

The Use of Peer Youth Educators for the Promotion of Adolescent Sexual Health:
A Case Study of Carolina for Kibera

By

Chelsea Katherine Whittle

Department of Global Health
Duke University

Date: _____

Approved:

Kathryn Whetten, Supervisor

Kim Chapman-Page

Sandra Canfield

Thesis submitted in partial fulfillment of
the requirements for the degree Master of Science in the Department of
Global Health in the Graduate School
Of Duke University

2011

ABSTRACT

The Use of Peer Youth Educators for the Promotion of Adolescent Sexual Health:
A Case Study of Carolina for Kibera

By

Chelsea Katherine Whittle

Department of Global Health
Duke University

Date: _____

Approved:

Kathryn Whetten, Supervisor

Kim Chapman-Page

Sandra Canfield

An abstract of a thesis submitted in partial fulfillment of
the requirements for the degree Master of Science in the Department of
Global Health in the Graduate School
Of Duke University

2011

Copyright by
Chelsea Katherine Whittle
2011

Abstract

Adolescent sexual health is a global concern because of its associations with HIV, other STIs, early and unwanted pregnancies, and post-abortion complications. To address the health burdens associated with sexual and reproductive health in youth, organizations employ several programmatic models to encourage behavior change and to distribute correct and appropriate information. One of those models is the peer education model. The peer education model uses adolescents to target adolescents to achieve program objectives. This paper is a case study of Carolina for Kibera, a non-governmental organization working in Kibera, a large urban slum outside of Nairobi, Kenya. Carolina for Kibera implements this model in its efforts to promote adolescent sexual health. The case study uses a triangulation method, including qualitative focus groups and interviews, document review, and researcher observation to determine how the model is implemented both in the context of the organization and in the context of Kibera. Results of the case study include a completed program description and an assessment of barriers and benefits to implementing this model, and how the context of the urban slum frames programming decisions and success. As a means of discussion and conclusions, implications and recommendations for future programming at Carolina for Kibera, and globally, are presented.

Table of Contents

Abstract.....	iv
List of Figures.....	vii
List of Tables.....	viii
Acknowledgments.....	ix
Introduction and Background.....	1
Sexual Health of Adolescents in Sub-Saharan Africa	
The Peer Educator Model	
Carolina for Kibera and Study Setting	
Review of Literature.....	11
Theoretical Frameworks behind Peer Education	
Identifying Peer Education as a Strategy for Health Promotion	
Empirical Evidence	
Contribution to the Literature	
Methods.....	20
Study Design	
Ethical Approval	
Interviews and Focus Groups	
<i>SRH Staff</i>	
<i>Peer Youth Educators</i>	
<i>Community Members</i>	
Document Review	
Researcher Observation and Participation	
Data Analysis	
Results.....	25
Preliminary Planning and Program Development	
The PYE Model at CFK – Educator Description, Recruitment, Training, and Retention	
Program Activities and Logistics	
<i>Activities</i>	
<i>Logistics</i>	
Assessment Findings	
<i>Leadership and Decision-making</i>	
<i>Monitoring and Evaluation</i>	
<i>Balance Between Peer Development and Peer Delivery</i>	
<i>Community Perspective</i>	
The Contextual Issues of Kibera	
<i>Health Behavior of Adolescents</i>	
<i>Community Life</i>	
<i>Examples of Adaptation</i>	

Implications and Recommendations.....	54
Benefits	
<i>Creating Leaders</i>	
<i>Integration</i>	
<i>Identified Health Behaviors</i>	
<i>Community Driven</i>	
Barriers	
<i>The Unmet Expectations of Peers</i>	
<i>Monitoring and Evaluation</i>	
<i>Diffuse Responsibilities</i>	
Implications for Practice	
Implications for Carolina for Kibera	
Recommendations for Carolina for Kibera	
Discussion of Limitations and Challenges to Research	
Opportunity for Further Study	
Conclusion.....	67
Appendix A.....	68
Appendix B.....	71
Bibliography.....	77

List of Figures

Figure 1: Map of Kibera in relation to Nairobi and Kenya

Figure 2: Map of the Villages of Kibera

List of Tables

Table 1: Context of First Sexual Experience, By Sex

Table 2: Ever Use of Family Planning Methods, By Sex

Table 3: Interviews Conducted

Table 4: Focus Groups Conducted

Table 5: Description of Active and Inactive PYEs

Table 6: September 2011 Monthly Work Plan

Table 7: Barriers to the Implementation of Activities

Table 8: Demonstrated Benefits to Participation (Beyond Salary)

Table 9: Contextual Factors Which Impact Program Implementation

Table 10: Implications for Practice

Acknowledgements

I would like to extend my gratitude to my committee. Thank you to Kim Chapman-Page, Sandra Canfield, and Kate Whetten for their guidance, time and energy and for being inspirational individuals in unique and important ways. It is both encouraging and humbling to work with individuals who understand my passion for global health – who see the world with a similar curiosity and have something to show for it.

Thank you to the staff of Carolina for Kibera, both in the US and in Kenya, especially the SRH staff. Asanteni for being gracious hosts, patient tour guides, willing collaborators, and for teaching me about leadership, commitment, and compassion. You are all living examples of ‘sacrificing for success’.

Finally, a heart-felt shout out to the three groups of people that truly contributed most to my success in writing this paper and completing the program – my buddies from the cohort, the proprietors of the coffee shops in the greater Chapel Hill area, and my remarkable family.

This paper is for the people of Kibera, who are etched permanently on my life’s path and especially for the peer youth educators who give more than most adolescents I have ever met to improve the welfare of their friends, neighbors, and fellow Kiberans. Thank you for taking me to your places, showing me around, and letting me have a glimpse of your life. You have taught me more than you know about friendship, sacrifice, and hard-work. One Kiberan youth I interviewed summed up my Kibera experience best when he said:

“Before I came to Kibera I thought it was a place for poor people, but when I arrived I found that although the roofs were dusty, the brains under the roofs were good.”

Introduction

Intertwined with high profile issues like HIV/AIDS, unwanted pregnancies, and female empowerment, sexual and reproductive health of adolescents in low income countries is the cornerstone of organizations, international efforts, and academic debate¹. Youth are vulnerable to poor sexual and reproductive health outcomes including infectious diseases and the mortality and morbidity associated with giving birth at an early age and unsafe abortions (Price and Knibbs, 2009). This topic is of special concern in sub-Saharan Africa, where high incidences of HIV further endanger sexual health outcomes (Kirby, Laris, and Rolleri, 2007; Klepp, Fisher, and Kaaya, 2008; Hayes, et.al., 2005). Youth in this area of the world, especially young women, are at the greatest risk of contracting HIV. Over half of the new infections in Africa occur in those 15-24. (Kabiru, et.al., 2010; Visser, 2007). Specifically in Kenya, 6.5% of women in this age group are HIV positive according to UNAIDS (Ringheim and Gribble, 2010). The first prevention measures implemented as a result of the HIV/AIDS pandemic were primarily the use of education and exposure to correct information. A shift to horizontal, or peer-to-peer communication models, and community-led programming emerged after the relative failure of these efforts to effectively control HIV (Dickenson, 2009). Central to improving the health of adolescents worldwide is an understanding that social structures, cultural beliefs, and peer relationships all contribute to the health behavior of this age group (Norr, et.al, 2004; Kim and Free, 2008).

One commonly used intervention within adolescent sexual health promotion is the peer education model (Agha and Van Rossem, 2004). Peer education, broadly, uses trained peers as the key implementers of the program. To meet program objectives, trained peers mobilize the

¹ Throughout this study, the terms adolescent and youth refer to individuals age 10-24, unless otherwise noted.

initiatives through interaction with their peers. The objectives vary among interventions and generally include providing moral support, information, and targeted health education in an effort to disseminate knowledge and in some cases to induce subsequent behavior change (Alcock, et.al., 2009). Peer education is used throughout health programming, especially programming related to HIV. In 2001, the United Nations showed commitment to this strategic use of peer education and presented it as an effective prevention measure for this age group (United Nations, 2001). Widely popular and assumed to be effective, peer education provides an intervention aimed at the societal level in a way that utilizes the impact and importance of adolescent peer relationships (UNAIDS, 1999b). However, there is little consensus among implementing organizations about exactly how to apply this model leading to wide variety in the construction and implementation of peer education programs. Organizations routinely modify peer education to match institutional capacity and specific objectives (Turner and Shepherd, 1999). Additionally, an organization's ability to tailor the program to the particular context in which the organization operates is argued to contribute significantly to program success, but is rarely explored (Campbell and MacPhail, 2002).

This paper attempts to illuminate the experience of one organization, Carolina for Kibera, in the format of a case study. Unlike other programs previously evaluated, this particular program aims to target an entire diverse and dynamic cohort of adolescents rather than a defined population (i.e. commercial sex workers) or in a closed environment (i.e. a school). By understanding how an organization with institutional objectives and operating with considerable contextual constrictions adapted this model, other implementers can gain insight from the successes and shortcomings of Carolina for Kibera. This paper is not designed to assess the effectiveness of the program or the peer educator model but instead to provide an in-depth discussion of the logistics, the benefits and barriers to implementation, and the contextual

issues that come into play for one program. Peer education has a wide potential for the promotion of adolescent sexual health, both within Carolina for Kibera and globally, and this case study can improve both the academic and organizational understanding of the approach.

This paper primarily aims to answer the following questions:

- 1) How is the peer educator model at CFK implemented?
- 2) What are some of the benefits and barriers to this model in the context of both CFK and Kibera?

Background

Sexual Health of Adolescents in Sub-Saharan Africa

Importantly for Kenya, and many of the surrounding countries, about half of the current population is under the age of 15 (CIA World Factbook, 2011). The sexual health of adolescents in sub-Saharan Africa is of great concern because of the related disease and family planning implications. The burden of disease associated with sexual health includes HIV, other STIs, abortion and maternal health complications, and related consequences. Because adolescents are often sexually active at an early age (both by choice and because of contextual factors), sexual health and related health decisions are consequential (Hayes, et. al., 2005). Socially, sexual health is complicated by issues of unwanted pregnancies, early marriage, gender based violence, and transactional sex. Multiple and concurrent partnerships along with unprotected sex are common, even though these same adolescents generally understand the transmission routes of HIV (Miller, et. al., 2008; Visser, 2007). Institutional policies as well as attitudes of authority figures like parents, teachers, and physicians can be hostile and judgmental, and present a barrier to adolescents accessing appropriate and correct information (Koronya, 2005).

Youth are both the highest incidence of new cases of HIV in Africa and also an opportunity for intervention (Visser, 2007). Sub-Saharan Africa represents the majority of cases of HIV. About 2.7 million adolescents age 15-24 are currently living with the disease and the most significant mode of transmission is through heterosexual relationships. Importantly, women in this age group are three times more likely to contract the disease as men (UNICEF, 2011). The prioritization of health information and related services for this age group is warranted.

The Peer Educator Model

Peer education generally refers to a member of a group attempting to administer to another in the same group, which will serve as the definition of peer education for the purposes of this paper (Miller, et. al., 2008). Implementing organizations use the peer education strategy in a diverse set of health interventions, varying what is meant by the terms 'peer' and 'education'. Peer education works in both behavior change and information exchange initiatives, depending on the goal of the program. Importantly, this model builds on affecting change at the individual level and approaches at the community level by attempting to change norms and expectations among groups (UNAIDS, 1999b).

For example, peer education can be used for a specific population. One study in Botswana used groups of women convened in their workplaces. Over the course of ten weeks, the women attended weekly sessions on HIV prevention, including safer sex practices, and related knowledge led by a peer selected from amongst the group. At the end of the intervention, there was a significant increase in knowledge in the intervention group and an increase in condom use, demonstrating the efficacy of peer educators (Norr, et.al., 2004). In another example, in Uganda, the intervention targeted street youth. The peers were former street youth nominated by the target group themselves. The peer leaders served as role models and focused on integrating HIV prevention taught by these peers into already existing NGO programming. The intervention included a variety of activities, including seminars, dramas, and interactive one-on-one sessions. The study found that the target group actively sought information from the peer leaders and these individuals quickly became respected members of the community, although health outcomes were not measured (Mitchell, Nyakake, and Oling, 2007). These are just two of the many examples of the peer model used in HIV prevention.

Carolina for Kibera and Study Setting

Carolina for Kibera (CFK) was established in 2001 with the stated goal of addressing the needs of Kibera through community-based development. CFK works in Kibera, the largest slum in East Africa, located in Nairobi, Kenya (see Figure 1). Kibera is an urban informal settlement that is about three miles from the city center. The population figure is disputed, and estimates range from 170,000 to a million people, all living within two square kilometers, or the size of New York's Central Park (Matheka and Erulkar, 2007). Kibera is split into twelve or thirteen 'villages', as shown in the map in Figure 2.

As in most urban slums, the population is diverse and comprises an assortment of the tribes of Kenya. Individuals come to Kibera for a variety of reasons, from cheap housing to the accessibility of casual labor, or to increase their chances of finding work in the capital city of Nairobi. The population is transient, with individuals moving in and out of Kibera as well as within as opportunities come and go. Healthcare, education, and sanitation services, when available, are informal and largely provided by NGOs and community initiatives. The average person makes a little more than a dollar a day, and the incidence of HIV is estimated anywhere between 10-25% (Carolina for Kibera, 2011).

With a contentious history fueled by uncertain land ownership, scarce service provision, and close proximity of diverse ethnic groups, security is often an issue. Kibera is perceived by outsiders as dangerous, a reputation not helped by the outbreak of post-election violence in 2009 which drew global attention. Because of the great need of Kibera, there are a significant number of organizations that work within it. Carolina for Kibera is one of the larger initiatives and is well known by community members.

Adolescent sexual and reproductive health is a central issue in Kibera. Kabiru and colleagues show that those that grew up in the informal settlements in Nairobi become sexually

active on average five years earlier than their peers who grew up in other parts of the city. The prevalence of HIV was three times the national average of Kenya in these areas of Nairobi (Kabiru, et.al., 2010). One survey of 2,000 randomly selected households with adolescents in Kibera provides a rare look into the diversity of this population and reveals the gravity of the need for sexual and reproductive health services and information. Adolescents described Kibera as dangerous and 60% of girls reported regularly feeling scared that they will be raped. This survey showed that a majority of the population is sexually active. Notably as seen in the Table 1 below, 43.3% of girls reported that they were coerced into sex during their first sexual encounter. This study also finds the presence of early marriage, unwanted pregnancies, and misinformation about HIV, as well as the unmet need for voluntary testing and counseling centers (VCT). As seen in Table 2, contraceptives of many different types are not widely used. This study, which was conducted in 2006 with the support of CFK and the inclusion of some of their associated peer educators, clearly shows the need for reproductive health services and information (Erulkar and Matheka, 2007).

Table 1: Context of First Sexual Experience, By Sex

	Boy (n=260)	Girls (n=369)
“Wantedness” of first sex		
Wanted first sex	61.3	33.5***
Did not want first sex	9.6	34.2
Was undecided	29.1	32.3
Motivation for first sex		
To show love	48.0	42.9
Curiosity	72.0***	46.1
Partner insisted/ would not take ‘no’ for an answer	13.1	34.9***
Threatened	0.5	5.9***
Promised money/gifts	1.6	3.7
Physically forced	0.5	6.7***
<i>Any form of coercion (insistence, threats, money, force)</i>	14.9	43.3

*Differences between groups significant at * p<0.05; **p<0.01; ***p<0.001*

Note: Reprinted from “Adolescence in the Kibera Slums of Nairobi, Kenya”. by A. Erulkar and J. Matheka, 2007. Population Council.

Table 2: Ever Use of Family Planning Methods, By Sex

	Boy (n=260)	Girls (n=369)
<i>Ever used a family planning method</i>	53.1	56.4
Pills	1.3	16.7***
IUCD	0.5	5.9***
Injectable/Depo	1.6	19.0***
Male condom	50.4***	37.4
Female condom	1.1	5.3***
Norplant	0.5	4.4***
Emergency contraceptives	0.0	4.1***
Safe days	3.5	9.9***

*Differences between groups significant at * $p<0.05$; ** $p<0.01$; *** $p<0.001$*

**Respondents were read a list of methods and asked if they had heard about particular methods. Therefore, these are probed responses and may be an overestimate of actual knowledge levels.*

Note: Reprinted from “Adolescence in the Kibera Slums of Nairobi, Kenya”. by A. Erulkar and J. Matheka, 2007. Population Council.

Established by a University of North Carolina student, a youth leader, and a nurse in Kenya, CFK began by using soccer as a tool for youth leadership and community engagement in 2001. The sports initiative was paired with a small health clinic at the outset of the organization provide health services to the community. The soccer program and the clinic remain central programs. Since then, CFK has grown tremendously into an internationally recognized organization, expanding its programming and reaching over 55,000 community members annually. Throughout its expansion, CFK has remained focused on youth development through community-led development. CFK employs almost exclusively Kenyan staff with the exception of one American staff person and offices are centrally located inside of the slum to maintain continuous contact and interaction with the community.

The current initiatives encompass diverse issue areas and are still growing. The Tabitha Clinic has grown into a three story structure that employs full-time medical staff and serves

upward of 40,000 patients a year with quality care. It also has an important partnership with the U.S. Centers for Disease Control and Prevention, which provides funding, resources, and increased credibility. In addition to the two inaugural programs, Taka ni Pato is a recycling and entrepreneurship project that conducts community clean-ups and allows participants to make money through recycling. The Angaza program is the newest initiative and provides needs-based scholarships to students attending primary, secondary, and university level schooling. Binti Pamoja, or Daughters United, is a large initiative that works towards girl empowerment.

Run as part of the CFK health initiatives and working jointly with the clinic is the sexual reproductive health (SRH) program. Broadly, the SRH program was created in 2006 and has operated for the past five years, with the primary supporting grant from the Planned Parenthood Federation of America – International. In an effort to integrate existing sexual health programming occurring throughout CFK into one program and expand related services, the SRH program was created. The target population for this program is youth ages 10-24 living in the whole of Kibera, although for the past year the target area has focused on the two villages immediately around the main offices in an effort to maximize impact by concentrating efforts. Fitting with CFK's organizational agenda of creating youth leaders and the demonstrated need of improved youth-centered services and information within Kibera, CFK decided to use the peer educator model. Generally, the SRH program is designed to contribute to the reduction of HIV/STI incidence, with a focus on family planning and reproductive health issues. The program aims to change both attitudes and practices in an effort to improve health outcomes through services, access to information, and peer-to-peer relationships. Activities conducted over the past five years included a range of interactive theater productions, school-based clubs, VCT centers, and one-on-one counseling sessions. Also included in the SRH program, but not

necessarily provided directly by the peer educators themselves, are family planning services and commodities, emergency contraceptives, and post-abortive care.



Figure 1: Map of Kibera in relation to Nairobi and Kenya.

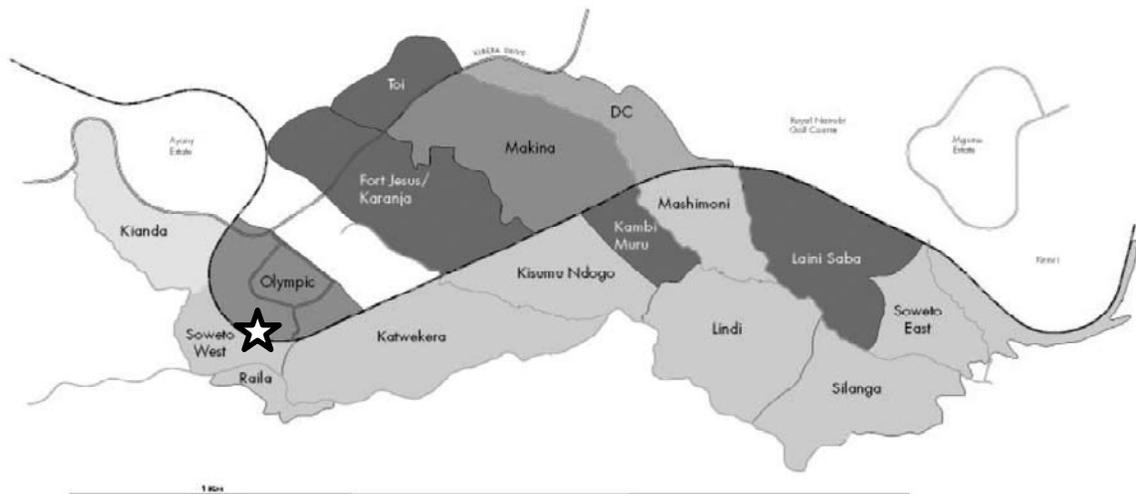


Figure 2: Map of the Villages of Kibera. The star denotes the main office of CFK. Reprinted from "Adolescence in the Kibera Slums of Nairobi, Kenya." A. Erulkar and J. Matheka, 2007. Population Council.

Review of Literature

The peer education literature draws from a variety of disciplines, including health education, social capital, cultural anthropology, and health behavior. The peer education model is used to communicate information and encourage behavior change in regards to several health related topic areas, such as HIV/AIDS and substance abuse, each of which has its own set of literature. For the purpose of this paper, the most relevant literature is that directly around the use of peer education in programs to change health behavior or to disseminate health information. The literature on this topic varies widely in both scope and rigor. The literature ranges from discussions on the theoretical underpinnings of peer education to the specific efficacy of a particular program, although the quality of some of this research is arguable. In a recent meta-analysis of peer education used for HIV prevention in developing countries in 2009, of thirty studies identified as rigorous only four of these targeted youth, three of which were in Africa (Medley, Kennedy, O'Reilly, and Sweat, 2009). This shows the lack of literature on the peer educator programs for adolescents like at CFK. The existing literature serves as a general background.

Theoretical Frameworks behind Peer Education

The key theoretical literature starts in the early 1980s and appears to end in the late 1990's, after which the literature focused on studying the efficacy and success of specific interventions. The peer education model is centered on the assumption that important health decisions and attitudes are influenced and shaped by social beliefs, instead of solely on individual rational choice. This is supported by the evidence that an individual's knowledge may not be correlated to behavior and the acknowledgement that social structures and context impact health decision making (Parker, 2004; UNAIDS, 1999a). Therefore the literature

consulted focuses on those theories that emphasize social and horizontal methods of health behavior change and community-based interventions. There are a collection of social theories that are cited in the theoretical framework for peer education. Among these, there are a few that stand out as most applicable to the case study at hand.

The first theory is diffusion of innovations. This theory, also known in its earlier stages as communication of innovations theory, explains how different innovations are adopted by communities over time (Rogers, 1983). While this theory can be interpreted at the individual level, it is often cited in reference to the uptake of new trends and behaviors at the societal level. This theory argues that specific individuals within communities adopt new innovations quicker and act as change agents (Dickinson, 2009). These change agents, also thought of in the literature as opinion leaders, can be roughly compared to peer educators. It is important to note that throughout the literature and programming, some interventions distinguish between opinion leaders and peer educators. Opinion leaders are usually of higher status than those they are communicating with (Turner and Shepherd, 1999). The theory goes on to argue that individuals seek out the leaders as influential individuals in the community. When the opinion leaders, or peer educators in this case, endorse certain behaviors, others are influenced to follow and eventually establish a new norm (UNAIDS, 1999b).

A second set of theories are centered on the concepts of social identity and role theory. Social identity theory argues that there are factors pertaining to one's social identity that construct health behaviors. Some argue that these social identities are collectively formed and negotiated (Campbell and MacPhail, 2002). This set of theories contrasts with the literature on health decision-making at the individual level, arguing that individual rational choice is not a satisfactory explanation for health behavior. It also argues that programs should shift away from information-based health education to participatory health programs, such as those programs

using peer education (Beeker, Guenther-Gray, and Raj, 1998). Closely related is role theory, which is based on the concept of societal roles and related expectations. This theory assumes that the peer will rise to the occasion of the roles of tutor and leader. Additionally, because of similar social identities peers are better equipped to communicate to each other. Through modeling the behavior and continued contact, peers can be relatable role models that exemplify new behaviors (Turner and Shepherd, 1999).

Finally, social learning theory, also known as the social cognitive theory, can be used to justify the use of peer educators (Milburn, 1995; Miller, et. al., 2008). In a review of 84 curriculum based sex-education programs for adolescents worldwide, over half of the programs cited social learning theory as the basis for the program (Kirby, et al., 2007). Social learning theory is based on the work of Bandura and colleagues who emphasized that modeling is an important part of the learning process (Bandura, 1977). This theory argues that individuals use each other to learn new behaviors (UNAIDS, 1999a). The extent to which the behavior is adapted depends on how credible the role models are as well as how empowered the individual feels, specifically in terms of self-efficacy to adopt a behavior (Turner and Shepherd, 1999).

Overall, theory provides a broad framework for health interventions. Turner and Shepherd argue that the peer education model is not based on any sort of theory, and instead it is a “method in search of a theory “(Turner and Shepherd, 1999). Although one review of 83 programs shows that 84% could precisely name the theory that the program was based on, there is still not a consensus on the theoretical basis for peer education (Kirby, et al., 2007). Programs that employ the peer educator model vary greatly and a lack of a concise and consistent definition of peer education is widely acknowledged in the literature. Because the model functions differently things in each study, results of evaluations are difficult to generalize making it difficult to identify what works (Shiner, 1999). When studying and applying the

literature, careful attention must be made to how exactly peer educators are employed as a model in order to determine the relevance to the discussion or programming matter at hand.

Identifying Peer Education as a Strategy for Health Promotion

Because the theories behind peer education provide only a generalized framework for the use in programming, practical applications require more exact definition and study of proven results (Milburn, 1995). The literature aimed at evaluating HIV related peer education programs in Africa primarily originate from South Africa and largely involves models implemented in a specific context or with defined target groups. The use of peer educators is supported by the literature on how youth learn new information, seek support, and adapt behaviors as well as the contribution of social norms and expectations on these actions (UNAIDS, 1999a). While peer education can change an individual's knowledge or attitude, it also can create change at the societal level by shifting norms and providing an opportunity for collective action (Medley, et al., 2009). The literature emphasizes participatory development and horizontal communication, which denotes a dialogue between similar individuals and uses individuals as the change agent rather than as targets of change. It also emphasizes face-to-face communication and personal interaction (Dickenson, 2009). Peer education can provide a forum in which peers can discuss new behavioral possibilities in their own language and within the appropriate context and in this way move from individual opinions to a group integration of new behaviors (Campbell and Macphail, 2002). This is a shift away from the didactic, professional teacher model and emphasizes participatory learning (Shiner, 1999).

There are a few major assumptions about youth behavior that drive the use of peers in health education programming. For example, youth learn information about sexual behavior from each other because they believe their peers to be a credible source of information (Turner and Shepherd, 1999; Visser, 2007; Mukoma, 2001). A youth's perception of friends' sexual

behavior is identified as predicting adolescent sexual behavior. For instance, the number of close friends who are perceived to use contraceptives is a good indicator of whether the individual will use contraceptives (Milburn, 1995). A study in Kenya confirmed this, and conversely showed that adolescents who had more peers engaging in risky behaviors were more likely to be sexually active at an earlier age (Kabiru, 2010). Youth are also more willing to communicate with individuals their own age about this type of information (Kinsman, et al., 2001; Campbell and MacPhail; Visser, 2007). Young people view each other as partners in discussing solutions and participation in this decision-making can contribute to ownership in individual health behaviors. In one study of peer workers in a Mumbai slum, the evaluation found that the peer educator felt that a friendship with the person they were working with contributed to their success. Additionally, the peer educator reported that the program was successful because they were perceived as credible and knowledgeable, in keeping with other literature that argues that these are two reasons that peer education models work (Alcock, et.al., 2009).

Another argument for the use of peer educators in the literature is that it may be empowering to the youth educator themselves (Medley, et al., 2009; Pearlman, Camburg, Wallace, Symons and Finison, 2002). However, the experience of the peer youth educator is not a major focus of the literature. The existing literature shows that there is a balance in the programming between developing the leaders and delivering the programs. Some benefits for the peer can include empowerment, career development, material incentives, and personal support (Shiner, 1999). The peer educators themselves can gain skills in conflict resolution, presentation, and collaboration, along with the chance to present themselves as a positive role model (Milburn, 1995). One study of a successful program that employed peer educators with street children in Uganda found that the peers became strong role model figures and that the

high expectations of their exemplary behavior created a sense of status and responsibility. This same study showed that the peers valued the life skills and leadership training above the information on sexual health topics, showing a prioritization of future employment over sexual health (Mitchell, Nyakake, and Oling, 2007). Another study out of Great Britain found that the involvement in the peer program positively impacted overall health behavior, even beyond the subject matter being taught, of the peers themselves (Ochieng, 2003). Peer educators benefit from their involvement in a variety of ways providing another rationale for the use of this model.

Empirical Evidence

Peer education for adolescents has attained almost complete acceptance as a clear choice for health education and behavior change (UNICEF, 2004; UNAIDS, 2001; Miller, 2008). However, results of the evaluations of peer-led interventions have been mixed. Generally, evaluations aim to illuminate best-practice models and to understand adolescent sexual health, specifically decision-making processes and subsequent behavioral choices (Agha and van Rossem, 2004; Mbulo et. al, 2007). Very few of the evaluations include HIV/STI incidence as the measured outcome or use the method of randomized control trials (UNAIDS, 1999b). Most of the evaluations are done in a specific context, such as in schools, or with a defined population rather than in a dynamic and open community such as in this paper. Because of the diversity of programs, it is difficult to generalize about the effectiveness of peer educators. Additionally, the lack of rigorous evaluations means that most of the discussion about peer education happens in grey areas such as anecdotal studies. Authors of recent literature reviews and meta-analysis find that only a handful of programs qualify as rigorous in terms of evaluation methodology or analysis and this limits the ability to draw concrete conclusions (Medley, et al., 2009; Kirby, et al., 2007). Notably, the literature about what constitutes successful programs has not

significantly changed over the last twenty years. This indicates both that the literature from the 1990s is still relevant as well as that the discussion of best-practices for peer education is not finished.

Yet there are trends that appear within this literature that identify successful peer educator programs and reoccurring reasons for using peer educators. Reviews of existing literature have aimed to find cross-cutting successful programmatic elements or themes. Medley and colleagues completed a meta-analysis of peer education interventions for HIV prevention in low income countries and found mixed results. Among a combined 30 studies, there was a moderate but positive statistically significant effect on HIV knowledge but no significant effect on STI infection (Medley, et al., 2009). Most evaluations find that peer models are effective at impacting knowledge, self-efficacy, and attitudes about sexual behavior (Kim and Free, 2008; Pearlman, et.al., 2002).

Another cited reason for using peer educators is because it is a cost-effective way to do prevention (Milburn, 1995). This is based on the assumption that the peers do not need to be paid as much as professionals and the assumption that they are treated as volunteers, rather than staff. In a cost-effectiveness study of several HIV prevention models in Chad, it was found that peer group education had the lowest cost per infection avoided. This was compared to other popular interventions like voluntary testing and counseling. Interestingly, peer group education for targeted groups, like sex workers and men at high risk, was more cost effective than the same intervention for youth (Hutton, Wyss, and N'Diekhhor, 2003).

On the other hand, the empirical literature shows potential limitations to the peer educator models. These reasons include difficulty changing sexual behaviors despite the use of concentrated behavioral interventions (Klepp, Flisher, and Kaaya, 2008). For example in the work by Medley and colleagues, the effect on condom use varied by target group and only one

of three evaluations of youth targeted programs found a positive effect on behavior (Medley et al., 2009). One review found no proven efficacy of peer-led sexual education programs for any of the targeted behavioral outcomes (Kim and Free, 2008). A study of a program in Zambia similar to the CFK program, found that the program had positive impacts on condom use and partner reduction as measured immediately after the program ended but that this significant impact was not sustained six months after program completion (Agha and van Rossem, 2004). Furthermore, this subset of the literature argues that the majority of analysis does not concern itself appropriately with the unplanned interaction of context. One extensive program in South Africa had limited success because of the interplay of such contextual factors as social relations, constraints of poverty, and a selection of power relationships. These studies indicate that programs would be greatly improved with a clear understanding of the conceptual foundations of the model, and an acknowledgement that peer education must fit into the broad scope of prevention measures and into the context of the audience itself (Campbell, 2003).

Few studies focus on adolescent peer education for sexual health, and even less in Kenya. In a study done with Kenyatta University students in Nairobi, Kenya, after two years of the use of peer educators for the promotion of sexual health and HIV awareness, no significant change in behavior was found, including abstinence and the number of partners. This same study found small but significant changes in attitudes around condom use and a large increase in HIV testing (Miller, et al., 2008). One report done on peer educators from NGOs across Nairobi by the Planned Parenthood Foundation of America looked at the views of the peer educators on sexual education and the information that they pass on. Each NGO trained their peers differently, which impacted their attitude about which topics they were comfortable with presenting. Even when trained on the topic, the peer educators avoided topics like family and community values, sexual orientation, and marriage. The same survey showed that the biggest

barriers to disseminating information were lack of funds and lack of educational materials (Koronya, 2005). It is important to expand the relevant literature in Kenya and in large urban settlements such as Kibera in order to determine best practices in these types of settings.

Contribution to the Literature

Organizations globally, such as CFK, choose to employ the use of peer educators predominantly for operational or contextual reasons, but also because of the assumed effectiveness the model to meet program objectives. CFK implemented this model because it fit with their organizational agenda and the context of Kibera. Because the organization did not place enough emphasis on evaluating the impact in the community or assessing the performance of the model in meeting program objectives, this is not an effectiveness study. The paper serves as a case study of one organization's attempt to adapt this model to the dynamic community it serves and to keep the model in line with organizational priorities and capabilities. Special attention is given to how logistical and contextual constraints impacted program planning and implementation. Attention to context and the organizational ability to adapt are shown in the literature to be driving forces of success (Campbell and MacPhail, 2002). The focus on the program's ability to address the contextual needs of Kibera and a thorough exploration of program implementation, rather than a focus on specific outcomes or indicators, distinguishes this analysis from existing literature.

Methods

Study Design

The primary methodology employed was a form of triangulation, using qualitative structured interviews and focus groups with stakeholders, researcher participation and observation, and document review. Multiple sources of data were necessary because of the lack of comprehensive quantitative tracking of the five years of program implementation as well as the lack of staff continuity. Methods triangulation, used in this case study, is widely accepted to add validity to qualitative methods studies such as this one (Patton, 1999). Triangulation added value to the conclusions of the qualitative analysis by bolstering support for the themes and adding context to the results (Bechange, 2010). The research took place from May 2011 to August 2011. The research protocol was created by the primary researcher with significant input from CFK staff.

Ethical Approval

Ethical approval for this study was obtained through the Duke University Graduate School Institutional Review Board. Each participant in the interviews and focus groups was read oral consent forms which were either signed by the participant or by the moderator on behalf of the participants in the case of the focus groups (See Appendix A). Every participant was at least 18 years of age which is the age of consent in Kenya and therefore able to consent to be a study participant. No incentives were given to any participants of the interviews or to the translator. Refreshments were served at the focus groups but no other incentives were given. Kenyan ethical review was not required.

Interviews and Focus Groups

All the interviews were conducted in English and followed an interview guide. They were informal in nature, allowing the conversation to flow from idea to idea (see Appendix B). The

interview guides were created iteratively as the research progressed and data was collected with suggestions from the department head and the program officer. The general timeline of the interviews and focus groups was constructed to first establish a general understanding of the program, followed by interviews pertaining to program activities conducted both by the PYEs and the rest of the SRH program, followed lastly by interviews that establish the context surrounding the program. The sequence was established this way to allow for an understanding first of the general program description and then to move forward to the more subjective portion of the project. All of the interviews and focus groups were recorded using a voice recorder. All of the interviews and focus groups were conducted in English and without the support of a translator, with the exception of the focus groups with the participants and the interviews with the parents. The focus groups and interviews were conducted on CFK property. Tables 3 and 4 present the details on both the interviews and the focus groups.

The population that participated in this study was the staff of CFK associated with the SRH program, the PYEs themselves, and a selection of community members.

SRH Staff

SRH staff, defined as full-time salaried CFK employees involved with SRH, was interviewed. This included one program officer, one head of health department, one HTC counselor, and one reproductive health nursing officer. For the staff category, no selection method was used because every involved staff member was included in the study. The number of interviews conducted with each staff member was determined by the researcher as the number necessary to meet the study objectives. Interviews were set as necessary with the staff members. These staff members, in particular the program officer and department head, contributed to the content, frequency and in some cases the individuals selected to participate, in the subsequent interviews and focus groups with the remaining participants of the study. The

purpose of the staff interviews was to understand the programming issues, contextual modification, and leadership structure.

Peer Youth Educators

For the interviews, purposive sampling of both active and inactive PYEs was used. This was to ensure gender distribution and a variety in response. The purpose of the interviews of PYEs was to understand the perspective of both active and inactive peer educators. In the case of inactive PYEs, two had left for personal reasons and one had left to take a paid staff position in a different CFK program and was selected for this reason. For the focus groups, all active PYEs were invited to attend the first focus group that focused on the PYE experience. For the second focus group, which focused on the specific activities conducted and program logistics, the content was considered significantly different and therefore all PYEs, even those who participated in the first focus group, were invited to attend. The sampling for the focus groups was convenience for both sessions.

Community Members

Two sets of community members, mothers of PYEs and beneficiaries of the program, were included in the study. Mothers of PYEs were selected by convenience sampling. The purpose of meeting with the mothers was to add to the understanding of the SRH program in the community. The beneficiaries of the program were defined as individuals who had at participated in a SRH event at least once. They were identified by one PYE who created a list of ten names to reflect diversity in both gender and tribe. This list was approved by the program officer. This group of ten was invited to the focus group and four attended. Individuals were selected by the peer educator based on both knowing a peer educator, known participation in the program activities, and availability on the dates of the focus group and interviews. Those individuals who did not attend the focus group but remained on the list were asked to

participate in the interviews. Understanding the biased and limited scope of these perspectives, the purpose of including these individuals in the interviews and focus groups was to get feedback about the activity and to understand the community perspective in general. Because this was not an effectiveness study of the program, questions about program beneficiaries personal behavior and understanding of HIV and sexual health issues were not asked.

Table 3: Interviews Conducted, 18 Total

Participant	Selection Method	Number of Interviews per Individual	Individuals Interviewed	Time (in hrs)	Facilitator
Department Head	N/A	2	1	3	Researcher
Program Officer	N/A	3	1	4.5	Researcher
HTC Counselor	N/A	2	1	2	Researcher
RH Nursing Officer	N/A	1	1	1	Researcher
PYE - Active	Purposive	1	2	2	Researcher
PYE - Inactive	Purposive	1	3	3	Researcher
Beneficiary	Convenience	1	3	3	Researcher
Mothers of PYE	Purposive	1	2	1.25	Researcher and Translator

Table 4: Focus Groups Conducted, 3 Total

Participants	Selection Method	Number of Males	Number of Females	Time (in hrs)	Facilitator
Beneficiary	Convenience	2	2	1 hr	Researcher and Translator
PYE – Active	Convenience	4	4	2 hr	Researcher
PYE - Active	Convenience	7	5	1.5 hr	Researcher

Document Review

The documents that existed were made available to the researcher by CFK. These documents were an assortment of tracking tools for specific activities, meeting agendas, grant related reports, and training manuals from the first five years of the program. Several

documents were unaccounted for and there was not a complete set of expected materials. The provided documents were used in the document review.

Researcher Observation and Participation

Beyond the interviews and focus groups, the researcher participated in program activities, got acquainted with the community, observed meetings and had casual conversations undocumented here. These observations, while informal, supplement the data collected from the formal interviews and focus groups. The events that the researcher participated in were selected purposely to give the broadest understanding of all of the offered activities. In addition to SRH activities, the researcher participated in community-wide events, other CFK activities under different programs, and staff meetings at multiple levels.

Data Analysis

The interviews and focus groups transcripts were fully transcribed by the researcher. The transcripts were then coded thematically based on the context of the responses. Response categories were combined across interviews to determine respondent themes (Ryan and Bernard, 2003; Guest, MacQueen, and Namey, 2011). The personal observations of the researcher and the documentation collected acted as supporting data and were not included in the primary analysis.

Results

The findings of the study are presented in three parts. The first presents a program description and how the peer educator model is used and implemented at CFK. It includes sections on the actions taken to prepare for the program, the description of the model at CFK, and the basic logistics for how the program runs. The second is the findings of the study aimed at assessing organizational and operational issues. The third and final section presents themes about the context of Kibera and how the program has adapted to suit its environment.

Preliminary Planning and Program Development

Before the initiation of the SRH program at CFK in 2006, reproductive health initiatives were already occurring across a few CFK programs. The sports program, Daughters United, and the clinic were all implementing activities with the objective of impacting the reproductive health and HIV incidence of the community through both information sharing and encouraging behavior change. These events included training sessions, group discussions, expert talks, and outreaches. Youth volunteers associated with each program acted as the key facilitators, although they were not considered peer educators. At the clinic, care for those who were HIV-positive was offered but there was no formal VCT site. Notably, there were few services offered beyond the informal distribution of contraceptives. From the organizational perspective, the first objective of the creation of the SRH program was to integrate these related functions to one concentrated effort. The second motivation for the creation of the SRH program was to meet an apparent need for related services within the community. At the time there was low uptake of health services and only five quality health service providers in the primary catchment area.

The program wanted to address two angles, the first within CFK to integrate the reproductive services towards different CFK program...Then CFK was having different

programs doing reproductive health information and they never had the services at hand. *Program Officer*

In 2006, CFK applied for and was awarded a five year grant from the Planned Parenthood Federation of America-International (PPFA). This grant was given in one year installments and required yearly reports that allowed for the opportunity to adjust activities, priorities, and objectives on a yearly basis. Reports also included the number of activities held and the amount of contraceptives distributed. Further evaluation efforts, such as impact measurements, were not required by PPFA or CFK.

The granting agency supplied CFK with the funds to conduct a baseline survey in the form of a Knowledge Attitudes and Practices (KAP) survey to guide the initial implementation in 2006. This survey was conducted once in five villages with over 900 youth ages 10-24 and included both quantitative and qualitative measures. This survey was done in an effort to understand adolescents' perception of sexual health issues and to assess how best CFK could provide support and information for that particular age group. Since then, no follow-up study has been conducted. A major theme that came out of the qualitative part of the study was that the youth in Kibera desired services that were geared toward their specific needs. The SRH program has attempted to keep their services "youth-friendly", although this is not clearly defined. The survey also found that almost half of the youth interviewed felt they had absolutely no risk of becoming infected with HIV, although half of this group also indicated they were sexually active. This analysis revealed the presence of homosexual activity along with a significant presence of homophobia, but this topic is largely not included by the SRH program. Lastly, the idea of the peer educator model was presented to the participants, who responded favorably. In addition to the KAP survey, CFK volunteers implementing reproductive health

activities at the time were interviewed. Finally, health facilities within Kibera were consulted to understand how to handle the contraceptive distribution component.

The original impetus behind the use of the peer youth educators was that CFK wanted to maintain a youth-centered approach, in concurrence with their longstanding emphasis on creating youth leaders in Kibera. The use of PYEs was not dictated by the funding agency. Other programs at CFK already used young people as implementers and active volunteers and most of the activities targeted the youth. According to the KAP survey, youth in Kibera suggested that to target the youth better, adolescent friendly programming and services were needed, including the employment of young people by CFK. The program officer, when discussing the start of the peer educator model, states that youth were needed to be an appropriate messenger of information and that the youth have their own way of speaking to each other, as evident in these two excerpts.

Why peer educators? Peer educators were instrumental young people who were to support the young program that was beginning. Ideally the target group was 10 – 24 years so they had to involve equal people within the same range so that they can reach out to people that were the same age. *Program Officer*

A young person in Kibera will have many informations but in their own language. Their own language I mean...the young people will have their own way of talking so as they mingle...they are mostly in groups of children, they end up having their own language. *Program Officer*

CFK believed that beyond fitting its organizational agenda, this was an effective and contextually appropriate model for the SRH program in Kibera. CFK planned to meet its objectives of information sharing and behavior change. The behavior change is assumed to be a result of the access to information, services, and the peer delivery. The three stated objectives for the grant, at the outset were as follows.

1. Increase skills and knowledge of CFK staff and volunteers to implement and manage HIV/AIDS program and other SRH information and services for adolescents and youth in the Kibera community

2. Increase awareness of HIV/AIDS and other SRH information among adolescents and youth
3. Increase availability of VCT and other HIV/AIDS preventive services

When asked, staff and PYEs stated the objective of the program to be to contribute to the reduction of HIV and STIs, as well as to support reproductive health issues, both through information exchange and behavior change. No formal amendment was made to these objectives in the five years of the program, although the scope, activities, and opportunities for the SRH program have changed during that period of time and associated activities now exist outside of this set of objectives. There is not a consensus about the current program aim, although they certainly extend beyond this set of objectives as laid out in the grant.

Over the last five years, work plans for the program were created annually with stated goals about the completion of a certain number of activities. The number of activities conducted and the amount of commodities distributed were tracked, along with some instances of rough estimates of participation. However, the impact in the community was not measured. Additionally, the catchment area of the program changed during the fourth year of implementation to narrow the population to those in the two closest villages around the CFK offices, Gatwekera and Soweto West (See Figure 2). This decision was made to give a clearer estimate of impact with the understanding that this would be easier to measure in smaller area. This impact has yet to be determined.

The PYE Model at CFK – Educator Description, Recruitment, Training, and Retention

CFK defines “peer” in terms of age, 14-24, and residence in Kibera. While not all of the PYEs have lived their entire lives in the community, they must live in Kibera at the time of taking the position and during the duration of their tenure, and demonstrate an understanding of the community in a personal interview as part of the application process. This shared experience allows the PYEs to connect with the individuals that they work with.

Because I have felt that poverty, I have been in poverty, I want those people not to be there. These are the same things that are affecting my own family...It is something which I know. For example if somebody has not slept without food, like from the United States. Me? I have done that. So if I have seen somebody sleeping without food I am against that. If the cause is not going to school, if the cause is drugs, if the cause is crime, I must help because I have been there. – *Male Peer Youth Educator*

Beyond age and residence within Kibera, the organization attempts to recruit a diverse group of PYES in regard to village of residence, gender, tribe, and background to reflect the diversity of Kibera. There is also a preference for youth who have already completed secondary school, or about the age of 18, so that they are able to commit fully to the program. During the time of this research, there were thirteen active PYEs, although there were a number of previous or inactive PYEs that continue to occasionally participate. Because there is not a defined way of exiting the program, there is some difficulty in determining who is active and who is not. For the purpose of this study, the active PYEs, as determined by the program officer, were invited to participate in the formal interviews and focus groups. The input from the thirteen active PYEs constitutes the results presented here. However, in order to get a larger selection of PYEs for descriptive purposes only, eighteen accessible active and inactive PYEs were interviewed and are represented in the Table 5 below. It is reasonable to assume that the active PYEs are representative of the PYEs in general because they were recruited, trained, and participated in the same program.

Table 5: Description of Active and Inactive PYEs

Average Age	Born in Kibera	Lives with someone other than parent(s)	Recruited in/after 2009	Male
19.16 (18-23)	44.44% (8/18)	44.44% (8/18)	44.44 (8/18)	55.56% (10/18)

The first group of PYEs was recruited in 2006 from existing CFK volunteers in other programs. After a period of time, some of these new PYEs returned to their original program, specifically the Daughters United program. When asked, the current PYEs primarily heard of the program

through one of three channels: attending a SRH event in the community, knowing someone who was involved as a PYE, or seeing a recruitment poster. The last formal recruitment occurred in 2009, during which eight of the current active PYEs were recruited. Whether they joined during a formal recruitment period or not, they were all interviewed and then selected to join the program. During the recruitment there was an effort to diversify the PYEs in terms of both gender and village of residence, in keeping with CFK's emphasis on diversity in participation and interaction. The process is described by the program officer here:

We did poster advertisement which were put outside in the community and it had a timeline to actually have the CVs. So what they were essentially doing is just bringing the CVs and a short story on why do you want to be a peer educator. Then after that we had them called in for an interview. The interview was conducted by four peer educators plus staff, two staffs. *Program Officer*

There was no recruitment done in 2010. Understanding that the grant was coming to a close, program staff indicated that they wanted to take the opportunity to make significant changes to the program as deemed necessary, which included recruiting new PYEs when the program resumed under a different grant in January 2012. Additionally, there was very limited funding to train additional PYEs in 2010. The funding provided by PPFA did not cover the supplemental training of PYEs on topics outside of immediate reproductive health information and training in HIV and, as mentioned before, the current program goes beyond the purview of the PPFA funded objectives.

We have had pressure to recruit more people. But why should we recruit more people if we cannot support them. We need them to be informed. Our key objective is the increase in information and education [of the community]. *Program Officer*

The peers entered into the program with varying amounts of information about CFK, but for the most part PYEs did not have a detailed understanding of CFK, their activities, and the SRH program. The current PYEs either mentioned that they came in through knowing a friend already involved or attending one of the events of the SRH program. Each had their own

motivation for joining the program, but a few trends emerged from the interviews. All five PYEs interviewed individually portrayed a distinct idea about serving their community and frequently mentioned helping the community as the primary reason for joining the program.

I get that interest to join this group because I can help my fellow youths so that they are not involved in drugs or teenage pregnancy. *–Female Peer Youth Educator*

Secondarily, there is a group of three PYEs, all men, who mentioned that in addition to benefiting the youth in the community, they joined the program in order to keep themselves out of trouble.

You see in the slum I didn't want to join these bad companies so I had to join the program to keep myself out. And also to act as ambassador in the community, to change the life of these youths. *–Male Peer Youth Educator*

When PYEs first join the program they go through about three weeks of training. This includes a two week orientation to CFK and all associated activities followed by five days of training on peer education. This peer education training includes information, such as on reproductive health and HIV, skills that govern the peer education work including presentation and counseling skills and tactics in community mobilization that may encourage behavior change, and lastly orientation to the tools that will be used during the activities. This is a one-time training with refresher courses offered at irregular intervals. The most recent training occurred in 2009 after the last recruitment. Throughout the PYEs tenure, they are expected to attend additional training courses. These courses do not follow a specific plan and are attended at convenience to both the PYE and the program in general. Trainings are offered both onsite at CFK and offsite at partnering organizations. There is not a set curriculum or number of courses that the PYEs are expected to attend. Topics of the most recent trainings included value clarification on abortion, nutrition, and family planning.

The length of tenure varies because there is no current plan to exit PYEs out of the program and no set amount of time that they are expected by CFK to serve as a volunteer. The current PYEs had all participated for at least two years, with two serving since program inception in 2006. During the first five years of implementation, one PYE was expelled on disciplinary grounds but the others that left did so for a variety of reasons including obtaining a job, pregnancy, and migration out of Kibera. There is also a cohort of PYEs that are inactive but not phased out of the program, meaning they participate sporadically. There was a growing amount of PYEs for the first two years of the program in 2006-2008 and at one point there were upwards of fifty volunteers. During the first focus group, there was a general consensus that in 2008 there was a large decrease in the active number of PYEs. When asked, the current PYEs believed that most had left because of more lucrative employment opportunities elsewhere. PYEs agreed that retention was difficult was because youth at the typical age of the PYEs are looking to advance themselves, sometimes are responsible for family members, and must support themselves. On the other hand, PYEs staying too long in the program was an issue presented by program staff and is correlated with little motivation, inefficient use of resources and general discontentment. The program staff, along with two PYEs during the second focus group, agreed that the ideal tenure is two years.

Program Activities and Logistics

Activities

The SRH program is guided by an annual work plan that outlines quarterly objectives for each program within CFK, created every year with the consultation of a variety of stakeholders,

including input from the PYEs. The program officer explains this process as “participatory”. The objectives of the quarterly work plans are translated by the peer leaders into a plan for each month that includes quantifiable amount of each type of activity. Table 6 is an example of a monthly plan made by the peer leaders for September 2011. The exact number of the specific activity planned fluctuates depending on the availability of PYEs, organizational obligations, and the number needed to meet existing, and previously missed, targets. The activities vary in scope and in audience. The activities are targeted in subject matter and directed toward the youth, although some events are open to the public. While the number of activities is tracked, results of the activities such as those related to resulting behavior change or service uptake are not monitored. Importantly, no financial incentives are given to community members for participation, excluding the possibility of refreshments.

These activities were created over the past five years to meet the program objectives through information sharing and encouraging behavior change. The activities aim to utilize peer relationships and influence, promotion of available services, and spread of information through both direct dissemination and group discussion. Activities have varied over time, with some activities currently discontinued. Ongoing activities are described in the following section.

Table 6: September 2011 Monthly Work Plan

DATES	TIME	ACTIVITY	VENUE	STAKEHOLDERS	REQUIREMENTS	PROPOSED Objective
19-22/9/2011	10-1PM	CBD-SUPERVISION	IN VILLAGES REPRESENTED	NURSE IN CHARGE AND PEER LEADERS	Timetable available on the supervision	To conduct progress support of CBD clients home visits and monitoring PYE progress on CBD.
23/9/2011	9-1:00pm	CBD-MEETING	CFK- HALL	PEER EDUCATORS with Support from Nursing Officer	NONE	To sensitize address some challenges
21, 23 & 24 th September, 2011	9-12:00pm	Sensitization	GATWEKERA & SOWETO WEST	PEER EDUCATORS & COMMUNITY	IEC- materials , mega phone	To sensitize the community on child immunization and family planning services
24 th September, 2011.	9-2:00pm	Outreach	GATWEKERA & SOWETO WEST	PEER EDUCATORS AND COMMUNITY	IEC materials ,PA address	To conduct immunization to children under five in Soweto W. and Gatwekera
On- going	4-5:30pm but varies with the school	School visit	ST. MICHAEL(Monday/Friday) NAZARENE(Wednesday) CHILDREN OF KIBERA (Tuesday , Thursday)	PEER EDUCATORS	Timetable pinned out and given to peer educators	To reach youths in school with reproductive health services and information
MONDAY to FRIDAY	FLEXIBLE FROM 8-3PM	HEALTH TALK	TABITHA CLINIC	PEER EDUCATORS	Timetable pinned out and given to peer educators	Reaching patients with reproductive health information

School Visits: School visits were created in order to access the students who were not available to attend events during school hours (including Saturdays) and to access a younger demographic. The school visits are conducted by either one or two PYEs. The curriculum used during the school visits is the national peer education curriculum for these types of interactions, *Tuko Pamoja*. This curriculum was designed for the Kenyan setting by Population Council, PATH, and USAID (PATH, 2007). The sessions are designed to be discussion-based. School clubs are constituted by a group of students who elect to join outside of class time. The SRH program currently has working relationships with one secondary and three primary schools. The PYEs are not allowed, by Kenyan law, to hand out any condoms or other contraceptives during these sessions.

Health Talks: The health talks are conducted at the Tabitha clinic in the waiting areas. PYEs are able to sign up for a topic, such as HIV prevention, and a time and give the talks independently. PYE presents the topical information as a prepared speech to those in the waiting areas and then addresses questions. The topics range and may or may not follow PYE-training material.

One-on-One/ CBD: The PYEs were trained on Community Based Distribution (CBD) separately. A CBD-trained PYE is known by their peers to have access to commodities like contraceptives and informational materials, which are kept at the person's house. CBD is handled as another role that the PYE plays, rather than simply an activity. CBD is a program model picked up by CFK within the past two years. Through the CBD activity, adolescents are able to access the commodities and materials, including contraceptives and family planning related information, from the PYE directly. PYEs are expected to create individual relationships with their clients with continuing contact between PYEs and the community. These relationships which are maintained and tracked provide community members with a peer confidant that is able to provide contraceptives, information, and personal counseling.

Forums/Debates: During the forums and debates, schools or select groups of youth are invited to attend. As a group, they are given a position on a controversial topic such as the acceptability of abortion and are expected to come to the event prepared on the topic. The moderator, usually a PYE, then facilitates formal debate. The audience is invited to participate by contributing to a discussion about the topic after the debate. The purpose is to both provide information but also to have a discussion and develop consensus on an issue.

Mobilization /Sensitization: Sensitization and mobilization are similar activities that aim to promote either the program itself or to provide information on a specific health topic through canvassing of the community. During mobilization, PYES go out into Kibera and attempt to

mobilize the community to attend a particular event such as a youth forum by using a megaphone to inform community members on the specific event details. PYEs also perform mobilization efforts for non-SRH activities as well. Sensitization is a similar activity during which the PYEs provide information on a reproductive health topic and refer people to the services that CFK provides namely the VCT sites and the Tabitha Clinic. Accompanying this is relevant topical or event related materials that are distributed.

Beyond the activities that are directly implemented by the PYEs are the services that are provided by the rest of the SRH program. This includes services at the clinic and activities and services provided by the HIV Testing and Counseling (HTC) staff. The services at the clinic include post-abortive care which is provided in part by the reproductive health nurse and HTC services including family planning and access to emergency contraceptives. Additionally, there is a static VCT that is located at the main CFK office which is staffed by two full time HTC counselors and a set of volunteer HTC counselors. Mobile VCTs and related outreaches are also conducted both at CFK-coordinated events and alternating community locations. The mobile services include door-to-door HIV testing and counseling. The PYEs promote these activities by referring clients and advertising the clinic, and also garner feedback about the services from the youth in the community.

Logistics

A single program officer oversees the PYEs and is responsible for carrying out the implementation of the program. This person is ultimately responsible to the head of the health department of CFK. Alongside the program officer, two full time HIV Testing and Counseling (HTC) counselors and one full time reproductive health nurse stationed at the clinic also have purview over the PYEs. The nursing officer supervises and assists the community based distribution activities as well as the clinically based trainings. The HTC counselors facilitate the

mobilization and sensitization associated with HIV prevention, including the door-to-door testing, mobile outreaches, and related trainings. The HTC counselors and RH nurse play a significant role in the oversight of the PYEs, by attending and leading monthly meetings and directly supervising this set of activities.

Amongst the PYEs are two elected peer leaders who act as the liaisons between the PYEs and the program staff. This model was implemented in 2009 when the current program officer took office. When this structure was first implemented, there were four peer leaders but this was reduced to two leaders for reasons that are unclear. Peer leaders are expected to become mentors after their tenure but the responsibilities of the mentor position are largely undefined. Peer leaders are responsible for ensuring that the activities are carried out, with little to no involvement of the full-time staff until after activity completion. This delegation of responsibility to the PYEs is a purposeful decision by the program officer to both reduce the burden of work on the program officer position and allow for the PYEs to gain leadership experience. The peer leaders meet regularly with the program staff and are responsible for the success of activities and the motivation of the PYEs. New peer leaders are elected every quarter.

The delegation of leadership is explained by the program officer here:

So for the activity to take place, the general aspect that I will be playing as the supervisor is just making sure, coordinating that they actually took place. So I don't go directly to the peer educators "hey you guys are having a school visit". No.... My meeting will be with the peer leaders and I will just be making the follow up. – *Program Officer*

PYEs are currently paid 1,000 KSH a month, the equivalent of about 12 US dollars. The stipend is instituted after the PYE has been in the program for six months and is paid for the duration of participation. Additionally, a lunch stipend is given at each of the events that the PYEs lead or attend. This lunch stipend of 100 KSH (about \$1.20) is given regardless of the duration of the activity or time of day that the event is held. When a PYE holds the position of

peer leader, their stipend is supplemented with 3,000 KSH a month as payment for their extra work, adding incentive to be a leader. This supplemental money only applies during the three month duration of office. The staff members that are associated with the program are full-time employees of CFK, with the exception of a collection of volunteer counselors at the VCTs.

Because of the communal atmosphere and integrative model of the larger organization, PYEs are often given responsibilities beyond their defined role within the SRH program. The PYEs are expected to participate in organizational events, volunteer for activities outside their commitment in the SRH program, and generally be available as resources to CFK in a broad sense. This can include activities from participating in research activities conducted by partnering organizations, providing information and tours to guests, and completing miscellaneous tasks for staff members. The commitments of the PYEs outside of the SRH program are not formally documented here but are a noteworthy part of the PYE experience at CFK.

Assessment Findings

The following are the findings of the interview and focus group questions attempting to assess the barriers and benefits to the implementation of the PYE model at CFK. The questions aimed to understand what the program is doing well, what needs improving, and the experience of the PYE. Although the program attempted to incorporate its understanding of the community in its initial planning stages and continues to modify to suit new and changing trends, there are inevitable unforeseen constraints and events that impact the programs ability to maintain fidelity to the original plan. Conversely, unexpected opportunities allow the program to implement new activities or operate differently. Those barriers and benefits, framed as interaction with the context of Kibera, are presented here. From this set of qualitative data, the

following themes emerged regarding implementation issues and how the context of Kibera impacts how the program is able to function.

There are general issues associated with each activity that inhibit the PYEs from successful implementation. These issues were mentioned by the PYEs in both the focus groups and in the individual interviews. Table 6 shows the barriers to implementation that had the highest frequency of repetition. Beyond these general implementation issues, important themes around leadership and decision-making, monitoring and evaluation, and the balance between peer development and peer delivery emerged. Those themes are presented below.

Table 7: Barriers to the Implementation of Activities

Stated Example	Stated Impact on Implementation
Lack of Training	PYEs are uncomfortable giving health talks because of the possibility they might know less than the medical staff
Gender Imbalance in Participation of PYEs	Male PYEs are more likely to participate than female PYEs.
Commodity Shortage	CFK is dependent almost exclusively on government supplied contraceptives.
PYE Follow Through	PYEs do not show up to activities they sign up to participate in

Leadership and Decision-making

The PYEs and the staff accounted two different opinions on the status of leadership and decision-making. During the first focus group it was suggested by one PYE and echoed by two others that the leadership within the SRH program was “poor”. The chief reason presented was unsatisfactory communication between the PYEs and the staff, despite the presence of peer leaders who are supposed to serve as liaisons. The solution provided, a consensus among the PYEs, was that the position of field officer should be added, as in the other CFK programs.

A field officer is someone who is in charge of the programs activities and be the representative, given a special position compared to others. But in SRH there are only peer educators. – *Male Peer Youth Educator*

The difference between a peer leader and a field officer within CFK is that the field officer position is permanent and better paid with the same duties as the peer leader, and the field officer is recognized as a staff member. Three PYEs mentioned that the difference in program models between CFK programs made the PYEs feel inferior and degraded by other volunteers. One PYE argued, with the backing of one other, that the staff was unsupportive because they “are not fighting for us” and another because there is not “a proper channel by which we can reach our staff”.

This contradicted the program officer’s perception on his role as a supervisor and the related importance of creating independent and self-sufficient leaders. Here, the program officer mentions that the peers hinted that they desired to be left alone. The delegation of responsibility to the peer leaders and PYEs was confirmed from observation during the period of research.

Because at some point the young people will tell you “hey [program officer] you are coming too close could you go a bit far”. That is a joke, but sometimes it feels like when you are working you need to achieve all these things. So probably for them it was like “hey, [program officer], must you always be at these activities”. – *Program Officer*

All staff members in individual interviews mentioned that they make decisions as a team and with the consultation of each other as needed, each describing the process as “collective”. The head of the health department said that he “doesn’t make decisions on [his] own” and on the larger programmatic or budgetary issues was sure that “no decision was made without [his] involvement”. The program officer includes the PYEs in creating guiding documents like work plans and the creation of annual objectives.

The theme of frequently inconsistent and ambiguous decision-making came out distinctly in interviews and focus groups with PYEs and in observation. Contributing factors were the rapidly changing environment of Kibera that necessitates quick decision-making, absent lines of communication between program staff and PYEs, and the lack of long-term planning. For

example, when asked about the move to reduce the number of peer leaders from four to two, a decision made by the program officer, three PYEs interviewed individually had different ideas on why this decision was made. Two PYEs at the first focus group argued that they were not included in the decision-making process in general and their suggestions or complaints were not heard. Instead, “they just say the bone is being thrown back to you”. There is not a follow up on the viability of the suggestions given. During the individual interviews, only one of five individuals brought up a similar issue, stating that the decisions were made slowly because of the amount of people that had to be consulted to make a decision made the process too slow, saying that the decision has to “go from the lower level to the highest hierarchy”. The remainder of those interviewed individually did not have an issue with current decision-making processes. The results of the focus groups and the individual interviews did not support each other.

Monitoring and Evaluation

A major finding of this case study was the lack of data use in programming, both in the planning and implementation stages. Efforts to track the activities in quantity were identified but it is unclear how the information gathered in those efforts impact the programming and the use of the PYEs. Debriefing meetings are held monthly for the PYEs. During these meetings, the work plans are reviewed and the activities completed, and not completed, are noted. Reasons why the planned activities were not held are discussed and frequently include barriers such as low attendance of PYEs, rain, or lack of materials. In the case that activities were not completed, they are added to the work plan of the subsequent month or quarter. If a target for attendance is drastically not met, for example, this target number is not adjusted until the next planning year, although activities to increase attendance may occur. The number of activities that each individual PYE attended or led and their participation is tracked and discussed at this meeting. While a quota for the number of activities is in place, there are no straight-forward or

quantifiable expectations for PYE contribution or what constitutes activity success. Tracking tools filled out by the PYEs after each activity aim to describe and identify the relative success of each activity. Beyond these tracking tools, the outcomes of the activities are not measured or monitored. It is uncertain if the tracking tools are used beyond the discussions that occur at this monthly meeting. At the present time, there was no apparent systematic effort to collect feedback from the community, beyond the assumption that because the PYEs are members of the community they are able to incorporate the changing needs and opinions of the community into programming decisions

Balance Between Peer Development and Peer Delivery

Resources, time, and planning are put into both creating effective leaders from the PYEs and also into meeting program objectives. The balance between allocating these resources into either peer development or peer delivery is a descriptor of any program using the peer educator model. The creation of youth leaders by CFK is an obvious organizational priority, as made clear by the program officer:

There is only one thing that I am trying to look by the time I am leaving this particular organization or program. Have I built leaders? Or have I not built leaders? These are the only two aspects. If I haven't built leaders then I know that I was sweating it just for sweating it. – *Program Officer*

The following points are themes representative of the issues that define this balance within CFK, with a focus on expectations and benefits to participation, both financial and otherwise.

The most often mentioned issue with the program by PYEs is the issue of personal advancement, in particular in regards to stipends and the potential to earn money. The issue of financial gain became the center of discussion at the focus groups and took up over half of the allotted time period. However, these issues were not mentioned at the five individual interviews conducted. At the beginning of the focus group discussion of expectations, it was unanimously decided that the PYEs had joined the program at least in part to help the community and that

they understood they would not be paid. The conversation quickly turned to the expectations that were not met. This included dissatisfaction with the amount of money they were paid, the lack of guaranteed access to scholarships, and the lack of subsequent employment as a result of the program. The following quote from a male PYE shows that he expected to be paid or to benefit with employment at CFK, even though he admits he knew he would not be paid when he became a volunteer. This concern was mentioned by all but one participant of the first focus group. The remaining PYE was currently receiving a scholarship from CFK to attend college.

I was told you have to be a volunteer, there is no salary that you are going to be paid. I was told that I would get some knowledge and maybe a scholarship. I was told that I would be a part of group. I would not lie, there are some expectations that I have were not there. But most of the expectations are there. Like, maybe I thought that I could have gained something like some cash or some employment. – *Male Peer Youth Educator*

There is a conflict within the data from the focus groups and interviews about the motivation to participate in the program. All five PYEs interviewed individually mentioned joining the program to contribute to the well-being of the community. However, the focus group discussion on this topic brought out clearly that the presence of financial incentives was a necessity for participation and the PYEs had an expectation for additional “appreciation” in the future. For example, one past PYE who served as peer leader shared an anecdote about PYEs refusing to participate in an activity because the lunch stipend was not supplied that day.

People turned up and there was no lunch and we were going to the field so many just left. Some just sat down... And I said we are going for the activity and the lunch for today it is not there. I told them just volunteer! It isn't a matter of lunch! – *Male Peer Youth Educator*

Stated consequences of lack of adequate financial rewards include low morale, attrition, and lack of motivation. The correlated words with statements around stipend include “appreciate”, “respect”, and “morale”, in the sense that there is a relationship between the amount of money paid to the volunteer and the amount of perceived respect (or appreciation) from the

organization. Beyond financial incentives, two PYEs said they would be satisfied with other types of rewards such as employment, scholarships, and connections to other organizations. When posed the question at the focus group about the acceptability of non-financial rewards, the group of PYEs was equally split. The program officer was in agreement that the stipend was a driving force of discontent and stated that it was because of the age of the PYEs, as seen in this quote.

Between the age of 18 to 22 most people are actually looking for work because they are living by themselves they are not living with their parents. But in this scenario as a program officer it brought me the picture fully that most young people begin to look at volunteerism as a point of sustaining themselves. So they entered the volunteerism with passion a hundred percent. They will tell you that. It's true they are passionate. But looking at the social cultural upbringing, there are other things that are going on. They are growing. They need to go to school. They have transport to pay. That is now the level where things translate to the program. – *Program Officer*

Despite the dissatisfaction over the salary, PYEs all claimed to have benefited from their involvement in SRH. PYEs stated additional expectations of benefits to participation beyond financial gains when they began their commitments. These expectations that were mentioned in both the focus groups and the individual interviews were the expectation that CFK would advance the PYEs up a leadership ladder, access to information through trainings, and access to scholarships. Over their course of participation, the PYEs mentioned several benefits beyond their salary. When asked about what they like most about participating as a PYE, all PYEs mentioned their own personal growth. The benefits of participation most often mentioned follow in Table 8.

Table 8: Demonstrated Benefits to Participation (Beyond Salary)

Demonstrated Benefits to Participation
Access to information and training sessions
Increased self-esteem
Leadership skills
Safe space away from drugs and other negative peer influence
Access to free healthcare at Tabitha Clinic
Interaction with outside organizations
Advancement within CFK

The PYEs that participated in both of the focus groups and in the larger community events that the researcher attended were clearly proud to be a PYE and to be associated with CFK. One female PYE expressed her pride with this statement:

It is good to be a peer educator and even to sacrifice to have the community change. Even if we are peer educators, we can bring change to the community. And people will change [and] they will remember you. – *Female Peer Youth Educator*

The PYEs mention that they are considered leaders in the community and that the people know who they are and understand their role. The PYEs portrayed themselves as proud to hold the position, satisfied with the benefits they have received, and having a continued desire to help their community, despite the predominance of negative sentiments at the focus groups. Both the interviews and researcher observation support this finding.

Community Perspective

Supplemental to the comments of staff members and PYEs, input from participants of the programs and parents of the PYEs were used to identify themes about the community perception of PYEs. This is largely a secondary outcome of the research and represents a minimal effort to gauge this perspective as this was not an effort to assess program outcomes. The PYE reputation within the community is anecdotally presented as a result of interviews and one focus group with community members, in particular program beneficiaries and mothers of PYEs. Program beneficiaries are defined broadly as members of the target audience in Kibera who have come to at least one SRH activity. Beyond the program beneficiaries, parents of the PYEs are also included in this perspective as members of the community. The beneficiaries and the parents of the PYEs have a generally favorable perception of CFK, and thought that the youth in the community were benefiting from the SRH program. They associate the organization with positive change and with making an effort to address community needs. Both mothers

interviewed trusted CFK with their child, primarily because it allowed their children access to information and training, and because it kept them out of trouble. However, the mothers knew relatively little about the organization.

Carolina keeps her busy, all the time she is there....You know I tell you, this age, if she is out you don't know where she is gone and you will get worried. You don't know where she is at in the Kibera slums. You don't know she has gone to the right place or the wrong place. That's why when she is there in Carolina she is in the right place because I know there is something she is doing there. *Mother of Peer Educator*

Participants interviewed mentioned that they could "count on" CFK and that CFK had "done something to address [the community's] problems". They were not sure of the details of the programs or the underlying objectives, however.

Most people know there is an organization that is existing called Carolina for Kibera. What they don't hear is that there are many programs. Actually they will wonder how these programs are incorporated to achieve the goals about why Carolina for Kibera has started. *Program Participant*

All three of the participants interviewed stated that they wished that there was a greater presence of the organization and the PYEs in particular in the community. During the focus group, the participants talked about what part of the PYE model they approved of and what features did not work well. The respected aspects were the abilities of the PYEs to start conversations and provide access to the information, but there was concern about the role model facet of the CFK PYEs. Participants in the focus group did not think that the PYEs were role models in the community because "they are not living what they say". The participants all expressed desire to learn more about CFK but only half of those interviewed in the focus groups had made effort to learn more through interaction with volunteers or staff. When the community members were asked about how CFK should communicate with the people of Kibera, participants supported mobilization and publicity, including the use of telephone, written, and face-to-face communication.

The Contextual Issues of Kibera

The SRH program was designed with the adolescent population of Kibera in mind and with an organizational understanding of the community. However, there are characteristics of the community of Kibera that hinder and enhance the model of PYEs, some in unexpected ways. This section aims to present results that demonstrate how Kibera influences programming decisions and potential outcomes by exploring influential characteristics of this community. These results may not be unique to Kibera. Some contextual issues may be universal and therefore encountered by other implementing organizations.

Health Behavior of Adolescents

The staff members, PYEs, and community all confirm that adolescents are sexually active, typically around the age of 14 or 15 years old. Similar to adolescents worldwide, their counterparts in Kibera are at risk for HIV, STIs, unwanted pregnancies and reproductive health complications.

Youths are targeted because they have a lot of issues that go on in their life on a daily basis because if it is not teenage pregnancy it is drop out from school, or early marriage, or for girls maybe abortion. – *HTC Counselor*

When asked why they thought the peer model was the best one to use at CFK, the youth and the program staff all agreed that the youth could not talk to their parents about sexual health and needed to talk to their peers. All five PYEs interviewed individually mentioned this as a rationale for using PYEs in the SRH program. This sentiment was shared with the program participants.

Most of the youths get the information from their fellow youths. They cannot approach their parents. They cannot talk about sex in front of their parents, they get shy. That is why I am involved so I can help them, so that we can discuss and make a solution. - *Female Peer Educator*

I wouldn't be lying about this. In Kibera, very few parents talk to their kids. About sexuality. About contraceptives. About where to get services. About general information about what an adolescent or a young person could do in life. About getting a good role model. -*Program Officer*

Youth do not get their information on this topic from their parents. Instead, they seek out their peers. As presented by both the program staff and the PYEs, adolescents have a basic set of information on sexual health, although some of this information is myths and misconceptions. There are those who know the information and do something anyway, those who are misinformed, and those that do not have the information to begin with.

[Youth 10-15] are the same group that do much of risky behaviors, they are sexually active both male and female. They are well informed in matters to do with, uh, adolescent sexual reproductive health. At the same time, they are very much informed in terms of misconceptions and myths. So they have both sides. That's why they are in confusion. They have lots of this information and also on the other side they have misinformation. - *Program Officer*

You see, here in Kibera, some of them they don't have that information. They need information, they need someone to tell them. They fear their parents, even their sister or brother, even their cousin. So they normally go to friends. So that they can help them. So most of them maybe come to me and tell me what can I do, things like that. So I can give them advice, on what they should do. So that's a big challenge in Kibera. Some of them, they lack the information. And some they know but they do it anyway. - *Female Peer Youth Educator*

Community Life

The following descriptors of Kibera most impacted the ability of the PYEs to carry out their program successfully. When asked questions about which contributing factors had the most impact on the ability of the program to be implemented successfully, these were the themes cited most frequently from both the focus groups and interviews. According to the results of the interviews and focus groups, each of these descriptors has different impacts on the success of the program, including accessing the population, monitoring progress, and appropriately addressing gender-related needs.

Table 9: Contextual Factors Impacting Program Implementation

Descriptor	Example or Quote
Illiteracy	<i>Female Peer Youth Educator:</i> You know if you have something from an organization, like a brochure and you give it to someone, even they can beat you. They don't know how to read and write so if you

	give them, it may intimidate them. It seems that you are – what I can say- you are discriminating. So that is the most challenging thing.
Distance between villages	<i>Example:</i> Kibera is large area without clear paths that can be tricky to navigate. It is difficult to mobilize the entire target area for an event given the resources of PYEs, time, and materials.
Mud during the rainy season	<i>Example:</i> The PYEs often mentioned needing to be equipped with mud boots in order to access parts of Kibera that are unreachable, or very difficult to reach, during the rains
Transitory populations	<i>Head of Health Department:</i> There are more and more people who are trying to settle here. It is very difficult to monitor because you always have a different person moving and a new person going. So these changes are happening on a daily basis. For example if I train youth on use of certain contraceptives and then I have a group about ten. In the next like six months or one year, six people among those who I trained leave Kibera. You have new ones coming with different sorts of behaviors.
Males are more likely to participate in activities	<i>Example:</i> One debate open to the entire community was attended almost entirely by male community members. It was determined that very few females attended because no female PYEs were involved in the related mobilization.
Gender imbalance implications like early marriage, transactional sex and sexual violence	<i>Male Program Beneficiary:</i> What do you notice about young girls? Why do you think bad things are happening? Because they don't have information... if they are enlightened they will not remain in the same position. The young girl has to be empowered. They must be taught that they don't have to open their legs to survive. That they can feed themselves through the gifts that God gave them.

Beyond general factors presented in Table 9, two themes that were the most important, unemployment and the hand-out syndrome, are explained in full detail. According to both staff and PYEs, both of these contextual factors significantly impact implementation and are not easily avoided or remedied because of their pervasiveness in the community. The unemployment and underemployment of both youth and adults is an identified cause of barriers of implementation. Individuals move to Kibera to find employment and with the understanding that living in Kibera can offer the opportunity for casual labor as a pathway to formal employment.

And the trouble with Kibera and especially the youth is that they don't come to Nairobi to do any other than that looking for jobs. So finding them also becomes a problem. You have to suit their program. - *Head of Health Department*

For us, those who are not financially stable, we go to [Kibera] where we can have causal jobs and we can afford rent. - *Program Participant*

There are multiple impacts of unemployment and underemployment on the ability to implement the SRH program and impacts both PYEs and potential program beneficiaries. For example, PYEs take jobs rather than show up at events or fulfilling a responsibility. The jobs often are informal and present themselves sporadically and preclude the PYE giving notice to program staff about not attending an event. This puts pressure on CFK to provide an increased salary to volunteers in order to keep PYEs active and meeting their objectives. The unemployment in the community also affects the program because community members leave Kibera to work and are not around to participate, as described by the head of the health department here

When I come [into Kibera in] the morning and there are so many people who are going out. And most of them are fifteen and older and they leave very early in the morning and they come back late and they are very tired. And if you are to target those kinds of people then you have to fit in their program and not yours. – *Head of the Health Dept*

Additionally, the presence of idle youth can be dangerous for both the community members and the PYEs as they carry out their activities.

Another impact of unemployment is that community members choose activities based on the promise of a sitting allowance, a phenomenon dubbed 'hand-out syndrome'. PYEs in the focus group as well as the program staff most frequently cite the hand-out syndrome as a barrier to implementation. Because CFK and thus SRH do not give sitting allowances or any type of financial incentive for involvement, convincing individuals to participate in activities or trainings is difficult due to the prevalence of other organizations that provide financial incentives. The community is described as one program participant as "expectant", a sentiment supported by the PYEs and program staff.

And people in the community are expectant apart from being trained. Some people will ask are they getting something else like money. Even if that thing is going to transform

their life, they still want money. I know that people think that we are going to give them something like money.- *Male Peer Youth Educator*

One reason, according to the PYEs interview individually, that this occurs is because of the community perception that NGOs have money to hand out. Individuals are expecting that they will receive some money for going to an event.

You know these NGOs they love money, they have money, and the people say why can't they give us the money. The community knows that the NGOs they have money so they want that money. - *Female Peer Youth Educator*

Examples of Adaptation

Staff members were asked to identify times when the program was modified to suit the environment. Over the past five years, activities have changed to suit the needs and the changing trends in Kibera. The following are illustrative examples of how the program adapted to better meet the needs of the community.

Formation of School Clubs - School clubs were formed when the program noticed that they were not reaching the younger demographic. This was hypothesized to be because this group was at school during many of the activities. Because school is regularly held on Saturdays, and this is a day with many events, the school clubs were created to be able to serve the younger school-age population. Additionally, the program recognized that there are young girls with early pregnancies and are in need of support.

Initiation of Post-Abortive Care – Since 2009 both the program officer and the head of the health department have noticed increase in the number of post-abortion complications presenting at the Tabitha Clinic. Abortion is illegal in Kenya and culturally taboo. Girls come into the clinic complaining of complications but are generally unwilling to be honest about the fact that they had gotten an unsafe abortion; this is described in the excerpt below.

In 2009 ...there are more fetuses that are being found in the community and there were more [rapes] that were happening... they were being reported at the clinic as I am

feeling bad but they were never like [I had an abortion or I was raped]. After examination we knew this girl had procured a unsafe abortion. – *Program Officer*

Because of this, the SRH program decided to begin offering care for youth who were dealing with complications from a botched abortion. This service is provided at the clinic in a room specifically designated for providing post-abortive care. The reproductive health nurse is trained on this service and the PYEs were educated in order to sensitize the community on exactly what services were offered. Since the initiation of the provision of post-abortive care, there has been concerted effort to educate the community on the risk of unsafe abortion and also the fact that CFK is not providing the abortions. Program staff cites the presentation of this information as an on-going issue due to the sensitive and controversial nature of abortion.

Mobile VCT – The HTC staff noticed that women were not coming to the static VCT. This was surmised to be because the women are in charge of the household chores, may run businesses that support their family, or may be under the watchful eye of their husband. To access the women who are stuck at home, mobile VCTs and door-to-door HIV testing were introduced.

Occurrence of Post-Election Violence - Ethnic violence induced by a political election in January 2009 and tribal tension resulted in displaced people, murder, destruction of property, and gender-based violence nationally. Kibera, due to its proximity to Nairobi and the significant ethnic diversity, was highly impacted by this violence. As a result, the SRH program and CFK suspended its normal programming for about three months, although regular implementation did not resume fully until August 2009. The SRH program in particular addressed new concerns resulting from the events and sought support from PPFA for permission to use funding in ways not prescribed in the grant due to extenuating circumstances. The SRH program initialized trainings on gender-based violence, provided emergency contraceptives, and provided “humanitarian” assistance, as described by the program officer. This was a time of insecurity

which necessitated that most of the program activities be suspended. One service discontinued during this time was HIV testing, for reasons exemplified through this account by the program officer.

I was conducting a session within the first one month during the post-election violence and I was removing blood from this particular client and we heard gun shots and I almost pricked myself with the same needle. And it wasn't comfortable to complete the session. There was so much insecurity. – *Program Officer*

PYEs and program staff worked in those camps of individuals displaced from their homes during this time, which included individuals from Kibera and other places in Nairobi. The program decided to continue with providing emergency contraceptives after this date, although the program officer recognized that the uptake of emergency contraception after the immediate violence was primarily by those engaged in risky behavior rather than the intended victims of rape. The program officer notes lasting consequences of this unstable period, including an upswing of unwanted pregnancies and increased amounts of gender based violence.

Implications and Recommendations

The results provide a description of how the model of peer education is implemented at CFK and how the context of the community of Kibera impacts implementation. The discussion of these results is presented in terms of the implications for CFK, describing both the benefits and barriers to implementing this model from the organizational perspective. Benefits are presented in terms of the successes of the program and the appropriateness of the model at CFK. Barriers are presented as those factors that inhibit implementing the program to plan and drawbacks of the peer educator model at CFK. This section culminates in a series of recommendations for improvement. The discussion ends with possible implications of the PYE approach for the broader audience of implementing organizations.

Benefits

When CFK chose to implement this model, it was determined to be the model that best fit the organizational needs and resources. The following benefits exemplify how the model fit well within CFK and Kibera, and are the strengths of this model in this particular case study. These benefits are the creation of leaders, the ability of the program to integrate, and the ability of the model to be community-driven. All three of these benefits are in-line with organizational priorities. The model of peer youth education rests on the assumption of a few characteristics of adolescent sexual health and decision making, as shown in the literature. These health behaviors as related through the qualitative data show that the assumed health behaviors are indeed present in Kibera and that is a benefit to the use of the peer educator model at CFK.

Creating Leaders

CFK is principally a youth-centric organization and has focused on creating young community leaders since its inception in 2001. Given this, the peer educator model was a clear choice for the organization. PYEs stated that a benefit of their participation was leadership training and associated leadership abilities, like presentation skills and self-confidence. These are some of the same benefits as presented in the literature (Milburn, 1995; Pearlman, 2002). Because CFK is a well-known organization in the community, those that are associated with the program become well-known and potential opinion leaders. The high amount of exposure, delegation of tasks, and chance to hold the role of peer leader all potentially can develop youth leaders in Kibera. Specifically highlighted by the program officer, creating leaders is a significant priority in the program. There is organizational capacity to identify potential leaders in the community through connections with other organizations, interaction with the community, and assisting current PYEs in recruiting their peers with similar goals. For these reasons, this model fits into the CFK paradigm of the emphasis on youth leaders.

Integration

At the inception of the SRH program, integrating all reproductive health interventions at CFK into one program was a key objective. This has been generally successful, although there are some reproductive health activities that remain outside of SRH and associated with other CFK initiatives. Continuing the commitment to provide comprehensive sexual and reproductive related health care at the clinic and through SRH, all sexual health, family planning, and HIV services and information are integrated. The wide range of activities and trainings show that CFK understands that reproductive and sexual health is tied up contextually with a number of other relevant topics. This diverse training and the ability of the PYEs to deliver the program, in some

instances, in a holistic way is indicative of the incorporation of related activities and services. This integration is echoed at the clinic and at the two HTC centers.

There is also a push for further assimilation within the SRH program with the addition of a “youth friendly one-stop-shop”. Currently in the works, this space would allow a youth to visit a single space to have all of their sexual and reproductive health needs met. The driving force behind this is that the youth do not feel comfortable going somewhere their peers may think they are headed for HIV testing or for post-abortive care. The PYEs fit within this integrative model at CFK by providing a wide spectrum of activities and information. As in other programs worldwide, PYEs at CFK work within a larger framework of reproductive health promotion efforts (UNAIDS, 1999b).

Identified Health Behaviors

The peer model heavily relies on several assumptions of adolescent sexual behavior and health decision-making. These assumptions, outlined in the literature, are found to apply in the context of Kibera (Visser, 2007; Mukoma, 2001). First, the adolescents are seeking information from each other and are more comfortable talking with their peers than with their parents. Additionally, because youth are setting norms among themselves and there is a presence of peer pressure, addressing these topics with such activities as forums and debates allow for collective assimilation of new and accurate information. The youth in Kibera show both a desire and need for accurate and relevant information and services. The results of this study support the literature and demonstrate the adolescent behavior in Kibera necessary to justify the model of peer educators. Other concerning health behaviors that might present opportunities for further programming include gender based violence, the presence of transactional sex, and homosexuality. All of these issues came up in the conversations as present in the community but are not incorporated currently in the program objectives.

Community Driven

CFK operates with the community-driven development model. This is demonstrated through how decisions are made, the involvement of community members in positions of both staff and volunteers, and the emphasis on reacting to community trends and needs. The SRH program reflects these priorities as well. The use of PYEs is appropriate because of larger organizational priorities, but also because it reflects how the community is learning about sexual health and a community desire for youth-friendly services. Using peer educators emphasizes the community by allowing for constant direct contact with the targeted youth and by employing volunteers directly from the target group. The PYEs are able to provide unique insight into the characteristics of youth in Kibera, and this insight should be stressed. PYEs are recruited from different places in Kibera purposefully and this reflects the diversity of the community. Each village in Kibera is different, (as noted by one participant “the problems of Gatwekera is not the problem of Kianda”), albeit these are neighboring villages in a condensed space. PYEs are in touch with the specific needs of their home community and able to provide relevant insight. The SRH program’s adaptation to the trends and behaviors of the community show a dedication to the community dictating program priorities. The diverse set of activities allow youth and community members to access different features of the SRH program and addresses the diversity of Kibera. The literature shows that those programs that are able to address the context in which they work are more successful and the SRH program makes attempts to adjust to suit their environment (Campbell and MacPhail, 2002). The SRH program showed that it can adjust to a changing environment, and has actively chosen to tackle difficult contextual barriers to implementation in order to best serve the community.

Barriers

The barriers to this model at CFK are presented as the operational issues that CFK has in implementing peer education from the organizational perspective. These barriers are weaknesses of the SRH program and show opportunities for improvement.

The Unmet Expectations of Peers

The creation of peer leaders in the community is a central tenet to why CFK is implementing the model of peer educators. The PYEs benefited, and continue to do so, from their involvement in this position resonating similar benefits as in the literature (Shiner, 1999). However, not all of the PYE's expectations were met. Programmatic inefficiencies in terms of leadership structure, payment, and training are of central concern to the PYEs and hinder their ability and motivation to carry out their assigned role. Because the staff in contrast to the PYES identify the leadership and decision-making to be working well, it is possible that there is a miscommunication of expectations on both sides. This could be a result of a number of characteristics of the PYEs as adolescents, including feeling entitled to certain benefits and a desire for self-advancement.

It is also possible that during the research process, the focus groups in which most of the grievances were aired became biased towards sharing negative concerns, even when guided by the moderator toward other topics. This is supported by the fact that most of the individual interviews did not contain the extent of the concern about the break down in leadership structure and communication with the staff. Nevertheless, this still indicates the lack of open and straightforward paths of communication between staff and PYEs. CFK must decide what PYEs are entitled to, what they can expect from the organization, and how best to support the volunteers, and this crucial part of the program description needs to be communicated to the

PYEs. Because the program relies on a set of motivated PYEs, and the PYEs lose motivation when their needs are not met, this is a concern for the efficiency of the SRH program.

Monitoring and Evaluation

The lack of monitoring and data management of program impact is a significant shortfall of this program. Despite the data being collected on the number of activities conducted and the amount of commodities distributed, there is not a clear mechanism for using this data in planning. Beyond the KAP survey conducted in 2006, no comprehensive needs assessment has been conducted. Likewise, there is evidence of only minimal efforts to track relative success of activities and no evidence of efforts to measure program impact, knowledge attained, behavior change or acceptability in the community. Although guided by the work plans, it is difficult to discern if the outcomes of activities and oral feedback during evaluation meetings are being integrated into future plans and implementation. The shortcoming of program monitoring and evaluation could be attributed to a number of factors, including the inability of staff to perform meaningful evaluations, the lack of requirement by both the funding agency and the broader CFK to measure impact, and the general laissez-faire prioritization of these efforts.

The peer education model is difficult to monitor in the context of Kibera for a number of important reasons. First, there is an assortment of organizations that work toward similar objectives as the SRH program, compromising direct correlation of PYE efforts to definable changes in health outcomes. Secondly, because the PYEs are involved in a variety of activities it is difficult to identify the effective aspects of the program. Additionally, because the PYEs are not the only means of meeting SRH program objectives, it is more difficult to measure the effectiveness of this model within Kibera and CFK contexts. Because this program functions almost entirely at the community level, with the exception of the one-on-one activity, the

defined catchment area is ambiguous. Efforts to remedy this, including the attempt in the last year of the grant to define the area as the two immediate villages around the office, are in place. However, program activities continue to take place outside of these two villages. The transient nature of Kibera also makes tracking individuals over time difficult.

While meaningful monitoring and evaluation is difficult, it is not impossible. Creative solutions can be implemented to more effectively collect data, measure success, and use this data in program decision-making within the program through tracking PYE activity, regular program monitoring, and evaluation. In addition, monitoring efforts can be supplemented by increasing the amount of follow-up with program participants, VCT clients, and clinic patients. This is a suggestion from both the HTC counselors and program participants. Successful periodic evaluation of the program, from the perspectives of the PYEs, staff, and the community, is important for implementation in the next stage of this program.

When conducting evaluations in the future, CFK is more likely to have success measuring changes in knowledge and attitudes rather than behavior change. This is because of the difficulty of measuring behavior change in general but also is compounded with the contextual constraints in Kibera such as transient populations and those barriers previously mentioned that make tracking individual behavior over time problematic. Instead, CFK and the SRH program should set measurable objectives that are realistically monitored given the resources of the organization, the context of Kibera, and the relative novelty of the monitoring and evaluation processes at the organizational level.

Diffuse Responsibilities

Another barrier to the peer education model at CFK is the diffuse responsibilities and use of volunteers within the organization. While it is important that the PYEs are treated like they are a part of team, roles and responsibilities are not sufficiently outlined. Additionally,

these individuals are expected to participate outside of the SRH program. The murkiness of definition has a few consequences. First, the volunteers are more likely to feel stretched or unappreciated. Secondly, it is difficult to measure PYE output because it extends beyond program implementation. It is uncertain during which activities they are participating in their PYE role and in which they are participating as part of the larger CFK team. Without clear definition it is more difficult to assess this model to potentially create generalizable results. Lastly, the diffuse responsibilities of the PYEs can create uncertainty at the organizational level because leadership and decision-making, two obvious problems from the perspective of the PYEs, become even more unclear as the scope of authority and expectations expands. While the communal nature of CFK almost requires the use of PYEs outside their given roles, and this may not be a detrimental operating procedure from the organizational perspective, it can be a barrier to implementation of this particular model.

Implications for Practice

Several lessons learned through this case study can be applied to organizations attempting to implement or improve on this model globally. These are created from the themes of the qualitative research as well as reflection on the literature. It is reasonable to assume that although Kibera represents one very specific context, other organizations attempting to implement similar formations of the model will run into similar barriers. Table 10 shows how the themes found in this study can be related to general application of the peer education model.

Table 10: Implications for Practice

CFK Example	Implication for Practice
The PYEs had expectations of advancement beyond organizational priority/capacity	Clearly define benefits that PYEs can expect from the organization, both tangible and otherwise
Context dictates that the program adapt to community needs and desires	Institute organizational flexibility to adapt to changes in in a structured, and non-reactive, way
PYEs are community members, and this is both a boon and a barrier	Address the needs and behaviors of PYEs as youth representatives directly and honestly
Lack of M and E limited ability to track success and impact in the community	Use monitoring and evaluation to illuminate changes, and untapped opportunities, in the community as well as track PYE activity and effectiveness
Keep PYE model in line with larger organizational agenda	Organizational integrity and attention to broader organizational objectives and resources

Implications for Carolina for Kibera

CFK adopted the use of peer educators because of contextual and organizational reasons, assuming, like many in the literature, that this was an effective model. Assumptions made by CFK, and supported by the literature, include that adolescents learn from each other, that the use of peer educators provides an opportunity to create leaders, and that the use of community members in programming will enable better adaption the program better to changing needs of the community (Campbell and MacPhail, 2002). All these factors are present in the current implementation of the peer education by the SRH program. First, the attributes of adolescents that the peer model relies on are shown through the results of this study and supplemented by evidence from previous studies in Kibera. Specifically, this is supported by the 2007 study in Kibera that showed that both girls and boys in Kibera who had role models that had good behaviors were less likely to be sexually active (Erulkar and Matheka 2007). Youth in the community identified that they, echoing the literature, show preference to learning from their peers about sexual behaviors and trust their peers above authority figures like their parents (Visser, 2007).

Secondly, CFK has shown the capacity to adapt to their surroundings, as demonstrated by the examples presented in this paper. PYEs actively participated in gathering feedback from the community to lead to these adaptations presented here, although they were surely aided by CFK's employment of multiple Kibera residents and the placement of offices within the community. The diverse context of Kibera provides a challenging environment to implement most programs. The barriers to implementation presented here apply to most organizations working in Kibera. CFK has shown resilience by attempting to dynamically adapt its programming to better access the community and meet demonstrated needs. The PYE model adds value to the community-led approach of CFK by creating additional potential for communication and interaction with the diverse population of Kibera.

Additionally, CFK shows fidelity to the overarching priority of youth development by predominantly focusing on the creation of leaders out of the PYEs. The program staff emphasize the creation of community youth leaders from the PYEs. The peer educators themselves cite leadership skills as a benefit of participation in the SRH program. For these reasons, it appears that the use of peer educators is an appropriate fit for CFK. Beyond that, the lack of monitoring and evaluation at both the program and organizational level, limits the ability to draw further conclusions about the effectiveness of the model in the community or the ability of the program to meet their objectives.

Although theoretically appropriate, there are substantial organizational issues that limit the capability of the program to run efficiently. Presented here as barriers, they show the difficulty with this model from the organizational perspective and through the experience of the PYEs. These implementation issues can be addressed through a series of recommendations presented below. The central limitation to fully evaluating the use of peer educators at CFK and the impact of the program in the community is the lack of measurement, creation of cohesive

and clear program objectives, and comprehensive data collection. While the conclusion can be drawn that this was an appropriate model from CFK to implement, the impact on health outcomes in the community cannot be made.

Recommendations for Carolina for Kibera

As a part of the assessment portion of the research, a set of recommendations for CFK were developed. These recommendations reflect analysis of the interviews and focus groups of the staff, volunteers, and participants of the program as well as researcher observation. They are enumerated below.

- 1) Define all of the roles and the activities with clear and actionable objectives and descriptions, including what constitutes success**
 - a. Volunteer*
 - b. Staff*
 - c. The program within CFK*
 - d. Activities*
 - e. Measurable outcomes*
- 2) Clarify the leadership and decision-making structure**
 - a. Lines of communication*
 - b. Feedback loops that are consistent and workable*
 - c. Clarify who is making the decisions on what level. Document the reasons for making a decision and clearly explain to those impacted why they are made.*
- 3) Involve the community further**
 - a. Perception in the community*
 - b. Transparency – how does CFK tell the community what CFK does?*
 - c. React to the trends in the community*
- 4) Strengthen the role of the peer youth educator**
 - a. Training and re-training*
 - b. Tracked volunteer experience*
 - c. Clear mechanism for communication*
 - d. PYE as a community member*
 - e. Opportunity to create leaders*
- 5) Utilize existing resources**
 - a. Connections with other organizations*
 - b. Spaces and places*
 - c. Location within Kibera*
- 6) Engage in purposeful monitoring and evaluation.**

- a. *Tracking tools and creation of measurable, and measured, goals*
- b. *Assessments of PYEs from the PYE perspective, the organizational standpoint, and from the community perspective*
- c. *Carry out community baseline*
- d. *Community evaluation of activities*
- e. *Use outcomes of monitoring and evaluation efforts to make decisions*
- f. *Focus on measuring changes in attitudes and knowledge rather than measuring behavior change*

Discussion of Limitations and Challenges to Research

During the research process, there were a number of constricting factors that impacted the ability of the research to go forward as planned or in the best way possible. The most severe constricting factor was the incomplete documentation available from the past five years of the program. This hindered the creation of a comprehensive picture of the program over the past five years and instead put most of the focus of the research on the program at the present time. Retrospective documentation and insight would have benefited the results by identifying trends and noteworthy events in Kibera, CFK and SRH. Additionally, the lack of documented monitoring and evaluation efforts prevented determination of the efficacy of the use of the PYEs and how the program has met their objectives.

Importantly, the context of Kibera impacted the research plan in similar ways in which it impacts the program. Participants in interviews and focus groups were unreliable because of competing day labor positions and work opportunities. Female participants were less likely to contribute to focus groups and their male counterparts dominated discussions. Lastly it was difficult to find program beneficiaries to participate in focus groups and interviews when they discovered that the only incentive was refreshments and not a sitting allowance.

This analysis applies to one organization in one unique context. This limits the generalizability of the findings. There are holes in the data that are a result of a detrimental lack of program monitoring and retention of documentation, changes in staff members, and lack of

long-term planning. Triangulation of data was attempted to estimate the history of the program, although the past two years are assumed to be correctly assessed through the data represented here because of retention of both the program officer and majority of PYEs during since 2009. Furthermore, there could have been content lost in the transcription, due to broken English and unclear audio recordings. Researcher bias cannot be excluded.

Opportunity for Further Study

This case study can serve as the background for further work with CFK. There is great potential for more rigorous studies in the future, including effectiveness and impact evaluations, or research lending itself to the burgeoning area of implementation science. Using input from the community regarding the impact of PYEs, a study could explain the community perception of the program and the acceptability of this model as employed by CFK. Further study could include an impact assessment consisting of the creation of a needs assessment or baseline survey and a time series of follow-ups to gauge change in community behaviors and sexual health. Due to the contextual constraints already mentioned here, creation of any study must be done carefully and with tightly defined catchment areas. Clearly illuminating the needs and trends of Kibera will doubtlessly contribute to more effective programming.

Conclusion

This project aimed to examine the use of the peer educator model by Carolina for Kibera in the context of Kibera. From the organizational perspective, the peer educator model aligned with both the organizational agenda and the context of Kibera. CFK was able to create leaders from the PYEs, emphasize their community-led paradigm, and provide reproductive health services and information to the youth of Kibera. Specific barriers of implementation presented in the results included issues surrounding leadership and decision-making, contextual constraints of Kibera, and the unclear motivation of PYEs to volunteer, specifically regarding financial motivation. CFK has shown an ability to adapt to its surroundings through concerted efforts to address dynamic community needs. Through addressing the recommendations presented here as well as instituting an appropriate and efficient monitoring and evaluation scheme, CFK can improve its program to contribute further to the peer education literature, and continue to provide support and care for the people of Kibera.

Appendix A: Informed Consent Forms

Carolina for Kibera

Process Evaluation- Sexual Reproductive Health Program

INFORMED CONSENT FOR STAFF

The purpose of this study is to do a process evaluation on the sexual reproductive health program here at CFK. This study will look at the past goals of the program and how they have changed over the five years of implementation. The study also aims to discover how the program is implemented in the community, the barriers and successes of the implementation, and how the program works logistically in the community. The evaluation aims to gain insights from the past five years to create a better program going forward. If you chose to participate, the interview should take about an hour. The information used from the interview will be used to create a comprehensive idea about how the program works logistically and how it can be best carried out in the future. The transcript from this interview will be kept in a secure location and not be shared with other CFK staff or participants of the programs. The transcripts will only be referenced in the compilation of a complete report of the evaluation which will be made available to you.

If you do consent to participating in this interview, please sign below. If you have any questions about the process either today or in the future please contact me. My contact information will be provided after the interview is over.

Name

Signature

Date

Carolina for Kibera

Process Evaluation- Sexual Reproductive Health Program

ORAL INFORMED ASSENT FOR PEER-YOUTH-EDUCATORS/PAST PROGRAM PARTICIPANTS

(MODERATOR: READ AT **INTERVIEWS**)

I would like to invite you to participate in an informal interview about your involvement with Carolina For Kibera (CFK). We are trying to better understand how CFK's sexual reproductive health program is going and how it can be improved. As a peer-health-educator in the sexual reproductive health program you are very important to CFK, and we think your input will be valuable.

Although the staff of CFK has authorized me to talk to you today, it is up to you to decide if you want to be interviewed. If you do not want to be interviewed that would be OK. And even if you agree to be interviewed, you can ask me to stop at any time and that would be fine.

If you agree to participate today, we think the interview should last about one hour. Basically, we will ask you questions about how you were trained, what activities you were involved in, and what you would say could be improved. If there is any question you do not want to answer all you have to do is tell me and we will skip to the next question.

With your permission, I would like to audio record the interview. This will help me focus on our conversation and not on taking notes.

No one except me will know that you took part in the interview, and I will not record your name or ask for personal information about you. And when I write the report for CFK and for my school project, I will present the information so that anyone who reads it will not be able to know what you said.

Do you have any questions for me? I will give you my contact information in case you have any questions after the interview.

Would you like to participate?

Signature of Moderator

I certify that I read this script in its entirety.

Printed name of Moderator

**Carolina for Kibera
Sexual Reproductive Health Program**

**ORAL INFORMED ASSENT FOR PEER-YOUTH-EDUCATORS/PAST PROGRAM PARTICIPANTS
(MODERATOR: READ AT FOCUS GROUPS)**

I would like to invite you to participate in an informal interview about your involvement with Carolina For Kibera (CFK). We are trying to better understand how CFK's sexual reproductive health program is going and how it can be improved. As a *peer-health-educator/participant* in the sexual reproductive health program you are very important to CFK, and we think your input will be valuable.

Although the staff of CFK has authorized me to talk to you today, it is up to you to decide if you want to be interviewed. If you do not want to be interviewed that would be OK. And even if you agree to participating, you can ask me to stop at any time and that would be fine. You are welcome to keep being involved with CFK and all their programs even if you do not wish to participate today.

If you agree to participate today, we think the discussion should last about one hour. Basically, we will ask you questions about the program, how often you attended, what your involvement was, and if you have any suggestions for improvement. If there is any question you do not want to answer, feel free to not answer.

With your permission, I would like to audio record this group discussion. This will help me focus on our conversation and not on taking notes.

No one except me and the other group members will know that you took part of the discussion today. I will not record your name or ask for personal information about you. And when I write the report for CFK and for my school project, I will present the information so that anyone who reads it will not be able to know what you said. I ask all of you not to reveal outside the group information that they may have heard in the group. Even though I will ask people in the group not to reveal anything to others, I cannot guarantee this. I want you to be open and honest in the discussion, but I don't want you to share anything you do not feel comfortable saying in front of other people.

Do you have any questions for me? I will give you my contact information in case you have any questions after the discussion.

Would you like to participate?

Signature of Moderator

I certify that I read this script in its entirety.

Printed name of Moderator

APPENDIX B – Interview guides

Department Head #1

- 1) The inception of the program
 - a. What was the original problem that the program sought to address
 - b. What were the initial objectives as you understand them
 - c. Motivating factors
 - d. Target audience
 - i. Why this audience
 - ii. What factors do the participants have in common? How are they diverse?
- 2) Resources available to the program
 - a. Funding
 - b. Staff
 - c. What is your role, decision making process
- 3) Relationships that the program has had over time
 - a. Organizations
 - i. Integration of the SRH within the clinic, within the health services department of CFK
 - b. Individuals
- 4) Outstanding issues

Department Head #2

- 1) How has the program changed to suit the environment of Kibera?
- 2) What are the biggest challenges created because of the environment of Kibera?
 - a. Barriers to implementation
- 3) How can CFK package information to better
 - a. Specifically in regards to the comprehensive care and the youth friendly services
- 4) Trends in Kibera that are emerging that will impact programming
- 5) Measurement questions – what is currently being done, and what are the plans for the future

Program Officer #1

- 1) The inception of the program
 - a. What was the original problem that the program sought to address
 - b. What were the initial objectives as you understand them
 - c. Motivating factors
 - d. Target audience
 - i. Why this audience
 - ii. What factors do the participants have in common? How are they diverse?

- 2) Resources available to the program
 - a. Funding
 - b. Staff
- 3) Relationships that the program has had over time
 - a. Organizations
 - b. Individuals
- 4) Important events/Dates to be aware of

Program Officer #2

- 1) What are the logistics involved with each of the program activities?
- 2) How are expectations managed and communicated?
 - a. How are they tracked to see if they have been completed?
 - b. How does this relate to the work plan?
- 3) Leadership and program structure
- 4) Future plans for improvement already in the pipeline

Program Officer #3

- 1) How has the program changed to suit the environment of Kibera?
- 2) What are the biggest challenges created because of the environment of Kibera?
 - a. Barriers to implementation
- 3) Participation trends over time
 - a. How have the participants themselves changed over time? How are the participants the same as each other? Different?
- 4) Unexpected challenges
 - a. Kibera contextual events that have impacted the program
- 5) Trends in Kibera
 - a. Emerging, continuing

VCT Officer #1

- 1) The inception of the program
 - a. What was the original problem that the program sought to address
 - b. What were the initial objectives as you understand them
 - c. Motivating factors
 - d. Target audience
 - i. Why this audience
 - ii. What factors do the participants have in common? How are they diverse?
- 2) Specific activities of the program
 - a. PTC, Follow-up
 - b. Logistics of each part (when, where, how, advertising)
 - c. Training of anybody running these programs

- d. How is it integrated into CFK
- 3) Resources available to the program
 - a. Funding
 - b. Staff –training, recruitment, decision making
- 4) Relationships that the program has had over time
 - a. Organizations
 - b. Individuals

VCT Officer #2

1. Leadership structure/ decision-making structure
 - a. What is the interaction with the rest of the staff? PYES?
 - b. What happens when a goal is not met on the work plan? How is this determined?
2. Monitoring
 - a. What data is collected and where does it go?
3. Context building
 - a. Given your understanding of the program, what did you expect to see that you did not see? How would you explain this?
 - b. Given your understanding of the program, what did you see that you did not expect to see? How would you explain this?
 - c. Unexpected barriers, unexpected opportunities
 - d. Relationship between the community context and the program
 - i. In what ways did the community context impact the way that the program was implemented?
 - e. Community → how do you get feedback from the community, what reputation does the program have
 - f. SWOT

RH Officer

- 1) The inception of the program
 - a. What was the original problem that the program sought to address
 - b. What were the initial objectives as you understand them
 - c. Motivating factors
 - d. Target audience
 - i. Why this audience
 - ii. What factors do the participants have in common? How are they diverse?
- 2) Specific activities of the program
 - a. Challenges: include packaging of information, contraception, PAC uptake, comprehensive integration, *stand alone services* (one stop shop)
 - b. Logistics of each part (when, where, how, advertising)
 - c. Training of anybody running these programs

- d. How is it integrated into CFK
- 3) Resources available to the program
 - a. Funding
 - b. Staff –training, recruitment, decision making, PYE relationship
- 4) Relationships that the program has had over time
 - a. Organizations
 - b. Individuals
- 5) Context building
 - a. Given your understanding of the program, what did you expect to see that you did not see? How would you explain this?
 - b. Given your understanding of the program, what did you see that you did not expect to see? How would you explain this?
 - c. Unexpected barriers, unexpected opportunities
 - d. Relationship between the community context and the program
 - i. In what ways did the community context impact the way that the program was implemented?
 - e. Community → how do you get feedback from the community, what reputation does the program have
 - f. SWOT

PYE

- 1) Name, residence, length of stay in Kibera
- 2) How did you hear about CFK? How
 - a. Recruitment into the program
- 3) What is your perception of the mission of the program?
 - a. How has this changed since your involvement began?
- 4) What are the expectations of a PYE? Primary responsibilities?
- 5) Program structure and logistics
 - a. Training, leadership, decision making, paperwork
- 6) Activities that you are involved in, are not involved in
- 7) How has being a PYE changed over time?
- 8) Suggestions for improvement
 - a. How to recruit more PYEs, more participants
- 9) FOR PAST PYES
 - a. What prompted you to leave the program?
 - b. Are you interested in continuing a relationship with the program? In what capacity?

Parents

- 1) What is your perception of CFK, SRH
- 2) What do you see as the mission of CFK, SRH

- 3) When did your child begin to participate
- 4) What did you know about CFK when this happened?
- 5) What were your worries about your child's participation?
- 6) What were your hopes about your child's participation?
- 7) What would you like to see change about your child's participation?
- 8) What is your personal involvement with CFK?
- 9) Would you like to be more involved with CFK?
- 10) Should CFK involve the parents of its volunteers more? How?

PYE Focus Group #1

- 1) Introductions – including your name and how long you have been a PYE
- 2) Think back, what were your first impressions? Of CFK? Of being a PYE?
- 3) What did you expect being a PYE would be like?
 - a. How is this the same or different from what you are experiencing now?
 - b. What has surprised you?
- 4) Why is it important for CFK to involve peers as part of this program?
 - a. How can you as youth leaders reach people that maybe others could not?
 - b. Why is it important for you as an individual to be involved with this program?
- 5) What would you tell your friend about being a PYE?
- 6) What would you change about your role?
 - a. Leadership, stipends, communication, responsibility

PYE Focus Group #2

- 1) List all the activities, for each of these activities
 - a. What is the goal/objective
 - b. What is it about the goal/objective that makes it unique
 - c. What is the logistical plan for this activity
 - d. Describe a time when this program was a success/failure? Why?
- 2) What is the community reaction to each of these activities?
- 3) What is keeping the activity from being the best it can be?
- 4) Describe the work plan.
 - a. How does it work?
 - b. Who enforces it?
- 5) Improvements and suggestions

Participant Focus Group

- 1) How did you hear about the program? How did you hear of CFK? SRH?
- 2) Why did you come to the program? What activities?
 - a. What did you expect when you came?
 - b. What happened that did/did not meet your expectations?
- 3) What surprised you about the program? About CFK?

- a. What did you like? Not like?
 - b. Was there something that should have been covered that was not?
- 4) Suggestions for improvement
- 5) What can we do to encourage more people to come?
- 6) What do you know about the mission of CFK? What is a good way to communicate with the community about this mission and the opportunities at CFK?

Bibliography

- Agha, S. and Van Rossem, R. (2004). Impact of a school-based peer sexual health intervention on normative beliefs, risk perceptions, and sexual behavior of Zambian adolescents. *Journal of Adolescent Health* 34(5):441-452.
- Alcock, G., More, N., Patil, S., Porel, M, Vaidya, L. et. Al. (2009). Community-based health programmes: role perceptions and experience of female peer facilitators in Mumbai's urban slums. *Health Education Research*. 24(6)957-966.
- Bandura, A. (1977) *Social Learning Theory*. Prentice-Hall. Englewood Cliffs, NJ.
- Beeker, C., Guenther-Gray,C. and Raj, A. (1998). Community empowerment paradigm and the primary prevention of HIV/AIDS. *Social Science and Medicine*. 46(7): 831-842.
- Bechange, S. (2010). Determinants of project success among HIV/AIDS nongovernmental organizations in Rakai, Uganda. *International Journal of Health Planning and Management*. 25(3): 215-30.
- Campbell, C. (2003).*Letting them die: Why HIV/AIDS Prevention programs fail*. The International Africa Institute.
- Campbell, C. and MacPhail, C. (2002). Peer education, gender and the development of critical consciousness: participatory HIV prevention in South African youth. *Social Science and Medicine*. 55:331-345.
- Carolina for Kibera. (2011) Community of Kibera. Retrieved from:
<http://cfk.unc.edu/whatwedo/communityofkibera/>.
- CIA World Factbook (2010).The World Factbook: Kenya. Retrieved from:
<https://www.cia.gov/library/publications/the-world-factbook/geos/ke.html>
- Dickenson, D. (2009). *Changing the course of AIDS: Peer education in South Africa and its lessons for the global crisis*. Cornell University Print. Ithaca, New York.
- Erulkar, A. and Matheka, J. (2007). Adolescence in the Kibera slums of Nairobi, Kenya. Population Council.
- Guest, G, KM MacQueen, E Namey (2011) *Applied Thematic Analysis*. Thousand Oaks, CA: Sage Publications.
- Hayes, R., Changalucha, J., Ross, D., Gavyole, A., Todd, J., et. al., (2005) The MEMA kwa Vijana Project: Design of a community randomized trial of an innovative adolescent sexual health intervention in rural Tanzania. *Contemporary Clinical Trials*. 26:430-442.
- Hutton, G., Wyss, K., and N'Diekhor, Y. (2003). Prioritization of prevention activities to combat the spread of HIV/AIDS in resource constrained settings: a cost-effectiveness analysis

- from Chad, Central Africa. *International Journal of Health Planning and Management*. 18:117-136.
- Kabiru, C., Beguy, D., Undie, C., Zulu, E., and Ezeh, A. (2010). Transition into first sex among adolescents in slum and non-slum communities in Nairobi, Kenya. *Journal of Youth Studies*. 13(4): 453-471.
- Kim, C and Free, C. (2008). Recent evaluations of the peer-led approach in adolescent sexual health education: a systematic review. *International Family Planning Perspectives*. 34(2): 89-96.
- Kinsman, J., Nakiyingi, J., Kamali, A., Carpenter, L., Quigley, M., Pool, R. & Whitworth, J. (2001). Evaluation of a comprehensive school-based AIDS education program in rural Masaka, Uganda. *Health Education Research*. 16: 85-100.
- Kirby, D., Laris, B., and Rolleri, L. (2007). Sex and HIV education programs: their impact on sexual behavior of young people throughout the world. *Journal of Adolescent Health*. 40:206-217.
- Klepp, K., Flisher, A., and Kaaya, S. (2008) *Promoting Adolescent Sexual and Reproductive Health in East and Southern Africa*. South Africa.
- Koronya, C. (2005) *Determining the knowledge and attitudes of peer youth educators towards sexuality education in Kenya*. Africa Regional Sexuality Resource Center. Planned Parenthood Federation of America-International.
- Mbulu, Lazarous, Ian M. Newman, Duane F. Shell, Lazarous Mbulu, Ian M. Newman and Duane F. Shell. (2007). Factors contributing to the failure to use condoms among students in Zambia. *Journal of Alcohol & Drug Education* 51(2):40-58
- Medley, A., Kennedy, C., O'Reilly, K., and Sweat, M. (2009). Effectiveness of peer education interventions for HIV prevention in developing countries: A systematic review and meta-analysis. *AIDS Education and Prevention*. 21(3): 181-206.
- Milburn, K. (1995). A critical review of peer education with young people with special reference to sexual health. *Health Education Research*. 10(4): 407-420.
- Miller, A., Mutungi, M., Elena, F., Barasa, B., Ondieki, W., et.al. (2008). At outcome assessment of an ABC-Based peer education intervention among Kenyan university students. *Journal of Health Communication*. (13):345-356.
- Mitchell, K, Nyakake, M., and Oling, J. (2007). How effective are street youth peer educators?: Lessons learned from an HIV/AIDS prevention programme in urban Uganda. *Health Education*. 107(4):364-376.
- Mukoma,W. (2001). Rethinking school-based HIV/AIDS interventions in South Africa. *Southern African Journal of Child and Adolescent Mental Health*, 13(1): 55-66.

- Nelson, N. and Wright, S. (1995). *Power and Participatory Development Theory and Practice*. Intermediate Technology. London.
- Norr, K., Norr, J., McElmurry, B., Tlou, S., Moeti, M. (2004). Impact of peer group education on HIV prevention among women in Botswana. *Health Care for Women International*. 25:210-226.
- Ochieng, B. (2003). *Adolescent health promotion: The value of being a peer leader in a health education/promotion peer education program*. *Health Education Journal*. 62(1): 61-72.
- Parker, W. (2004) Rethinking conceptual approaches to behavior change: The importance of context. *Center for AIDS development, Research and Evaluation*.
- PATH. (2007). Tuko Pamoja: A guide for peer educators. Retrieved from: http://www.path.org/files/CP_kenya_pe_manual_karhp.pdf.
- Patton, M. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*. 34(5): 1189-1208.
- Pearlman, D. N., Camberg, L., Wallace, L. J., Symons, P., and Finison, L. (2002). Tapping youth as agents for change: Evaluation of a peer leadership HIV/AIDS intervention. *Journal of Adolescent Health*, 31(1), 31-39.
- Pratt, C., Obeng-Quaidoo, I., Okigbo, C., James, E. (2000) *Health-information sources for Kenyan adolescents: Implications for continuing HIV/AIDS control and prevention in Sub-Saharan Africa*. *The Western Journal of Black Studies*. 24(3):131-144.
- Price, N., and Knibbs, S. (2009). How effective is peer education in addressing young people's sexual and reproductive health needs in developing countries? *Children and Society*, 23(4), 291-302.
- Ringheim, K. and Gribble, J. (2010) Improving the reproductive health of sub-Saharan Africa's youth: A route to achieve the millennium development goals. Population Reference Bureau. Retrieved from: <http://www.prb.org/pdf10/youthchartbook.pdf>
- Rogers, E.M. (1983) *Diffusion of Innovations*. Free Press, New York.
- Shiner, M. (1999). Defining peer education. *Journal of Adolescence*, 22(4), 555-566.
- Turner, G. and Shepherd, J. (1999). A method in search of a theory: peer education and health promotion. *Health Education Research*. 14 (2): 235-247.
- UNAIDS. (1999a). Sexual behavioral change for HIV: Where have these theories taken us?. Geneva, Switzerland. Retrieved from: http://www.who.int/hiv/strategic/surveillance/en/un aids_99_27.pdf

- UNAIDS. (1999b). Peer education and HIV/AIDS: Concepts, uses, and challenges. Geneva, Switzerland. Retrieved from: http://data.unaids.org/publications/IRC-pub01/jc291-peereduc_en.pdf
- UNAIDS. (2001). Resolution adopted by the general assembly. Geneva, Switzerland. Retrieved from: <http://www.un.org/ga/aids/docs/aress262.pdf>.
- Ryan, G. and Bernard, H. (2003). Techniques to identify themes. *Field Methods*. 15(1):85–109.
- UNICEF. (2004) Peer education fact sheet. Retrieved from: http://www.unicef.org/lifeskills/index_12078.html.
- UNICEF, UNAIDS, UNESCO, UNFPA, ILO, WHO and The World Bank. (2011) Opportunity in crisis: Preventing HIV from early adolescence to young adulthood. Retrieved from: http://www.childinfo.org/hiv_aids.html.
- United Nations. (2001). Declaration of commitment on HIV/AIDS. General Assembly. Retrieved from: <http://www.un.org/ga/aids/docs/aress262.pdf>.
- Visser, M. (2007). HIV/AIDS prevention through peer education and support in secondary schools in South Africa. *Journal of Social Aspects of HIV/AIDS*. 4(3):78-94.
- Visser, M., Schoeman, J., and Perold, J. (2004). Evaluation of HIV/AIDS prevention in South African schools. *Journal of Health Psychology*. 9(2): 263-280.
- World Bank Group. (2010) Kenya data profile. Retrieved from: http://ddp-ext.worldbank.org/ext/ddpreports/ViewSharedReport?REPORT_ID=9147&REQUEST_TYPE=VIEWADVANCED&DIMENSIONS=116.