities. As outlined in this study, as well as the others mentioned, community-based interventions that focus on developing community health from within are effective and essential, but continually monitoring and evolving these programs is the key to creating sustainability and long-term health gains.

Many studies, such as the one above, identify the gaps in community-level health programming research, but either do not follow up with the research needed to find solutions, or are unable to complete the research due to the very program complications they are trying to address such as ethicality, funding, and community buy-in/engagement. In a scoping review conducted by Ndu and colleagues (2022), one of the limitations noted was that research in this area thus far has had a very limited focus on "the lived experiences" of CHWs and how their role affects their lives as well as the communities they serve. Out of the 63 articles originally chosen for review, over half of them (33) had to be excluded due to the study not having any

components that assessed the CHW's personal views about the success of the programs (Ndu et al., 2022). Without this information, it is difficult to know why some CHW-based programs fail even with proper funding and resources. In low-income countries focusing more research on community-based public health programming and the use of CHWs from CHWs' perspectives would help stakeholders of these programs better understand the circumstances, needs, opportunities for improvements, and health barriers the communities face.

While the benefits of M&E plans are evident across various levels of public health programming, there is very little research that incorporates community-level experience and feedback, including that of VHTs, into the plan. Dedicating more efforts to evaluating what makes public health programs better by incorporating community and CHW feedback into the M&E plan is a valuable approach to address some of the sustainability and community buy-in challenges these programs often face. By also incorporating feedback from members of the interdisciplinary team, local and international program stakeholders can gain insight into the gaps, challenges, and limitations of the program through a different lens (Hamelin & Paradis, 2018).

UVP needs to incorporate participant feedback consistently and regularly into its M&E program to build on its sustainability and consistently monitor its progress with its partner villages. These results then need to be incorporated regularly into program improvement and development. The goal of this qualitative program evaluation is to provide UVP staff with the framework necessary to complete future program evaluations with its participants, VHTs, and community members, as well as an initial data set to gain first-hand insight into how their programs have been operating thus far.

### **Chapter 3: Methodology**

#### 3.1 Introduction

The project that is the subject of this thesis used qualitative methods to assess the VHTs' and interns' perspectives of the program to provide UVP with a participant-based program evaluation for the 2022 Summer Internship Program. In-depth Interviews (IDIs) and Focus Group Discussions (FGDs) were used to gain the interns' and VHTs' emic perspectives on the quality of the program, including as it relates to working with people from different backgrounds, the perceived benefits gained by the surrounding community, and the perceived personal and professional skills gained from working with UVP.

### 3.2 Population and sample

The study participants consisted of Ugandan male and female adult VHT members from Busimba and Nasuti South villages and male and female college-aged Ugandan and American current and former UVP interns. All VHT and intern participants were chosen to participate in UVP's Summer Internship by the program directors and either had a background in or experience with community development work, public health, social work, or other medical/healthcare-related fields.

Category	Number	Description
VHTs	10	Ugandan male and female adult VHT members from Busimba (5) and Nasuti South (5) villages.
		Busimba VHTs: 1 female, 4 males
		Nasuti South VHTs: 4 females, 1 male
Current Interns	6	College-aged Ugandan and

		American students
		Busimba interns: 1 Ugandan male
		Nasuti South interns: 1 Ugandan male, 1 Ugandan female, 3 American females
Former Interns	2	Interns suggested by UVP directors/staff for participation in this qualitative study
		1 Ugandan male, 1 American female
Current & Former Interns	2	Interns that were a part of the 2022 intern cohort as well as a previous intern cohort
		1 Ugandan female, 1 American female

Participants for this study were chosen via convenience and snowball sampling. As a participant in the Summer 2022 UVP intern cohort, I was able to explain the research purpose and procedures to the participants and build rapport with them before asking for their voluntary participation in the study. Written informed consent was provided by each potential participant; consent forms were also translated verbally to Lusoga for the VHTs requiring translation services. Those agreeing to participate had an opportunity to ask questions and sign the consent forms before engaging in either IDIs or FGDs. As a way to promote confidentiality, ethicality, and to not interfere with the team process of UVP's work in the villages that summer, individual IDIs were conducted with each intern participant on their chosen day and time outside of UVP's working hours. A total of two FGDs were conducted with the VHTs, with one group consisting of the Busimba VHTs and the other consisting of the Nasuti South VHTs so that the location and

time could better accommodate their preferences and their respective village clocks (the culture, customs, and norms that are known among village members) that help to establish the timing of various community activities.

# 3.3 Focus Group Discussions

Both of the FGDs, with all five of the village's VHTs were conducted by the researcher and a Ugandan intern who volunteered to act as a direct translator as needed. Before the two discussions, the guides were provided to the Lusoga translator so he could become familiar with the questions and gain a better understanding of the purpose of the FGD portion of this program evaluation. Each FGD was conducted at the respective UVP team house in either Busimba or Nasuti South. These locations were chosen as they were known common locations for the VHTs and provided a comfortable and private location. The FGDs were conducted in a combination of English and Lusoga. The VHTs were familiar with, understood, and spoke basic English, but sometimes required clarifications in their native language of Lusoga. The researcher would read the FGD question in English and the translator would then read the question again in Lusoga. Participants were free to respond in either English or Lusoga and their responses often consisted of a mixture of both languages. The translator would then provide a brief English interpretation of major ideas stated by the group before moving to the next topic. Each FGD was recorded using Apple recording software and was made available to the translator so that he could provide word-for-word Lusoga to English translation of the discussion in a typed document. The FGD recordings and translations were only accessible by the researcher and the translator and were kept on a password-protected laptop.

The FGD guides consisted of three primary themes. The first group of questions looked at the VHTs' perspectives on their role in the community and any impact they felt they had. The

second set of questions elicited their thoughts about working with people from varying backgrounds and how that impacted their work in the community. The final set of questions sought the VHTs' perspectives on UVP as an organization and any improvements that could be made to help them be more effective at their jobs as well as increase the community benefit from the program.

# 3.4 In-Depth Interviews

Each in-depth interview was conducted by the researcher and the current or former UVP intern on a day, time, and location of their choosing. Each IDI was conducted in English and recorded using Apple recording software. The recorded interviews were stored on a password-protected laptop and then uploaded to transcription software for audio-to-text conversion. Two different versions of the IDI guides were used for the interviews. Version two, which was used for former UVP interns, had the same set of questions as version one but also included two additional questions to assess the impact of participation in UVP on their current careers. Both IDI guides had the same set of themes to guide the discussion. The first set of questions asked about personal perspectives regarding roles with UVP. The second set of questions asked about working with people from various backgrounds, and the final set asked about UVP and its summer programming.

#### 3.5 Data analysis

The recordings of the IDIs and FGDs were initially uploaded to a transcription software and the transcripts were then analyzed for accuracy and completeness when compared to the written field notes taken during each interview. Codes were initially derived from a review of the FGD and IDI guides and then iteratively expanded after a thorough review of the interview transcripts. MAXQDA was then used to code the data. While reading through the transcripts, the

codes were applied to applicable portions of the interviews using the following definitions for each code.

Purpose of UVP	The role of UVP in the community and any services they provide
Supplies/Resources Needed	Human or tangible resources that were needed to conduct the program activities but were not provided; Tangible/human resources that would have made the living conditions more conducive for the intern
Review of/Advice for UVP	Positive, negative, or general advice/recommendations for the organization
Influence of UVP in Current Career/Job/Role	How UVP has helped in your current job/role; Skills you have gained from interning with UVP
Perspectives on Intern Roles with UVP	The responsibility of the UVP intern; the impact of a UVP intern; the activities a UVP intern is to perform
Advice for Future UVP Partners	Advice for future UVP interns or VHTs
Perceived Community Experiences/Benefit	Ways in which the community is benefitting or being hindered by UVP's presence in the community from the perspective of the interns and VHTs
Working with People from Different Backgrounds	Description of the positive and negative experiences of working with people from different backgrounds; lessons learned from this experience
Perspectives on VHT Roles in the Community	What is the role of the VHT in the community; Any services they provide; and their impact on the community

Different codes were often used for the same portion of text as many of the codes overlapped and related to each other. This process was completed twice using MAXQDA, and the text segments labeled with each code were grouped into seven themes by their similarities: Perceived purpose of UVP; Intern and VHT roles in the village; Perceived community experience/benefit; Benefits

of working with UVP for interns and VHTs; Drawbacks of working with UVP for interns and VHTs; Working with people from different backgrounds; and Review of/advice for UVP.

After each coded portion of the text was categorized into the above four themes, the data was then stratified by participant type: current intern, former intern, national intern, international intern, Busimba VHTs, and Nasuti South VHTs. Primarily, the main differences in responses were between all interns and VHTs and between current and former interns. Due to this, the results will be presented with the distinctions of VHTs, current interns, and former interns unless the ideals regarding a certain theme varied greatly among the national versus international interns. Since this was a rarity in the data, a distinction will be made between the perspectives of the national interns versus the international interns on an as-needed basis. If the distinction is not made, the perspectives on a certain topic are largely similar among this group.

#### 3.6 Ethical Considerations

IRB approval was waived for this special studies project as it is a program evaluation intended to be used for UVP and not generalizable to a broader population. Once the data was coded, categorized into themes, and stratified by participant type, recommendations could be made regarding the research question.

#### 3.7 Limitations and Delimitations

Two primary limitations have the potential to introduce bias in this study. As the primary researcher, I was also a participant in the UVP 2022 cohort. This allowed me to build rapport with my fellow interns, program coordinators, and VHTs as well as gain a level of access to the community and VHTs I would not normally have been able to have. However, this has the potential to introduce bias. The other main limitation of this study is the language barrier between me and the VHTs. Since Lusoga is a smaller derivative of Luganda, that is spoken only

in Busimba and Nasuti South, there was no access to professional translators to assist with the FGDs. Another intern who is familiar with Lusoga, as well as Luganda, served as the translator during the FGDs. Although he provided direct word-for-word translation there is still potential for the introduction of bias since he was also a participant of the program.

Only participants whom I had direct access to were asked to participate in the study. No former UVP VHTs participated in this study and no additional former UVP interns were interviewed for the IDIs. Due to the rigor of UVP's summer programming for interns, there was not sufficient time or resources to locate and reach out to other former UVP interns or VHTs.

#### **Chapter 4: Results**

#### 4.1: Results

This qualitative research study aimed to gain the perspectives of the interns and the VHT members who participated in recent cohorts of UVP's Healthy Villages Initiative. The average age of the participants who were interns was 23.9 years and their majors were all health science related. Due to cultural norms in Uganda, the individual ages of the VHTs were not collected; however, it is standard practice in Iganga for VHTs to be 20 years or older to serve as a VHT for their village. While similar questions were asked of the VHTs and the interns, the FGDs with the VHTs yielded mostly responses that aligned with the general role/purpose/effect of VHTs in the community as opposed to their role/purpose/effect with UVP specifically. Since the purpose of this evaluation was to provide data specific to UVP, some of the responses the VHTs gave will not be covered in as much depth for certain themes in the interests of clarity of purpose.

Theme One: The Purpose of UVP

Participants in each IDI and FGD were asked to describe what they believed were the responsibilities of UVP in the Iganga District and to list what services they were known for providing. Across all interviews and FGDs, except for the two interviews from former interns, participants described UVP as providing services to the community in the past, but not currently providing services during the 2022 summer internship. Services listed as provided in the past ranged from none to family planning services, bed nets, malaria testing, and obstetric fistula treatment. One of the international interns described the purpose of UVP as follows:

"UVP is mostly focused on establishing grassroots community health practices. So working with the populations mostly on a village level, but also working with the district and other health officials in the area to try to encourage better health practices. To

advocate for people's health abilities and resources, and to try to encourage people to think about their health and to prioritize their health. To try to prevent diseases that are endemic to the area such as malaria and HIV." (International Intern 2)

Among both VHT groups, they collectively described what UVP does in the community in terms of the resources they have been known to provide despite not providing them during the summer 2022 internship. The VHTs of Busimba listed the services UVP provides as including:

"family planning services free of charge to clients, for example, condoms, combined oral contraceptives, progesterone-only contraceptive pills, and injectable contraception.

WASH projects including the provision of free tippy taps, construction and maintenance of boreholes, and community mobilization and sensitization about malaria with the provision of mosquito nets at affordable prices." (Busimba VHTs)

While most current interns stated that services, such as those mentioned by the VHTs, were not provided during the summer 2022 program they each mentioned sensitizations and education sessions in the five program areas as being the primary component of UVP's programming. Among three of the four former interns interviewed, there also appeared to be a consensus that education about HIV, malaria, WASH, family planning, and obstetric fistula were the primary output activities for UVP in Iganga. One former intern interviewed stated:

"From my point of view, UVP is into more of health education on specific topics. For instance, malaria, STDs... They also do health education about WASH [...] which also helps people prevent diseases." (National Intern 1)

There was some variance among current interns, former interns, and the VHTs regarding the perceived overall purpose of UVP, however, all groups seemed to agree that services, either

in the form of tangible services or education, were provided in the areas of HIV, WASH, Family Planning, Obstetric Fistula, and Malaria.

Theme two: Intern & VHT Roles in the Village

Understanding the various roles of the members of a multidisciplinary team is an important component of the team process and its ability to function. When the VHTs were asked about their roles in their respective villages, most of their responses were related to their work as a VHT in general versus with UVP specifically. In both FGDs, the VHTs described their roles as "trusted leaders" and gatekeepers in their communities. Some of their responsibilities included, "sensitizations about family planning, immunizations, nutrition, and general cleanliness", "promoting and extending the reach of health services to people", as well as being "representatives of Nasuti Health Center". Several of the VHTs in each group also mentioned that without their "role in the community [...] many people would be unwilling to immunize their children". According to the VHTs, they are key players in the delivery of health care to the villages, and without their roles in the community, many of its members would be reluctant to receive more Westernized health services such as "family planning, immunizations, and treatment for HIV and malaria". They each had many positive things to say about their positions in the village which primarily spoke to their roles and connection to the community members.

When the current interns were asked to describe the VHTs' role in the community, they had very little knowledge about the "true roles" of the VHTs and were unable to identify how impactful their relationship with the community was. Six out of the eight interns interviewed, including two of the interns that were current and former interns, stated that working with the VHTs made work "easier", "smoother", and "quicker" because they were able to assist the interns with "mobilization" for different activities and sensitizations, and because the VHTs

"knew what areas to do a sensitization" in. These six interns all described how the VHTs were very "knowledgeable" about their communities and were able to provide the interns with information about where to do certain sensitizations, which houses to mobilize, and which health topics were most important to discuss in each village. As far as specific roles the VHTs played, all of the interns stated that they helped with "sensitization and mobilization" for the interns, "helped with the translation", and provided "social connections" to key members of the communities which was necessary for the interns to be able to work in the village. Only one of the interns listed a role the VHTs held outside of working with UVP. She stated:

"[...]There was this one week where they were all running for elections, and so they were all helping with the elections [...] and then being very involved social people in the village means that they have to go to burials or they have other meetings [...]."

(International Intern 4)

Negative aspects of working with the VHTs rarely came up among the international and national interns, but when they did, it was mentioned that they could "slow down work" when they "would not show up on time" and because of "miscommunication due to the language barrier".

The former interns had similar ideas regarding the role of the VHTs and their activities in the villages. They agreed with the current interns that the VHTs, "when present", were "essential" to work in the communities because they helped to build "rapport" between the interns and the village members, they "knew the borders of the village" so the interns knew where to "conduct sensitizations", and they "energized the community" for events. Only one of the interns, a former international intern, described her team's work with the VHTs in a unique way that aligned with UVP's mission for the summer Healthy Villages Program. She stated:

"Our main long-term impact was less so having these clinics and testing, and more so about empowering the VHTs. So it was about building momentum and motivation to work in their communities, building capacity and knowledge [in] each of the different areas [...]. So building that with the VHTs and building their connections to UVP and the resources they can provide." (International Intern 2)

While the former interns held similar perspectives about the roles of the VHTs and their activities in the communities, they also held similar beliefs regarding the difficulties of working with the VHTs with one exception. Two of the four former interns, one national and one international stated that the "VHTs made work [more] difficult because they "did not show up" and "were not very proactive". One of the former international interns also stated that she found working with the VHTs difficult because she never "understood what their role [was]". She stated:

"I think it would have been nice to have a [clearer] understanding of who they were and what their role was supposed to be. I think that's a big issue. There was never any explanation of what their role truly is." (International Intern 1)

VHTs and interns were also asked to describe the roles of an intern in the village and to list any specific activities/responsibilities of the interns. The VHTs of both FGDs provided ways in which they believed the interns impacted the VHTs' activities in the villages. The VHTs of Busimba stated the interns "helped" their work in the village. They stated:

"We have gained more knowledge from these interns [in] community approaches [about] health issues [which] has increased community participation and increased health-seeking behaviors hence adding value to our work we do in the community".

When asked the same set of questions, the current interns stated what they believed their roles to be as well as describing specific activities and programming they carried out in the village. All of the interns stated whether they participated as an intern or a team leader and listed the activities of the specific role, but in an attempt to uphold the confidentiality of this study, those statuses will be withheld from the data and only the role of the intern will be assessed. Five of the eight current interns stated their primary roles and activities as an intern were conducting "sensitizations" and "mobilizing" the community members for those sensitizations. Each of the interns was also asked to describe specific ways that they personally contributed to UVP's impact in the villages. Each one of them listed specific contributions such as, "data analysis", "team bonding", contributing "creative ideas for sensitizations", "homemaking", attempts to "boost team morale", and many more. Specific activities carried out by the interns included "sensitizations" in the five program areas, "mobilizations", "building tippy taps", "carrying out door-to-door surveys", "translation from English to Lusoga", "construction of plate stands", "planning for the sensitizations", and "Global Health Leadership Curriculum sessions". The activities that were most often listed by each of the current interns were the construction of tippy taps, door-to-door surveys, and conducting sensitizations on one of the five program areas. An interesting activity listed by one of the international interns was conducting a "malaria-themed soccer game" with the children in the village.

The former interns listed similar overall roles and responsibilities during their respective intern years, however, they also listed some different activities they conducted during their internship. Activities listed by the former interns consisted of "conducting HIV and malaria days", "testing for HIV and malaria and providing treatment", "building relationships with the

community members", "distributing mosquito nets", "Moonlight Sensitizations", "identifying fistula patients", and hosting "clinic days".

While the current interns did not list many of the activities performed by the former interns, they did note that their activities were limited by "insufficient funding", and because of this they were "unable to do normal programming". Among both groups of interns when asked to describe what their day-to-day program looked like, they all described a day that went something like this:

"[...] We would wake up, try to do our chores, eat breakfast, and then we would try to meet with our VHTs around ten. [...] Then we would go out into the field and build tippy taps, then in the evening we would either have a GHLC session or we would plan a sensitization for the following day [...]." (International Intern 5)

Theme three: Perceived Community Experience/Benefit

Among the interns, there was a substantial difference between the perspectives on the community's experience of UVP among current and former interns. Since two of the interns were both current and former interns, they were asked to describe their opinions regarding the current community experience as well as the communities' experiences in their former internship cohorts.

Among the former intern group, including the two interns that were current and former interns, there appeared to be an overall positive perception of the community members' experience with UVP in years prior, while nearly all current interns had a more negative perception of the community members' experience of UVP. The two interns who served in the 2022 cohort as well as previous cohorts described the perception of their previous village's experience with UVP's programming as being overall positive and helping to "increase the

health" of the communities they served. As evidence of the positive impact made by UVP in one of the former partner villages, one current and former participant stated a village she worked with in a previous cohort was:

"Recognized now for having high standards of WASH by the National Health Commissioner." (International Intern 1)

Another current and former intern described UVP's contribution to Iganga as a whole as having an overall positive impact as it relates to the health status across the district:

"...before 2003 when UVP was starting to come to Iganga, it was one of the worst districts in Uganda. If you told someone you're going to Iganga, after you come from there, they would isolate you for some time and make sure you don't have trachoma, make sure you don't have diarrheal diseases...make sure you don't have jiggers in your feet. But apparently now if you come to Iganga... you don't have fleas in your hair, you're not sick. People think hmm maybe Iganga is a good place to stay." (National Intern 3)

Comparatively, when these same two interns were asked to describe their perception of the communities' experiences from their current cohort, their responses were much less positive and indicated there might even be a negative impact experienced by the 2022 program villages. The international intern felt as if the lack of services provided in the current year was not only creating an internal sense of imposed neocolonialism but was additionally causing disappointment among the community members. When asked to describe in more detail she stated:

"There's a lot of am I imposing my own views and values in the community that even if they may want to take in whatever information I'm saying, they can't because it's not culturally or monetarily feasible." (International Intern 1)

The national intern also held similar beliefs stating:

"So to us as volunteers, we may understand the standing point of the organization, but the village members won't understand that. They will literally think the organization they're liars, they're scammers, and all that, and it's also disappointing because I mean you get to talk to more people about the organization's programs and everything so they can know what the organization does, but this is not going to happen this time. Yeah, so it is sad." (National Intern 3)

All of the current interns, whether they were national or international interns, cited the community experience as being overall negative this summer primarily due to a "lack of tangible services" being provided to the community members. Despite the majority of the current interns having a more negative outlook on the community's experience of UVP, they also had some hopeful and more positive outlooks about their perception of the communities' experience of UVP as a whole and the summer internship. One of the current national interns stated:

"I think UVP is affecting the community positively by trying to change people's understanding about specific aspects in relation to health. For example, most people in rural areas like Busimba, don't know much about specific diseases like obstetric fistula."

(National Intern 2)

Among the interviews with current interns, the overarching theme regarding the experience of the community members was that while "education can provide some impact," tangible services provide "more of an impact". One of the international interns even noted that the most

meaningful moment of the internship was when a community member came up to her and thanked her for building his family a tippy tap, adding that she felt like "they really liked it when they had something to go home with". About half of the interns also stated that they felt the community members were "disappointed" when they would show up to a sensitization and not receive anything to go home with that they could use to implement the education. More than half of the current interns discussed "family planning methods, mosquito nets, [or] HIV/malaria testing" as services that needed to be provided for the community to experience a "greater impact".

Throughout each current and former intern interview and in both VHT FGDs, participants noted the need for various resources to carry out their respective roles and to make a greater impact in the communities. Three out of the ten interns interviewed listed the need for more "human resources" while all other interns and the VHTs listed the need for more "tangible resources" such as "family planning methods", "mosquito nets", "tippy tap supplies", and "HIV and malaria testing". The VHTs also listed several personal supply items that they believed would make their job in the community easier such as "gumboots", "at least two [UVP] t-shirts", "facilitation like a cup of water or tea and banana", and "money for bicycles/bicycle repair".

Across all interviews, each intern mentioned the need for tangible supplies to make a real impact in the community. The national interns were able to give some additional insight as to why this was such an important need in these communities. One national intern said he believed:

"You always have to include real services since most of the community members are much more interested in the real services. Yes of course you carry out any education but knowing that at the end, I'm going to give out a real service." (National Intern 2)

While discussing the need for physical resources to give the community when doing sensitizations, one national intern was able to provide context about why this is so important in this community. She stated:

"[...] So the physical impact in Africa... we believe in something tangible more than the intangible." (National Intern 3)

Out of all interviews and FGDs, only one of the national interns mentioned the need for increased facilitation in the form of, "[...] a more favorable environment for sensitizations such as tents" so that the community members would be more comfortable receiving "sensitive" services or to help them "come out if it is raining".

Additionally, there was an outlier in the data that was uncovered through the in-depth interviews regarding this theme. Among four out of the five IDIs from Nasuti South, it was noted that the community's overall perception of UVP was negative due to a specific event that occurred over the summer.

"[...]our sensitization got canceled because one of our VHTs was misinformed, I guess.... confused, told a bunch of community members that we were going to be talking about handwashing when it was in fact family planning. And so, all those women got uncomfortable, so our sensitization last week was canceled and we're no longer welcome to that side of the village." (National Intern 3)

The four interns who described this mentioned that the circumstance was "damaging" to the relationship the community has with UVP moving forward and that it was "sad" that because of miscommunication the community members thought UVP was trying to "trick" them into participating in a family planning event, ultimately creating "distrust" among the community.

Among the VHTs from both villages, each FGD primarily discussed how the community was perceived to benefit from VHTs in general, and each listed specific benefits of this community service such as "transportation to and from [the] hospital", "making referrals to the health center", and "dispelling myths" about health topics. As it relates to UVP as an organization, both groups stated the communities had benefitted overall from UVP's presence in Iganga because of the "sensitization and mobilization about specific health topics such as fistula, HIV, and family planning". Both FGDs also identified the provision of services as being both a negative and positive aspect for their communities since services were not provided during the current summer program. VHTs of Nasuti South explained that providing "materials for tippy taps, plate stands, maintenance of boreholes, and the fistula campaigns" was generally beneficial for the community while the VHTs of Busimba listed these same services as well as the lack of "provision of mosquito nets" as a negative experience for the community since these expected services were not provided this year.

Theme four: Benefits of working with UVP for the interns & VHTs

The fulfilling components of the program to the former interns consisted of personal gains such as increases in "leadership skills", "flexibility", the ability to "connect with people from different backgrounds", "patience", and "connecting with the community members".

Another common theme among the former interns was that the ability to provide tangible services to the community such as "building tippy taps", "providing bed nets", and "treatment for fistula" provided them with a great sense of fulfillment and feeling like they were able to leave an impact in Iganga. One of the former national interns states:

"[...] Fistula has also helped to develop the communities because the fistula clients before were ignored by the community; they were isolated. But then UVP comes, takes

them out, and then brings them back reformed with even new skills to help them generate money." (National Intern 1)

An international former intern also described the fulfilling experience of interacting with the fistula clients:

"[...] There would be fistula patients we would identify and then getting them connected just at that spot, they would say 'I thought I had no hope. I didn't think there was any treatment for this [...]'. And then knowing they are going to be in these camps getting reintegrated and having a second chance at life and just those little things that really reminded me how much I love public health." (International Intern 2).

The two major distinctions among the positive aspects of the program that were mentioned in all intern interviews were the acquisition of personal skills and the ability to connect with the community and provide them with at least one "tangible impact". All of the current interns and former interns mentioned at least one personal skill they gained from working with UVP whether it be "leadership skills", "flexibility", "critical thinking skills", "data collection", or "planning public health activities". As mentioned in all eight intern interviews, the most fulfilling moment for each intern was "building tippy taps" because it left the community with a "tangible" impact the interns "could see when passing by" to do their activities in the village.

"I think doing the tippy taps is honestly the one thing that I find fulfilling here. When people are just really grateful for what you're providing them, and seeing how happy they are by something so simple, and it's like one thing we can control kind of ourselves. I think that's very fulfilling" (International Intern 3)

During the interviews with the former interns, they were specifically asked how UVP had affected their current or future career/career path. Although the current interns were not asked this specific question, all of them still stated how the lessons they learned from UVP would be of benefit to them in the future. In the group of current interns, all of them listed specific skills they gained that would be of use to them in their future careers. The skills that were listed by at least two interns were that they gained leadership skills, learned how to interact with various types of people, and survey/data collection skills. Each of the interns described these skills as necessary for future jobs they may hold.

The former interns listed many of these same skills, but they also stated how they applied their learned skills to their current careers. They also discussed how their overall experience with UVP affected their career goals and trajectory. One of the former national interns described how "learning how to build a tippy tap" was useful in his current career. He stated:

"[...] I got the opportunity to learn how to make tiptaps. So this was even very vital in my profession because I have to teach the VHTs how to make tiptaps, to teach the community members how to make tiptaps." (National Intern 1)

A former international intern also detailed how her experience with UVP had "shaped [her] future" and how she was able to come back to Uganda for another "study opportunity" for school since she had prior experience with an NGO in Uganda:

"So career-wise I think it was really important and it was really my first global health experience. I would say it's going to set up my life, which I really hope to continue to work in global health in the field. [...] And so I would say this was just like the birthplace of it all." (International Intern 2).

As for positive experiences, the VHTs of Busimba talked about the overall benefit they've witnessed in their community through interaction with UVP while the VHTs of Nasuti South primarily discussed the benefits they gained by interacting with people of different backgrounds. While the positive feedback about the program according to the VHTs of Nasuti South differs from that of the Busimba VHTs, both opinions reflect the gains for the community members either from the perspective of the community members themselves or from the perspective of the VHTs.

Theme five: Drawbacks of Working with UVP for Interns & VHTs

Among both VHT groups, there was one negative experience listed by both groups of VHTs. All of the VHT members stated that working with the interns and UVP interrupted their daily work as well as their work as a VHT outside of being a UVP VHT. The VHTs of Busimba village stated, "Working with interns interrupts my daily work because I have to give them time to participate in community work. For example, working in the fields, rearing my animals, and also other works as a VHT of the community are being interrupted." The only other negative aspect of the program according to the VHTs was having to, "volunteer our time and not being compensated."

In general, the two difficulties of being a VHT that were mentioned in both groups were difficulties with "interpersonal relationships", and the financial burden/lack of appropriate facilitation which VHTs often experienced. The VHTs of Busimba and Nasuti South described how "harsh health workers or medical professionals" and "politicians" often interfered with their service to the community and "demotivated" them by making them feel "inferior" in certain situations. Regarding the lack of adequate resources, the VHTs listed items such as "reimbursement for transport costs", funding for "bicycle repairs", "volunteering time, and not

being compensated", and as compared to other health workers, being required to work "without [a] break, tea, lunch, and [being] paid very little among others".

Negative aspects of working with the VHTs rarely came up among the international and national interns, but when they did, it was mentioned that they could "slow down work" when they "would not show up on time" and because of "miscommunication due to the language barrier". The main component of UVP that the former interns found to have a negative impact on their experience was not having "enough information". Across all four interviews with former interns, each one of them discussed how they felt "unprepared" to do the work in the villages and to work with the VHTs. One international intern stated:

"They didn't tell us anything about the work in the community. We had zero orientation about that. [...] So we got to the community and I had no idea what we were doing".

(International Intern 1)

Theme six: Working with People from Different Backgrounds

As mentioned throughout the previous themes, one common thread throughout the entirety of the interviews and FGDs was the uniqueness of this experience to provide space to work with people from different backgrounds towards one common goal. While the interns had both positive and negative things to say about working and living with people from different backgrounds, the VHTs from both villages only had positive things to say about working with the interns. In both VHT FGDs the overall sentiment was that working with people from diverse backgrounds "breeds innovation", "enhances communication", and helps them "gain new perspectives and insights". The VHTs of Busimba reported finding enjoyment in working with the interns and stated they were looking forward to working with the interns because, "we expected a lot from these people such as cooperation, community engagement, and different

ideologies about health issues and how their ideologies will impact our communities at large." The VHTs of Nasuti South added that working with people from different backgrounds, "dispels negative stereotypes and personal biases about different groups. Interacting with others can build bridges to trust, respect, and understanding across cultures." VHTs in both groups also listed key qualities that they believed an intern should possess in order to be an effective member of a multidisciplinary team. These qualities included to "be cooperative with the community", "critical thinking", "problem-solving", "integrity", "positivity", "collaboration", "inquisitiveness", and "self-discipline".

When asked to discuss their experience working with people from different backgrounds, all interns equally responded to this question through the lens of doing physical work in the villages as well as through the lens of living with people from different backgrounds. The former UVP interns each described the conflicts that arose from living with different personalities and people of different cultures. The majority of the conflicts described involved "cultural differences" which included conflicts in the house such as completion of "chores", "timekeeping", and "living habits". The two former international interns stated how beneficial it was to have training on and to practice "cultural humility" when living and working in these situations.

"I think going into it, what I always think is the number one thing for us as interns and as people from outside of the community coming in is cultural humility. And so I am glad that that was a core component to our team dynamics." (International Intern 2)

Outside of the challenges of living with people of different backgrounds, the former interns had very positive things to say about working in the field with people from different backgrounds. It was common across these four interviews for interns to describe how different

members of a multidisciplinary team can support the team in different and unique ways. One of the former national interns described his contribution to UVP as being "in a position to help UVP get to know that our government has tried its level best in fighting Malaria [...] the government distributed mosquito nets [and] there is free malaria treatment at the hospitals". He further went on to describe how this impacted "UVP programming" so they knew "what had been provided and what needs provision" for the community members. Other former interns added that working with people of different backgrounds and educational disciplines helped them to "grow as a leader", "grow personally", "fit the needs of the community with different people and personalities", and that completing a shared goal or task with different people helps to, "add different strengths, skills, and backgrounds to the table [... which] makes for a richer and fuller approach to public health" (International Intern 2).

The current UVP interns had mostly similar values as it pertained to working with people from different backgrounds. However, some unique circumstances were mentioned among the 2022 UVP cohort. The current interns discussed topics such as "culture shock", learning to "stand up for myself", and the challenges of navigating conflicting values and customs. All eight of the current interns interviewed discussed the "difficulty" and "challenges" they experienced working with the VHTs, community members, and each other especially when the "education status", "language differences", and "personal values" varied. Although each one of them described these challenges, most of the interns further discussed how this experience provided them the opportunity for personal "growth", and felt they were more equipped for "working with different people in the future". When describing the challenges and rewarding portions of the summer, one of the national interns stated:

"For example, they [people of different backgrounds] bring different ideas, then you share those ideas, and you agree on one thing which makes work easy" (National Intern 4).

Regarding people from different backgrounds working on the same team, four of the current interns described some opposition to how different members of the intern team were treated by the UVP staff, community members, and the VHTs. It was noted that the national interns' "contributions" were often "not recognized on the same level as the international interns". All of the international interns described their efforts to be "aware of" the potential for favoritism, "manage personal bias", "work together as a team", and "try to be flexible and establish interpersonal connections" as a way to help mitigate some of the problems the national interns were experiencing. One of the international interns described her personal experience regarding this as well as the way she tried to recognize and mitigate the conflict:

"I think a lot of that came through in the planning conversations we would have and in the GHLC sessions. [...] I would approach a problem in a certain way that I would say the American education system has maybe taught me to? [...] And I think [...] things [are] just not going to go that way always. And you sort of need to be willing to be flexible and also just allow for things to happen that you can't predict" (International Intern 4)

While the interns may have been able to mitigate some of these conflicts among themselves, according to the national interns, there was very little to be done on behalf of the VHTs and UVP staff. The national intern with the most vocal views on this matter stated:

"[...] as a national, there is the issue of half of the entire time they [UVP staff] are like 'You have to respect these guys. They don't do things that you do, but you have to be respectful'. [...] Generally, I do not have respect for anyone who treats you guys above the nationals. If anything we should all be on the same level." (National Intern 5)

Furthermore, according to one of the national interns, there were some challenges surrounding "the treatment of the national interns" compared to the international interns by the community members, VHTs, and Ugandan-based UVP staff. Regarding this, two of the international interns also felt it necessary to mention the trouble this caused within their intern team and the ways they tried to mitigate this issue. One of the national interns frequently described that the community members and VHTs treated the international interns like the national interns "bosses", and how UVP staff would assume the national interns "could not afford" certain items and would often depict the international interns as being "remembered by the community", but not including the names of the national interns in these statements. Two of the international interns discussed their "internal struggle" knowing these things and further stated they wished they had more "cultural training" to know how to navigate the situation better. A national intern's advice regarding this would be for UVP to:

"[...] Up their game on treating the nationals. If they are fronting equality so much then they should actually live up to what they say. [...] I don't know if they just take the assumption that all nationals are used to the conditions like this, but we don't appreciate that [...]." (National Intern 5)

The final major theme that was found among current interns, as it relates to working with people from different backgrounds, was the issue of the language barrier between the interns, community members, and VHTs. For example, in five of the ten IDIs, it was noted that current interns believed UVP should have provided them with more comprehensive "Lusoga training". One of the current and former national interns stated, "...they taught us a few words in Lusoga but

then in [a previous] cohort Lusoga was taught in depth". Another national intern described how the experience of having to translate made him "uncomfortable" because the interns were taught "so few words in Lusoga". An international intern described how only "team leaders received Lusoga training", but that "the rest of the team members did not get that training at all". Concerning this, three of the international interns and one of the national interns described the lack of Lusoga training as damaging to their interpersonal relationships with each other. Among these four IDIs, the consensus was that while the need for the national interns to help translate conversations between the VHTs, community members, and the international interns was understood, it was often a point of contention among the interns and was a difficult job, since there was a lack of training, and was not well recognized by the community members or staff. While describing the need for more Lusoga training during orientation, one international intern described the strain it placed on her and one of her fellow national intern's relationship:

"[...] and so I think that was just really frustrating for her, and I totally get it. I was trying to figure out ways that I could ease that burden [...], but it was really hard because the language barrier made it so difficult." (International Intern 4)

One of the national interns also described how the lack of Lusoga training affected her interpersonal relationships with the international interns, her overall experience during the Summer Program, and provided her perspective on how the community members received the translated information during sensitizations. When describing how difficult it was for her to translate due to not knowing the "local language" she also stated:

"[...] sometimes I feel like I don't have the final say because when they [VHTs] say something and I say something and I reply, they're [VHTs] like translate for them [...] it's demeaning [and] demotivating" (National Intern 5)

Theme seven: Review of/Advice for UVP

The interns and VHTs reported many things they believed could have benefited the community's experience of UVP as well as their own time while working with UVP. For the purposes of this project, their responses were divided into positive, negative, and general experiences/advice for UVP. Second to the theme of working with people of varying backgrounds, the theme of Advice for UVP occurred most frequently across all 12 transcripts, and for that reason, the results will be divided into three categories: current interns, former interns, and VHTs. Ideas from interns who were currently serving as an intern but had also been an intern in a prior cohort will be included in the data with current interns or with former interns depending on which period the advice is related to.

Among the four former interns, one piece of general advice for UVP that was mentioned in all four interviews suggested that UVP invest more in its "human resources". Some of the suggestions included "adding more staff" in Uganda so the "impact could be increased in the community" as well as investing more resources towards the "facilitation of the VHTs" including things such as "interaction with staff", being considerate of their time and lives outside of UVP, and "providing food and water during events". Two of the former interns, one national and one international intern, also mentioned that having the "executive staff" come visit Uganda more often would be beneficial. The international intern noted that "the morale" of the Uganda-based UVP staff was "boosted" and "energized" when the executive staff came to Uganda as compared to not having them there in years prior. The national intern also thought that having the American-based UVP staff come to visit Uganda more often would be beneficial so they "know what is happening on the ground".

Another common theme among the former interns was that three out of four of them wished they had had "more information" before working with the organization and prior to beginning work in the village. One of the former national interns stated he "went to UVP when I had very little information" and went on to say that he could have "performed better" with additional information about the organization and its programming. Two pieces of general advice for UVP offered by at least half of the former interns were to have "clearly defined roles for staff and interns" and to "add more resources so the impact can be felt more". One of the former national interns also suggested that while adding more resources would increase UVP's impact in the community, the program should also, "participate in other outreaches the government organizes [...] so it is more recognized and in pattern".

Additionally, a former international intern described her challenges navigating working in the villages without defined objectives, roles, or information about how to conduct their activities. She stated:

"[...] We went [to the village] and then we were just a little bit like, wait so what are we supposed to do?" (International Intern 2)

According to one of the former national interns:

"And then there is information they give us that is not detailed. And it's only the program coordinator that knows the details about the program and they have not turned out. [...] and then you just have to forge an answer and lie because you do not know it." (National Intern 3)

This theme was also discussed in seven out of the eight current intern interviews. Seven of the current interns discussed their concerns regarding the organization of the program itself.

Current national and international interns alike discussed the need for there to be a clearer

definition of roles, activities, and outputs required for UVP/the interns, and for closer monitoring of the programming by UVP staff including "executive staff" members. One national intern had very strong feelings and suggestions as they relate to the organization of the program:

"I understand others, the directors, don't come often, but you need to watch people. You need to supervise [...]. Come see what's on the ground yourself, because it's one thing getting reports from other people, but is it actually what's being done? Because then they would know how resources are being allocated, how people are being treated [...] And how the UVP staff are being treated. What motivates and demotivates them." (National Intern 5).

Another theme that was discussed among most of the current interns was the need for further direction and facilitation about how to do the work in the community. Priorities such as "how to build a tippy tap", "how to build a plate stand", "how to conduct a sensitization", "how to monitor our progress", and more information about the program areas was listed by the interns. One of the international interns stated that she felt like "we were running around doing whatever we wanted because we didn't know". Another international intern suggested:

"[...] Coming back to those conversations about culturally appropriate conversations to have and our ability to recognize our roles, especially as international interns, I think also as well having a little bit more structure... I think why those issues came up was because we were trying to design all those interventions ourselves. But there is so much science on this work. There is science on sensitizations and education campaigns. [...] So really dig into that, learn the best practices, and then provide that knowledge to the interns so that they can do the best that they can because we were just making sh\*\* up as we went [...] and I think our work could have been a lot better [...] if they had provided

us with parameters, previous knowledge from other years, and also from the literature."

(International Intern 4)

A few of the interns stated they "didn't know what [I was] doing" and stated they would have had "more of an impact if we had examples of what we should be doing". Due to the lack of facilitation regarding these topics during the intern's orientation, one international intern stated:

"[...] the first three to four weeks we were here I felt like we were a burden. [...] We needed so much help and we couldn't do anything on our own. We had to find people to come build us trash pits. We couldn't even build our tippy tap because we didn't know how to." (International Intern 3)

In general, the VHTs in each FGD listed the need for more public health-related supplies as their general advice for UVP to increase their impact in Iganga. Examples discussed during the discussions included, "free bed nets, "more information about family planning and knowledge about treating malaria", "constructing and maintaining boreholes", and "malaria medication".

## Chapter 5: Discussion, Recommendations, & Conclusion

5.1: Discussion

5.1.1: Community Involvement in the Program

The participants of UVP's Healthy Villages Initiative revealed many findings that align with UVP's mission and goals, but they also had some recommendations regarding the improvement of the program. Nearly all of the study data can be summarized into four main categories of advice. Those are the need for a more impactful community experience; the provision of tangible services for the community members; the need for greater organization and facilitation of UVP's Summer Internship; and the implications of working with people from different backgrounds. There were also many pieces of advice that interns offered relating to the need for a better way to evaluate, monitor, and refine the programs in the villages. All of the results presented above have implications with reference to these main categories of advice. In the context of existing literature, these findings exhibit many of the known necessary components of community-based public health programming and are representative of the known gaps in the literature as they relate to other similarly structured public health programs.

As stated by Baptiste et al (2020), a key component of delivering health services in low-resource settings is to involve the community members in the assessment and monitoring phases of community health programming. This directly aligns with what many of the interns called out as a problem as it related to their perceptions of the community's benefit from UVP's presence. This is because many of the interns described feeling that the community members were not benefitting from UVP's programming as much as they could because they seemed to already know a lot of information about topics such as malaria and HIV but needed assistance in attaining sustainable solutions to address their physical needs in these key areas. If UVP were to

incorporate community-based assessment and monitoring into its programming, it may help to not only partner with the community on a more personal level but also help to know and meet the communities' true health needs. Additionally, two of the male national interns also noted the need for a more robust system of monitoring the program's progress as well as the progress of individual interns and VHT teams as a way to remain accountable to the communities. As noted in the study by Agarwal and colleagues (2019), one of the requirements of effective community-led public health programming is continual monitoring and refinement of its programming. It is important to note, however, that all interns interviewed were a part of UVP's launch villages, so it is possible they were just unaware of what UVP's follow-up/monitoring portions of their programming looks like. To better align with the current evidence as it relates to the qualities of effective community health programs in low-resource settings, and to provide a more tailored community experience, UVP needs to engage the community members as partners in their programs, especially in the area of monitoring and evaluation.

Throughout all of the themes assessed among the VHTs and interns, the most commonly occurring concern was the need for UVP to source additional funding so that "real services" could be delivered to the community members. Many of the interns described this need as a necessary addition to UVP's programming as a way to meet the community's needs and to establish trust and commitment between UVP and its partner villages. The VHTs also acknowledged this need, citing that UVP is a poor provider of family planning methods and services. This need for tangible services was an assumption made by the interns and VHTs. To better ascertain whether or not this assumption is correct, UVP would need to seek out the perspectives of the community members directly to find out what tangible or intangible needs are most important to them. While many community-based organizations struggle with sourcing

sufficient funding and often have to come up with more creative ways to address the community's needs, the first step is allowing the community members to identify what the community's needs are (Baptiste et al., 2020).

Despite the lack of a formal process for community feedback and involvement, many of the interns discussed interactions with the community that led them to believe that the community members would be more appreciative of tangible services than education sessions alone. Some of these assumptions were due to the community members being openly thankful for the only tangible service provided that summer, tippy taps, while the other assumptions of community needs were based on community members directly asking the interns if services such as malaria testing and treatment would be provided. According to the VHTs, who are also community members, there is a substantial need for tangible services within the villages.

5.1.2: The benefits and drawbacks of working with people from different backgrounds and how cultural sensitivity/ethics and equity relate to this

Another key topic addressed by the interns and VHTs was their experiences working with people from different backgrounds. Many of the interns and both groups of VHTs discussed how this required them to grow personally and professionally, consequently helping to expand their skills and abilities to serve the community better. These findings directly align with those found in the 2016 study by Musoke and colleagues. One aspect the Musoke study (2016) did not cover was gaining perspectives about working on interdisciplinary teams from the VHTs. The present program evaluation of UVP did look to gain the perspectives of the VHTs, who listed many qualities they believed were important for an intern to possess when working with their community. Many ideals such as respect, cooperation, and willingness to engage with the community came up during the FGDs as qualities that an intern should possess which are

paramount for members of a multidisciplinary team that are coming from more developed countries (Musoke et al., 2016).

Related to the key traits the VHTs mentioned as necessary for an intern to possess, a couple of the interns also mentioned how cultural humility was something that they tried to keep at the forefront of their minds while in Uganda as well as a topic they wished UVP had discussed more. Although none of the interns reported power struggles among their teams or with the VHTs, interns from one of the villages did often describe situations that could have been prevented or more easily navigated if there had been more intentional and focused training during their orientation period just as listed by Musoke and colleagues (2020) as being a necessary component of quality community-based programs. To further the idea of practicing cultural humility and ethicality in public health work, and to meet the requests of the interns, it would also be beneficial for UVP to incorporate the VHTs' advice for future interns into their orientation with UVP as well. Consequently, this addition to UVP's Summer Internship may also help the interns mitigate some of the problems they encountered while working with people from different backgrounds.

When working on a multidisciplinary team it is also paramount that each member understands their role as well as the roles of others on the team. As discussed in the study that was undertaken in the Wakiso District by Musoke and colleagues (2020), when asked to assess their roles in the community, VHTs were able to identify several key features that VHTs should possess to provide the best service to the community members. Without the VHTs' ability to understand the full extent and weight of their role, they would be less equipped to adequately serve their community. The same can be said of other multidisciplinary team members such as the interns. Among the group of former and current interns interviewed, about half of them

admitted to not fully understanding what the roles of the VHTs were. The VHTs listed many more activities for which they were responsible that the interns had no idea about. If the interns were more aware of the role of the VHTs in their communities they may have been able to forge a stronger partnership with them and leverage their expertise to the benefit of the community.

In the study by Baptiste and colleagues (2020), it was also noted that a component of successful community-based health programming is that the programs are mutually beneficial for all participants. Much of Baptiste et al.'s study (2020) emphasized the benefits for the community members, but it also noted that the program's facilitators must also benefit from the experience. All of the interns in the present study were able to state many ways participating in UVP's summer program had been of benefit to them personally and professionally. The most common skills gained were those of learning to work with people from different backgrounds, flexibility, and communication skills. Some of these same acquired skills were cited as being attained by the participants from the study done by Buregyea and colleagues (2021).

While four interns reported not having experienced any benefit from participating in UVP's internship, some of the factors they listed as areas for improvement of the program could help to address this gap. For example, if program gaps such as the lack of tangible resources, the need for further development of the cultural humility/ethicality components of the program, and the need for adequate facilitation were addressed further, these improvements could all help the interns and VHTs to have a richer experience with the program, as well as produce better outcomes and benefits for the community members.

5.1.3: The need for better alignment/understanding of UVP's organization, purpose, goals, activities, and definition of roles

One theme that was common among all interns was that they all discussed the need for more time to learn Lusoga - the local language spoken in Nasuti South and Busimba villages. The language barrier, and the need for the national interns to constantly translate for the international interns, created interpersonal difficulties throughout the teams and also led to miscommunication with the VHTs ultimately leading to a poor outcome for the community members that summer. It has been shown across multiple studies that community members do benefit from multidisciplinary community-based public health programming when they are "highly involved" in the design and implementation of the programming (Peters et al., 2022). For the community members to be more involved, it would require the interns to know some basic Lusoga. Overall, it seems the Summer Internship could benefit from the incorporation of VHT feedback about how interns should be interacting in the communities, adding a more thorough component of cultural humility/ethicality in public health, more time for learning the local language, and more preparation about the work the interns will be doing in the villages.

Additionally, many of the interns discussed how a clearer definition of roles, responsibilities, suggested program activities and overall purpose of UVP needed to be better aligned with their provided services. Often the data showed that former interns believed they were carrying out UVP's mission despite not having a clear picture of expectations and roles whereas the current interns found both of these ideals to be lacking. The lack of these clear definitions made the Summer Internship's programming much more difficult and often led to miscommunication and a lesser impact on the community. If UVP were to better focus its purpose and goals while providing a clearer picture of its participants' roles and intended activities in the village, the interns and VHTs would be provided with better facilitation to successfully deliver a more direct and useful set of health programs for the community. As stated

in the literature, a community health program whose purpose, mission, goals, and activities are explicitly outlined can help foster sustainable community benefits (Buregyea et al., 2021).

The final theme that was very prevalent among the IDIs and FGDs was the clear dissociation between what the interns viewed as the purpose of UVP as compared to what the VHTs listed as its purpose, as well as the vast difference between the types of services listed as being provided. According to the current interns, it would appear that it was difficult for UVP to source adequate funding for its typical activities and programming which ultimately limited their responses when asked to recall the services provided. The current interns would often state that "normally" these services were provided, or "they used to provide these services in previous years" while the former interns were able to list a full range of services provided that aligned with what the VHTs listed as well. Through the discrepancy between what the interns and VHTs were stating the purpose of UVP was and the services provided, there was clear evidence that during the 2022 Summer Internship, UVP was unable to fully meet their purpose and ultimately the expectations of the interns, VHTs, and their partner villages.

Concerning this, over half of the current interns also discussed how they did not have enough supplies to provide services that they were told by the UVP administration they would be able to provide that year. They often listed not having enough tippy tap supplies, including hammers and jerry cans, as a major problem considering that was the main tangible impact of the summer. Two of the seven interns even went as far as to say they felt like a "burden" to the community because they had to rely on them and their resources frequently throughout the summer's activities. The VHTs were more concerned with the lack of their facilitation, often stating that they were not provided for in terms of meals, transportation-related costs, and payment for service while working with UVP. According to the study conducted by Peters and

colleagues (2022), it is well-researched and known that utilizing a community's resources is useful in creating sustainable health solutions, but it can also become "tasking" to the community when their resources are constantly being used without any measurable and sustainable health gains being made as identified by the community. The ability to involve the community in health programming and evaluation while utilizing its resources to promote empowerment and sustainability requires a detailed and clear vision for a program, its activities, and its continual evaluation and monitoring.

### 5.2 Recommendations & Conclusion

Overall, the IDIs and FGDs conducted with the interns and the VHTs provided muchneeded insight into the strengths, weaknesses, and areas for improvement for UVP. Key themes
are important for UVP to consider as they revise and refine their program, such as: the need for
better alignment/understanding of UVP's organization, purpose, goals, activities, and definition
of roles; community involvement in the program; the benefits and drawbacks of working with
people from different backgrounds and how cultural sensitivity/ethics and equity relate to this;
and the need for a more continuous and thorough M&E plan with sustainable ways to refine the
program over time. As it relates to how UVP could improve its Summer Internship program from
the perspectives of its participants, I would recommend the following:

- UVP should incorporate community-based assessment and monitoring into its
  programming in order to partner with the community on a more personal level
  and to better assess and meet the community's true health needs.
- 2. To further cultural humility and ethicality in public health work, it would be beneficial for UVP to incorporate the VHTs' advice for future interns into their orientation with UVP. Their advice included ideas that ensure interns are ready to

- positively collaborate with the community. The details of orientation should also be strengthened in the area of cultural humility and equity since their programs are run by multidisciplinary teams using a local vs. international approach.
- 3. UVP should focus on its purpose and goals while providing a clearer picture of its participants' roles and intended activities in the village to successfully deliver a more direct and useful set of health programs for the community.
- 4. All of these recommendations provide evidence for the need for UVP to begin to include community and participant feedback into their organization-wide M&E program so that the program can more seamlessly and continually be refined for optimal community and participant success.

As it relates to successful community-based health programs of this type, the literature identifies the need for a well-designed program with clear roles for its participants and suggests achieving this by implementing a robust M&E plan that places high value on the feedback of all its participants. It is further discussed that more research in the area of multidisciplinary CHW-led programs is needed to achieve optimal results. Prior to my departure from the UVP Summer Internship Program in 2022, the executive directors made it known that they would not be hosting a Summer Internship in 2023 so that they could focus on the refinement of their internship program. Since UVP has a very specific CHW-led program design, its public health impact in Iganga would benefit from incorporating the feedback presented in this study into the refinement and improvement of its Summer Internship moving forward. Although this qualitative study provides a strong basis for initial program refinement, further research about the best way to design and implement CHW-based programs is needed for UVP to continue to provide sustainable health gains in Iganga in this current format.

### References

- Agarwal, S., Kirk, K., Sripad, P., Bellows, B., Abuya, T., & Warren, C. (2019). Setting the global research agenda for community health systems: Literature and Consultative Review. *Human Resources for Health*, *17*(1). https://doi.org/10.1186/s12960-019-0362-8
- Baptiste, S., Manouan, A., Garcia, P., Etya'Ale, H., Swan, T., & Jallow, W.. (2020).

  Community-Led Monitoring: When Community Data Drives Implementation Strategies.

  Current HIV/AIDS Reports, 17(5), 415–421. https://doi.org/10.1007/s11904-020-00521-2
- Buregyeya, E., Atusingwize, E., Nsamba, P., Nalwadda, C., Osuret, J., Kalibala, P., Nuwamanya, R., Okech, S., Ssekamatte, T., Nitumusiima, S., Wakabi, T., Bikaako, W., Yawe, A., Naigaga, I., Kagarama, J., Kabasa, J. D., & Bazeyo, W. (2021). Lessons from a community based interdisciplinary learning exposure: benefits for both students and communities in Uganda. *BMC medical education*, *21*(1), 5. https://doi.org/10.1186/s12909-020-02429-2
- Concern Worldwide. (2016, October 26). *Community benefits health programme evaluation*.

  Concern Worldwide. <a href="https://www.concern.net/knowledge-hub/community-benefits-health-programme-evaluation">https://www.concern.net/knowledge-hub/community-benefits-health-programme-evaluation</a>
- Hamelin, AM., Paradis, G. Population health intervention research training: the value of public health internships and mentorship. *Public Health Rev* 39, 6 (2018). https://doi.org/10.1186/s40985-018-0084-9
- Mandal, M., & Stammer, E. (2021, December 2). *Measuring the hard-to-measure: Embracing complexity and empowering communities through data*. JSI.

  <a href="https://www.jsi.com/measuring-the-hard-to-measure-embracing-complexity-and-empowering-communities-through-data/">https://www.jsi.com/measuring-the-hard-to-measure-embracing-complexity-and-empowering-communities-through-data/</a>

- Muluya, K. M., Mugisha, J. F., Kithuka, P., Kibaara, K. R., Muwanguzi, D. G., Ochieng, O. G., Yitambe, A., & Wananda, I. (2022). Incentives for mothers, health workers and "bodaboda" riders to improve community-based referral process and deliveries in the rural community: a case of Busoga Region in Uganda. *Reproductive health*, 19(1), 24. <a href="https://doi.org/10.1186/s12978-022-01334-9">https://doi.org/10.1186/s12978-022-01334-9</a>
- Musoke, D., Gibson, L., Mukama, T., Khalil, Y., & Ssempebwa, J. C. (2016). Nottingham Trent University and Makerere University School of Public Health partnership: experiences of co-learning and supporting the healthcare system in Uganda. *Globalization and health*, 12, 11. https://doi.org/10.1186/s12992-016-0148-x
- Musoke, D., Ssemugabo, C., Ndejjo, R., Molyneux, S., & Ekirapa-Kiracho, E. (2020). Ethical practice in my work: community health workers' perspectives using photovoice in Wakiso district, Uganda. *BMC medical ethics*, 21(1), 68. <a href="https://doi.org/10.1186/s12910-020-00505-2">https://doi.org/10.1186/s12910-020-00505-2</a>
- Ndu, M., Andoniou, E., McNally, S., Olea Popelka, F., Tippett, M., & Nouvet, E. (2022). The experiences and challenges of community health volunteers as agents for behaviour change programming in Africa: a scoping review. *Global health action*, *15*(1), 2138117. https://doi.org/10.1080/16549716.2022.2138117
- Peters, L. E. R., Shannon, G., Kelman, I., & Meriläinen, E. (2022). Toward resourcefulness: pathways for community positive health. *Global health promotion*, 29(3), 5–13. https://doi.org/10.1177/17579759211051370
- Roberton, T., & Sawadogo-Lewis, T. (2022). Building coherent monitoring and evaluation plans with the Evaluation Planning Tool for global health. *Global health action*, *15*(sup1), 2067396. https://doi.org/10.1080/16549716.2022.2067396

- UBOS. National Service Delivery Survey 2015. Kampala: Uganda Bureau of Statistics; 2015.chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ubos.org/wp-content/uploads/publications/03\_20182015\_NSDS\_report.pdf
- Uganda Bureau of Statistics. (2023, May 19). *Uganda profile*. Uganda Bureau of Statistics. <a href="https://www.ubos.org/uganda-profile/">https://www.ubos.org/uganda-profile/</a>
- Uganda Village Project. (2022, June 30). *Uganda Village Project Facilitating Public Health in Uganda*. https://ugandavillageproject.org/
- UNICEF. (2018). National Malaria Control Program Info Pack for Key Malaria Messages in Schools. UNICEF.

  https://www.unicef.org/uganda/media/3466/file/UGDA%20malaria%20information%20pack%202018.pdf
- WHO. (2023, March 29). *Malaria*. World Health Organization. <a href="https://www.who.int/news-room/fact-sheets/detail/malaria">https://www.who.int/news-room/fact-sheets/detail/malaria</a>
- Zheng, C., Anthonypillai, J., Musominali, S., Chaw, G. F., & Paccione, G. (2021). Community

  Perceptions of Village Health Workers in Kisoro, Uganda. *Annals of global health*, 87(1),

  82. <a href="https://doi.org/10.5334/aogh.3325">https://doi.org/10.5334/aogh.3325</a>

# **Appendices**

### **Appendix A:** FGD Guide

Interview Date:

Interviewer:

Focus group ID:

Location:

(VHTs)

# **INTRODUCTION**

Hello, my name is Alexa Taylor, and I am a student at Emory University in Atlanta, Georgia USA. I am conducting research to help answer this question for my master's level thesis: In what ways could the Uganda Village Project be improved?

Thank you all for agreeing to meet with me today. I am looking to gain your perspectives on this topic, so I appreciate your honesty and willingness to participate. I do have a guide of questions here to ask, but I am more interested in your unique experiences as VHTs on this topic, so please remember there are no right or wrong answers. If there are any questions you all prefer not to answer let me know and we can skip that question if you wish. This discussion will be about 1 hour, but let me know if you all wish to stop early or take a break.

I would like to audio record our conversation to make sure I capture everything you all say, and can represent your thoughts accurately in the findings. This discussion is completely confidential, and the recording will be stored securely, and then destroyed once I have transcribed the interview. The recording will only be linked to an identification number, and as a reminder your participation in this discussion will in no way affect your participation or position with UVP. Is it okay to audio record our conversation?

So that I can accurately hear each of your thoughts, I ask that we allow everyone a chance to speak if they wish. Each of your thoughts in this topic are important, so while opinions may be different each one is valuable.

We will get started with our discussion now. Do any of you have any questions for me before we get started?

### CONFIRMATION/DEMOGRAPHIC QUESTIONS:

• Can you all describe any prior experience related to the work you do as a VHT?

# **WARM-UP QUESTIONS**

- 1. Can you describe the different roles a VHT holds in this community?

  Probes: Can you talk about what you believe a VHT can contribute to this community? Can you tell me about how long you have been working in the Iganga District?
- 2. Based on your experience, can you describe what UVP does in Iganga?

*Probes:* What services do they provide? Can you describe a typical day working in the village? Do you work with anyone? Can you describe a current project you're involved with?

Okay now that we have warmed up to the topic a little bit we are going to move on to the main questions of this interview.

# **KEY QUESTIONS:**

This first series of questions asks about your perspectives on your current role in this community.

- 3. What do you think are fulfilling aspects of serving as a VHT?
- 4. In contrast, can you describe the negative aspects of being a VHT if there were such aspects?
- 5. Can you describe how your roles as VHTs have influenced this community so far?

This next category of questions looks to gain your perspectives about working with people from different backgrounds.

6. Can you describe what it is like to work with people from different backgrounds while working as a VHT?

*Probes:* How is this different from working with people of similar backgrounds? Can you describe how this impacts the work you do?

7. When working with the UVP interns specifically, can you tell me how that impacts the day to day flow of work?

*Probes:* Does it affect your mood? Does their presence during the summer influence your work differently than when they are not here throughout the year? Are there any power struggles?

8. How prepared did you feel to work with student interns prior to this summer experience? *Probes:* Can you tell me about any training you had to learn how to work with people from different backgrounds if at all? Did your orientation with UVP provide this at all? As it relates to working with people from varying backgrounds, can you tell me about the main thing you wish UVP had helped to prepare you for if anything?

Moving on to the next topic, these questions will be asking about your review of UVP.

9. In your opinion's, can you tell me about the best experience this community has gained from working with UVP if there was ever an experience?

*Probes:* In contrast, can you tell me about a negative experience this community has had since UVP has been here if ever?

10. Can you describe how you feel UVP is affecting this community overall?

Thank you so much for taking the time to have this discussion with me! I greatly appreciate your time and willingness to share your experiences. I just have two closing questions and then we will complete this interview.

# **CLOSING QUESTIONS**

11. Is there any advice you would give to a new UVP intern when working in similar communities?

Probes: What about a new VHT?

12. If you had access to the directors of UVP what is one piece of advice you would give them to help further the impact of the program in this community?

Probes: To help further your progress as as a VHT?

Again, thank you for your time and valuable in	nput. This is the end of our interview. Do you have
any final comments or questions for me at this time? If any of you wish to follow up on this	
research you can contact me via WhatsApp at	or Stephanie Kaye with the
Uganda Village Project at .	

### **Appendix B:** IDI Guide

Interview Date:

Interviewer:

Participant ID:

Location:

(Interns)

### INTRODUCTION

Hello, my name is Alexa Taylor, and I am a student at Emory University in Atlanta, Georgia USA. I am conducting research to help answer this question for my master's level thesis: In what ways could the UVP summer internship program be improved?

Thank you for agreeing to interview with me today. I am looking to gain your perspective on this topic, so I appreciate your honesty and willingness to participate. I do have a guide of questions here to ask, but I am more interested in your unique experience on this topic, so please remember there are no right or wrong answers. If there are any questions you prefer not to answer let me know and we can skip that question if you wish. This interview will be about 45 minutes, but let me know if you wish to stop early or take a break.

I would like to audio record our conversation to make sure I capture everything you say, and can represent your thoughts accurately in the findings. This interview is completely confidential, and the recording will be stored securely, and then destroyed once I have transcribed the interview. The recording will only be linked to an identification number, and as a reminder your participation in this interview will in no way affect your participation or position with UVP. Is it okay to audio record our conversation?

We will get started with the main portion of the interview now. Do you have any questions for me before we get started?

### CONFIRMATION/DEMOGRAPHIC QUESTIONS:

- Are you at least 18 years of age? If you do not mind sharing, what is your age?
- Is this your first time interning with UVP? If not what cohorts have you participated in?
- Are you a student? If so, what are you currently studying? If not what is your current professional background?

## **WARM-UP QUESTIONS**

- 1. Based on your experience, can you describe what UVP does in this community? *Probes:* What are the types of services they provide?
- 2. Can you describe your role with UVP?

Probes: Can you talk about what, if anything, you believe you contribute to UVP

3. Can you describe a typical day working in the village?

*Probes:* Do you work with anyone? Can you describe a current project you're involved with?

Okay now that we have warmed up to the topic a little bit we are going to move on to the main questions of this interview.

## **KEY QUESTIONS:**

This first series of questions asks about your perspective on your current role with UVP.

4. Can you tell me about a time when you felt fulfilled in your position if there was such a time?

*Probes:* In contrast, can you tell me about a time when you felt negatively about the work you do if there was such a time?

- 5. Can you describe how UVP has been of benefit to you if at all?
- 6. (FOR FORMER INTERNS ONLY) Can you tell me about how UVP has influenced your career thus far?

*Probes:* Can you describe any other opportunities that you were led to because of your involvement with UVP? Can you tell me about how your time at UVP has been relevant to your current roles if at all? (END)

This next category of questions looks to gain your perspective about working with people from different backgrounds.

7. Can you describe a time when you worked with a person from a different background while with UVP?

*Probes:* How is this different from working with people of similar backgrounds? Can you describe how this impacted your work?

- 8. When working with the VHTs, can you tell me how that impacts your workflow? *Probes:* Does it affect your mood? The quality of work? Are there any power struggles?
- 9. Can you describe your preparedness level to work with VHTs prior to this summer experience?

*Probes:* Can you tell me about any training you had to learn how to work with people from different backgrounds if at all? Did your orientation with UVP provide this at all? As it relates to working with people from varying backgrounds, can you tell me about the main thing you wish UVP had helped to prepare you for if anything?

Moving on to the next topic, these questions will be asking about your review of UVP.

- 10. Can you tell me about the best skill you have gained from working with UVP?
- 11. Can you describe the components of UVP orientation that have really benefited your experience working in this community if at all?

*Probes:* If you had control over the orientation portion of UVP what changes would you make if any?

12. Can you describe how you feel UVP is affecting this community?

Thank you so much for taking the time to interview with me! I greatly appreciate your time and willingness to share your experience. I just have two closing questions and then we will complete this interview.

## **CLOSING QUESTIONS**

- 13. What is one piece of advice you would give to a new UVP intern?
- 14. If you had direct access to the UVP directors, what is one piece of advice you would give them to help further their impact in this community?
- 15. What is one thing you wish you knew prior to beginning this experience?

Again, thank you for your time and valuable input. This is the end of our interview. Do you have anything you want me to know or any further questions for me?