FACTORS ASSOCIATED WITH REFUGEE MEN'S INVOLVEMENT IN FAMILY PLANNING IN NYARUGUSU CAMP, KASULU DISTRICT, TANZANIA

Anand Sandesara, BSc

Master of Public Health Dissertation

Muhimbili University of Health and Allied Sciences

October 2010

FACTORS ASSOCIATED WITH REFUGEE MEN'S INVOLVEMENT IN FAMILY PLANNING IN NYARUGUSU CAMP, KASULU DISTRICT, TANZANIA

By

Anand Sandesara

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Public Health at Muhimbili University of Health and Allied Sciences

Muhimbili University of Health and Allied Sciences
October 2010

CERTIFICATION

The undersigned certifies that she has read and hereby recommends for acceptance a dissertation entitled ***Factors Associated with Refugee Men's Involvement in Family Planning in Nyarugusu Camp, Kasulu District, Tanzania*** submitted in partial fulfillment of the requirements for the degree of Master of Public Health at Muhimbili University of Health and Allied Sciences.

Dr. Ave Maria Semakafu

(Supervisor)

Date: 9th November 2010

DECLARATION AND COPYRIGHT

I, **Anand Kalyan Sandesara**, declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

Signature..... Date.....

This dissertation is a copyright material protected under the Berne Convention, the Copyright Act 1999 and other international and national enactments, in that behalf, on intellectual property. It may not be reproduced by any means, in full or in part, except for short extracts in fair dealing, for research or private study, critical scholarly review or discourse with an acknowledgement, without the written permission of the Directorate of Postgraduate Studies, on behalf of both the author and the Muhimbili University of Health and Allied Sciences

ACKNOWLEDGEMENT

I would like to thank many individuals and organizations for making this dissertation and my studies at Muhimbili University of Health and Allied Sciences possible.

First, I express my sincere and deep thanks to my supervisor, Dr. Ave Maria Semakafu from the Department of Development Studies, for her commitment to providing critical advice, guidance, and support throughout the entire research process.

Furthermore, I am grateful to Rotary International for honoring me with an Ambassadorial Scholarship to fully support my year-long study in Tanzania. Without the generous sponsorship, I would not have been able to pursue my studies here.

My heartfelt appreciation goes out to the Tanzanian Red Cross Society and its entire staff for helping make my study possible and for being such supportive and hospitable hosts during my time in Nyarugusu refugee camp. Special thanks is owed to Mama Jane Chagie, the Red Cross Project Coordinator for refugees, and Mr. Frank Lyatuu, the Nyarugusu Team Leader, for their time, advice, and willingness to accommodate me. I am indebted to my faithful and diligent research assistants, Luwela Esube and Itabelo Kenas, who not only helped bring the study together, but who introduced me to a world of which I knew so little.

Additionally, I am thankful to Mr. J.S. Katanga from Dar es Salaam's Ministry of Home Affairs for granting me permission to enter Nyarugusu and to conduct my research.

Finally, I am grateful to the countless professors and administrators at Muhimbili who helped make my year an incredible learning experience, and to my 21 classmates who became like a family to me while taking this course.

Thank you all.

DEDICATION

To my family, who wholeheartedly supported my decision to come live and learn in Dar es Salaam, and to the more than 60,000 refugees in Nyarugusu camp, who continue to persevere in the face of great adversity

ABSTRACT

Refugees are a marginalized group at high risk for poor health outcomes due to their displacement and vulnerable state. Reproductive health in refugee camps has become an issue of public health concern within the last two decades, but refugee men's involvement in family planning remains a neglected area of study. In refugee camps around the world, the use of contraceptives is frequently low while crude birth rates remain high. A cross-sectional study of 454 married Congolese refugee men was conducted during June of 2010 in Nyarugusu camp in Kasulu District within Kigoma Region using face-to-face interviews with a standard questionnaire. Additionally, 5 focus group discussions were carried out, 3 with refugee men and 2 with refugee women. Finally, key informant interviews were completed with 10 health providers from the Tanzanian Red Cross Society. Results from the questionnaires show that 35.2% of the refugee men reported that they or their wives had ever used family planning methods while in the camp, while condom use as a means of family planning stood at 4.4% among respondents. Strong cultural barriers to family planning approval and use were evident from both men and women. Perceived benefits from humanitarian agencies for having large families within the camp influence the use of family planning and the desired family size. Having employment in Nyarugusu was found to be a predictor of ever having used family planning in the camp (OR=1.92, 95%CI: 1.16-3.18). Those who discussed family planning with their wives were significantly more likely to have ever used family planning during their time as a refugee (OR=42.88, 95%CI: 15.26-120.54). Those who did not see any benefit or incentives to having a large family in the camp were also more likely to have ever used family planning in the camp (OR=1.77, 95%CI: 1.10-2.86). The main provider-related barriers to men's involvement in family planning included the lack of pertinent campaigns targeting men and the lack of in-service training for staff regarding family planning. Overall, gender sensitizations, men-specific family planning campaigns, and revision of certain camp policies should be promoted. Further research should be undertaken to better understand this neglected area of study.

TABLE OF CONTENTS

Certification i
Declaration and Copyright ii
Acknowledgement iii
Dedication iv
Abstract v
Table of Contents vi
List of Tables viii
List of Figures ix
List of Abbreviations x

CHAPTER 1: INTRODUCTION
1.1 Background 1
1.2 Problem Statement 4
1.3 Study Rationale 4
1.4 Research Questions 6
1.5 Research Objectives 6
1.6 Broad Objective 6
1.7 Specific Objectives 6
1.8 Conceptual Framework 7

CHAPTER 2: LITERATURE REVIEW
2.1 Introduction to Literature 10
2.2 Refugees and Family Planning Services 11
2.3 Refugee Men and Family Planning Knowledge 12
2.4 Men and Family Planning Communication 13
2.5 Family Planning Involvement in Refugee Camp and Home Country 15
2.6 Refugees and Fertility Preferences 16
2.7 Policies and Programs Concerning Men and Family Planning 17
2.8 Other Barriers to Family Planning 20

CHAPTER 3: METHODOLOGY

3.1 Study Site 22
3.2 Study Design 23
3.3 Study Population 24
3.4 Sample Size 24
3.5 Sampling Procedure 24
3.6 Data Collection Techniques and Tools 25
3.7 Training and Recruitment of Research Assistants 28
3.8 Plan for Data Processing and Analysis 29
3.9 Ethical Considerations 30

CHAPTER 4: RESULTS

4.1 Questionnaires 31
4.1.1 Characteristics of Sample 31
4.1.2 Family Planning History 32
4.1.3 Fertility Desire among Refugee Men 34
4.1.4 Family Planning Knowledge among Refugee Men 37
4.1.5 Benefits and Drawbacks to a Large Refugee Family 39
4.1.6 Family Planning Communication among Refugee Couples 41
4.1.7 Refugee Men and Family Planning Providers 42
4.1.8 Logistic Regression 44

4.2 Focus Group Discussions 46
4.2.1 Family Planning Knowledge 46
4.2.2 Family Planning Attitudes 46
4.2.3 Communication and Family Planning 49
4.2.4 Abortion 51
4.2.5 Repatriation Concerns 51
4.2.6 Camp-Based Family Planning Education 53

4.3 Key Informant Interviews 55
4.3.1 Staff Turnover 55

4.3.2 Camp Employee Description 56
4.3.3 Challenges of Men's Involvement 56
4.3.4 Family Planning Campaigns 58
4.3.5 Family Planning Supply Chain 59
4.3.6 Repatriation 60
4.3.7 Health Agencies in the Camp 60
4.3.8 Camp Family Planning Guidelines 61
4.3.9 Ideas for Increasing Family Planning 61

CHAPTER 5: DISCUSSION
5.1 Family Planning Use 63
5.2 Men's Knowledge of Family Planning 63
5.3 Misconceptions and Stigma 64
5.4 Men's Desired Fertility 65
5.5 Family Planning and Couples Communication 66
5.6 Perceived Benefits and Drawbacks to Large Family Size 67
5.7 Cultural Barriers to Men's Involvement in Family Planning 68
5.8 Provider Related Barriers 69
5.9 Family Planning Campaigns 70
5.10 Limitations 71

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS
Conclusion 73
Recommendations 73

REFERENCES 75

APPENDICES
Appendix A: English Consent Form for Refugees 80
Appendix B: Swahili Consent Form for Refugees 82
Appendix C: English Questionnaire for Refugees 84
Appendix D: Swahili Questionnaire for Refugees 89

Appendix E: Focus Group Discussion Guide 94
Appendix F: Consent Form for Key Informants 97
Appendix G: Guide for Key Informant Interviews 99

LIST OF TABLES

Table 1: Demographic Characteristics of Respondents 32
Table 2: Family Planning History of Respondents 33
Table 3: Demographic Variables Associated with Respondents' Family Planning Use ... 34
Table 4: Refugee Age Group and Desired Number of Children 35
Table 5: Reason for Desired Number of Children 36
Table 6: Abortion and Child Death among Respondents and Respondents' Wives 37
Table 7: Family Planning Knowledge on Child Spacing and Methods 38
Table 8: Frequency of Family Planning Methods Identified 39
Table 9: Benefits and Drawbacks to Large Families in a Refugee Camp 40
Table 10: Family Planning and Spousal Involvement 42
Table 11: Refugee Perception of Family Planning Providers 44
Table 12: Logistic Regression Analysis of Selected Variables 45
Table 13: Focus Group Discussion Characteristics 46

LIST OF FIGURES

Figure 1: Conceptual Framework 7
Figure 2: Nyarugusu Refugee Camp, Kasulu District, Kigoma Region 23
Figure 3: Current Number of Children vs. Desired Number of Children 35

List of Abbreviations

CMR	**Child Mortality Rate**
CPR	**Contraceptive Prevalence Rate**
DHS	**Demographic Health Survey**
DRC	**Democratic Republic of the Congo**
FP	**Family Planning**
HIT	**Health Information Team**
IAWG	**Inter-Agency Working Group**
IAFM	**Inter-Agency Field Manual**
ICPD	**International Conference on Population and Development**
IDP	**Internally Displaced Person**
IMR	**Infant Mortality Rate**
MCH	**Maternal and Child Health**
MDG	**Millennium Development Goal**
MISP	**Minimum Initial Service Package**
MMR	**Maternal Mortality Ratio**
NGO	**Non-Governmental Organization**
RHRC	**Reproductive Health Response in Conflict Consortium**
SPSS	**Statistical Package for Social Science**
TFR	**Total Fertility Rate**
TRCS	**Tanzanian Red Cross Society**
UN	**United Nations**
UNFPA	**United Nations Population Fund**
UNHCR	**Office of the United Nations High Commissioner for Refugees**
USAID	**United States Agency for International Development**
VCT	**Volunteer Testing and Counseling**
WCRWC	**Women's Commission for Refugee Women and Children**
WFP	**World Food Program**
WHO	**World Health Organization**

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

As of 2008, there were approximately 34.4 million people of concern worldwide to the Office of the United Nations High Commissioner for Refugees (UNHCR), composed of refugees, asylum seekers, internally displaced persons (IDP), returnees, and stateless people. Refugees alone accounted for 9.05 million people out of that total (UNHCR, 2008). UNHCR defines a refugee as "someone who owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country" (United Nations, 1951).

In the developing world, such persecution continues to create these populations fleeing from their home countries. By continent, Africa is home to the second largest number of refugees, after Asia. Although the current politics are changing, Tanzania has for a long time received refugees with open arms, a legacy initiated by its first president, Julius Nyerere. As a result, Tanzania hosted the highest number of refugees in Africa for years. These refugees hailed from Burundi, the Democratic Republic of the Congo (DRC), Mozambique, Rwanda, Somalia, and Uganda (UNHCR, 2009). As recently as the year 2000, over 680,000 camp refugees were based in Kigoma and Kagera regions. That number fell below 100,000 for the first time in fifteen years in November 2009 (Sapa-Associated Free Press, 2009).

Relief efforts in camps by governmental and non-governmental organizations (NGOs) have historically focused on the traditional areas of assistance, which include food, water, shelter, sanitation, and immunization (Schreck, 2000). Preventing disease outbreaks and malnutrition often take precedence over other health-related concerns, such as reproductive health. But while providing sufficient amounts of food and minimum standards of shelter remain a focus for aid agencies working with refugees, sex can be a drive that overrides other refugee needs (Editorial The Lancet, 1993).

The humanitarian crises in Rwanda and Yugoslavia in 1994 finally brought attention to the lack of reproductive health services among refugees due to incidences of sexual violence and widespread unavailability of contraceptives. The same year, the International Conference on Population and Development (ICPD) in Cairo provided a Program of Action that addressed this limited access of services to refugees (Schreck, 2000). Two influential organizations formed as a result, the Reproductive Health in Response to Conflict consortium (RHRC) and the Inter-Agency Working Group on Refugee Reproductive Health (IAWG). The IAWG introduced the Minimum Initial Service Package (MISP) to emergency-phase refugee camps, which was a basic reproductive health kit, as well as the Inter-Agency Field Manual (IAFM), which provided guidelines for reproductive health in refugee situations (Austin et al, 2008).

Reproductive health in refugee settings focuses on a few key areas: MISP, safe motherhood, sexual and gender-based violence, sexually transmitted infections (STI) including HIV/AIDS, family planning, and reproductive health of young people (IAFM, 1999). Out of those, issues related to HIV/AIDS tend to dominate both humanitarian assistance discussions and research projects, while family planning programming within post-emergency camp settings has received comparably little attention (Escher, 2004). Family planning is a recognized human right inextricably linked to general health, and it is typically comprised of both contraception and child-spacing, activities which relate to how many children are desired and when (UNFPA, 2008). Contraception can prevent 2.7 million infant deaths a year, while reducing the economic burden on poor families. Estimates show that having universal access to family planning can save the lives of 175,000 women annually, while child spacing of at least three years can prevent the deaths of 1.8 million under-fives. Proper family planning can also avoid the severe and sometimes fatal consequences of abortion, which can arise with unwanted pregnancies (UNFPA, 2006). Within refugee camps, it is estimated that 25-50% of maternal deaths are due to unsafe abortions (IAWG, 2004). Therefore, family planning has the potential to reduce maternal mortality ratios (MMR), child mortality ratios (CMR), and infant mortality ratios (IMR).

It has been proven that the economic burden on poor families can be reduced by having fewer,

healthier children who can be cared for and educated, as opposed to having many children, where quality of life can be compromised. Smaller families allow for scarce resources such as food, housing, and health to be better managed, and it allows couples to engage more freely in income-generating activities (UNFPA, 2008).

Most family planning programs carry a women-focused approach, neglecting the men's half of the equation. This holds true in both refugee and non-refugee settings, but even more so in the former. Services have most commonly been offered within Maternal and Child Health (MCH) centers, and most family planning research and campaigns have focused on women. The focus on women reinforced the notion that family planning is a women's domain, leaving men on the periphery. However, the benefits of men's involvement in family planning are many, including the prevention of unintended pregnancies, the reduction of the unmet need for family planning, and the fostering of safe motherhood (Raghavan-Gilbert, 1999)

Men's involvement in family planning has been defined as increasing the number of men who use condoms and have vasectomies, but also increasing the number of men who encourage and support their partner and peers to use family planning. It lastly refers to men's involvement in policy matters to assist the development of men-friendly family planning programs (Toure, 1996).

Realizing the dearth of men's involvement in family planning, the ICPD emphasized a move to correct that in stating, "Efforts should be made to emphasize men's shared responsibility and promote their active involvement in responsible parenthood, sexual and reproductive behavior, including family planning" (ICPD, 1994). This resulted in a spike in family planning programs that involved men (IGWG Men's Reproductive Health Task Force, 2004). When it came to refugees, the IAFM similarly suggested that men be given the appropriate information and take an active role in the family planning decision-making process. This would in turn ensure that joint responsibility is taken for decisions and also maximize acceptance of family planning methods within a community (IAFM, 1999). However, men's involvement in refugee camp settings continues to be low, and involving the refugee men has proved to be a struggle.

1.2 Problem Statement

Over the last two decades, increased attention has been given to the necessity of reproductive health services in refugee settings. As a result, international humanitarian organizations have made family planning programming available within refugee camps. However, the programming has neglected the role of men, the often forgotten fifty percent of the family planning equation. Historically, men's involvement in family planning has not been prioritized in practice around the world, despite the fact that it has proven to be crucial to family planning's success and that it is promoted in policy guidelines (WCRWC, 2002).

The limited success of family planning services in Tanzanian refugee camps may in part be due to this lack of men's involvement. Contraceptive prevalence rates (CPR) remain low, while the crude birth rates remain high. UNHCR in Tanzania has expressed concern over the fact that more than 200 babies are being born each month in Nyarugusu camp. Within four years, this will amount to nearly 10,000 new refugees, which will make it difficult to serve everyone (Mgwabati, 2010). The lack of family planning creates greater health risks for women and burdens couples with more children than they can properly support, adding to the myriad of other problems already faced by refugees. It effectively puts the lives of the mothers, infants, and children at high risk and also compromises their quality of life. The lack of family planning can have repercussions in both the camp setting as well as after the refugees are repatriated or resettled. Conflict itself can complicate emergencies, but some research suggests that it is the post-conflict situation which creates further risks by removing the protective factors that come with isolation and a lack of mobility (Morris, 2009). While each refugee camp in Africa is not identical, Nyarugusu camp in western Tanzania is facing the typical issues of low usage of family planning. The factors associated with the lack of men's involvement need to be addressed.

1.3 Study Rationale

Refugees are a group of public health concern and importance, as their status as displaced individuals makes them vulnerable to a variety of health risks. They are the marginalized of the

marginalized, living in an unfamiliar setting. Refugees are among the most vulnerable groups to health disparities because they are exposed to the increased risk factors of displacement, such as economic stresses, a breakdown of social structure, and poor pre-displacement health status. Refugee situations can intensify existing barriers with regards to contraceptive use, such as cultural norms and misinformation among the refugees prior to departure (Seicean, 2004).

Given that most of the focus in the field of refugee reproductive health falls on women, there is a lack of this research concerning men. Specifically, family planning with relation to refugee men, especially within the camp setting, has seldom been studied. Within Tanzanian camps, use of family planning clinics and contraceptives remains unacceptably low. Thus, it is important to understand the possible causes. Given the benefits of engaging men in family planning, it is important to maximize their involvement by identifying potential barriers which are preventing men from participating fully. By addressing these barriers, it is possible to increase the usage of contraceptives in order to prevent unwanted pregnancies and to engage in healthy child spacing.

Family planning among refugees is also important in relation to achieving the Millennium Development Goals (MDGs), as successful family planning initiatives have the potential to reduce the maternal mortality ratio (MMR), infant mortality rate (IMR), and child mortality rate (CMR), improve children's education, alleviate poverty and hunger, and decrease the spread of HIV. Protracted refugee situations are becoming more and more commonplace, so it is relevant to carry out such an investigation within a post-emergency camp such as Nyarugusu, which has been in existence for thirteen years. Family planning within a refugee setting is important because the families will eventually have to repatriate to their war-torn homeland at some point in time. Services will not be free, as they are in refugee camps, and therefore it is important to return with a healthy family that will not be a socio-economic or health burden.

While no two refugee situations are identical, the findings from one camp can still be of help to the management and care of the nine million other refugees worldwide and those in similar

settings. The persistence of refugee situations in the Great Lakes region along with the global efforts towards safe motherhood make this study ever pertinent. Finally, the Tanzanian Red Cross Society (TRCS), which is currently in charge of health services at Nyarugusu camp, has expressed interest as to what challenges men are facing with regards to family planning and why. These findings will thus add knowledge to a gap in the literature, and they can be of use for the creation of family planning programs or for the appropriate allocation of financial and human resources

1.4 Research Questions

1. What proportion of men use family planning services?
2. What are the available family planning services in the refugee camp?
3. What personal factors are associated with use of family planning services?
4. What provider-related factors are associated with use of family planning services?

1.5 Research Objectives

1.5.1 Broad Objective

To describe factors associated with refugee men's involvement in family planning in Nyarugusu camp in Kasulu District

1.5.2 Specific Objectives

1. To determine the proportion of men using family planning
2. To describe available family planning services in the refugee camp
3. To describe factors associated with involvement in family planning among refugee men at the individual level
4. To describe factors associated with involvement of family planning among refugee men at the provider level

1.6 Conceptual Framework

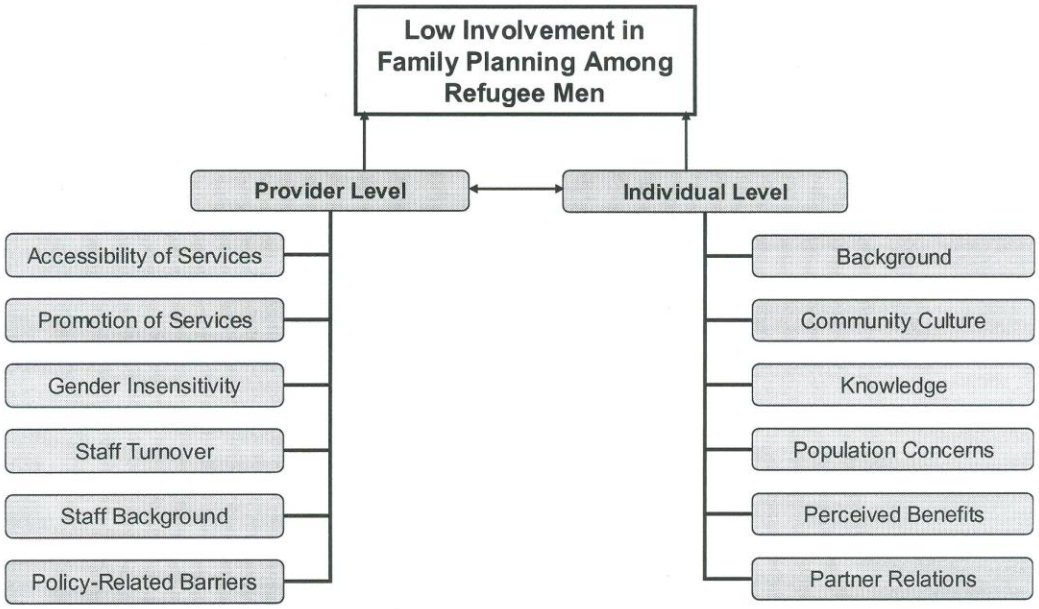


Figure 1: Conceptual Framework

Figure 1 shows the conceptual framework which is used in this study to analyze the potential factors associated with the low involvement of refugee men in family planning. The framework divides the factors into two broad categories, those which fall under the provider level and those which fall under the individual level. These two categories function with one another to affect the low involvement in question. The framework is based off of literature which focuses on factors associated with low family planning usage in both refugee and non-refugee settings.

The provider level refers to all of the people and organizations related to provision of family planning services within the refugee camp. This includes the health staff who work in the dispensaries, health posts, and MCH clinics as well as staff who oversee the health operations

and are in management-level positions within the implementing NGOs.

Accessibility of services, the first factor listed in the provider level of the framework, refers to the degree of which the services can be reached by refugee men. This takes into account distance, waiting times, and hours of operation. Accessibility in this framework also includes availability of the broad range of family planning methods for both men and women.

The promotion of services is a factor regardless of whether or not the services are accessible. It is important to consider to what degree and how family planning messages target refugee men by providers, if they are being promoted at all.

Gender sensitivity of the providers has often been cited as a cause for low men's involvement in non-refugee populations, due to a lack of skills and experience in working with issues relating to sexuality among men. The attitudes of providers towards men could either promote or hinder men's involvement in family planning. At the same time, the attitudes of the men towards the provider can do the same.

Staff turnover in the health facilities within the camp prevents a consistent presence for the refugees seeking help. This impedes the formation of trusting relationships between providers and clients.

The background of the staff is a potential factor to refugee men, such as the number of men versus the number of women working at the provider level for issues relating to family planning. Whether the provider is a refugee or non-refugee may have an effect on refugee men's decision to become involved in family planning services.

Finally, the policies regarding family planning which are exist or are in practice can have a large impact on all of the other factors in this category regarding available services, staff characteristics, and more. The policies are largely those of the implementing humanitarian agencies as well as the UNHCR.

The individual level refers specifically to factors directly tied to the characteristics of the refugee men. The background of the refugee men refers largely to demographics, such as education level, marital status, religion, age, number of children, and their residence in the DRC.

Cultural factors of the community relate to beliefs within their communities which either give value or discourage men being involved in family planning. These are factors which are largely carried over from the refugees' communities in the DRC prior to displacement. This incorporates the preference for larger families and the attitudes towards using contraception.

Knowledge refers to the level of understanding the refugee men have about family planning, including birth spacing and contraceptive use. It also includes the presence of misinformation and myths regarding family planning which have propagated and accepted as truths.

Population concerns are linked to fertility desires because historically, certain refugee groups decided that they needed to rebuild their families and communities which had been decimated by violent conflict. Therefore, groups who feel as though their population has shrunk may avoid family planning.

Perceived benefits refer some advantages that refugees may see in having more children within the camp. For example, in some other African refugee camps, families had more children believing that this would result in greater food rations or a better chance to be resettled abroad.

Partner relations reflect the degree of communication between refugee men and their female partners as well as the tendency to agree or disagree on the involvement in family planning. It also includes frequency of sexual intercourse, history of family planning usage, and the decision-making power dynamic that exists between a refugee man and woman.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction to Literature

While refugee health has gradually become an issue of public health concern, Africa has been underrepresented in the body of research. Family planning in relation to refugee health has only recently come into the picture, and men's involvement has historically been neglected. In one comprehensive literature search, only 10% of studies on refugee health were conducted in sub-Saharan Africa, and family planning was seldom a focal point (Seicean, 2004).

In the 1990s, positive trends in family planning were seen as condom usage increased significantly, as did donor allocation of resources towards men's involvement in family planning. These trends represented a global overview, but pockets certainly existed where such increases were not as evident, including refugee settings (Clark et al., 1999). This literature review focuses on existing studies which revolve around refugees and family planning, but also on non-refugee men and family planning. This is due to the dearth of studies in the specific area of interest and the understanding that the refugee men at some point were non-refugees themselves. The general factors associated with refugee men's involvement in family planning include services, knowledge, communication, pre-displacement factors, fertility preferences, policies, and more – much along the lines of the conceptual framework in Figure 1.

The predominance of female controlled methods for pregnancy and the traditional linkage of birth to maternal health has pushed men to the wayside when it comes to family planning. The self-fulfilling prophecy that men do not care about family planning has led to a lack of efforts in educating men about family planning. Refugee situations can intensify existing barriers with regards to contraceptive use, such as cultural norms and misinformation among the refugees prior to departure, and that is why it is crucial for this area of study to be addressed (Seicean, 2004).

The terminology for men's involvement in family planning varies. It has been referred to as

men's involvement, men's participation, men as partners, male involvement, and more. However, the terms refer by-and-large to the same concepts. This includes planning the number of offspring and their structure with the partner, approving and using contraceptives, supporting and encouraging the partner in family planning, and promoting men-friendly family planning policies (Ghosh, 2004).

2.2 Refugees and Family Planning Services

Even though attitudes towards family planning vary widely among conflict-affected populations, there is significant evidence pointing to an unmet need for family planning services. Service provision and usage of family planning services in camps is far from uniform, suggesting further research and modification of programming (RHRC 2003). The IAFM lists the MISP as a necessary service in the first phase of an emergency, followed by other contraceptive services once the situation has stabilized, and yet those necessities are not always realized (Schreck, 2000). A global evaluation on the availability of reproductive health services for refugees and internally displaced persons had mostly positive findings, with the exception of family planning. There were gaps in family planning services, especially concerning the availability of methods and skills of service providers (RHRC O'Heir, 2003).

On the other hand, a survey of 52 post-emergency camps in seven countries around Africa and Asia showed that family planning services were available close to all camps (Hynes, et al. 2002). In a separate study carried out in refugee and IDP settings in over 33 countries, it was found that at least one method of family planning was available within each setting. Oral contraceptive pills (96%), condoms (95%), and injectable hormones (89%) were the most commonly available. However, a choice of contraceptive methods is essential to family planning, and while a majority of sites had at least one method available, IUDs, sterilization, and implants were far less common (IAWG, 2007).

Health providers in Kenya's Dadaab refugee camp found that the family planning services themselves were not always continuous, since resources were often diverted to address the continuous influx of refugees and outbreaks of communicable diseases. Long-term

interventions were difficult to implement because refugee camps were thought of as temporary residences. However, the camp was home to Somali refugees who had been in Dadaab for fifteen years (USAID, 2008).

Aside from just the availability and continuity of general services, there have been shortcomings in terms of services which are accessible to men. Services which are men-friendly are important because if men are introduced as equal and supportive partners in the range of reproductive health services, as well as clients, the reproductive outcomes will be improved for both men and women (Raju, 2000). Most family planning clinics cater to women, often integrated as part of maternal and child health (MCH) clinics (Wegner et al., 1998). The women-centered focus makes men uncomfortable about attending the clinics or accompanying their wives since the staff is not as familiar or comfortable with speaking to men about sexual health. One man in a Kenyan study claimed, "There was not even a single man there, just queues of women and their babies. This was a woman's world and I felt totally lost" (Wambui, 1995). Thus, even when men are ready and willing to participate, family planning programs have not given them adequate attention.

Experts claim that family planning initiatives for men should not run in competition with those of women, but rather, the efforts should be integrated. The efforts for increasing men's participation should also enhance women's programming and not undermine it. Suggestions for men's participation involve male-only clinics, male service providers, wider range of services, gender-neutral environments, special hours or special rooms, services for young men, and IEC materials specific for men.

2.3 Refugee Men and Family Planning Knowledge

Men's lack of sufficient knowledge regarding family planning can serve as a barrier to their involvement in family planning, regardless of if the proper services are available. Staff at Dadaab refugee camp felt that refugees did not have adequate knowledge of positive family planning, and this was responsible for low utilization, despite the availability of basic services (USAID, 2008). A study carried out in an Angolan refugee camp showed that knowledge of

family planning among men was extremely low at baseline, with only 8% of men able to name at least two modern methods. This increased only slightly to 11.6% post-intervention. Interest in birth spacing or limiting births was 50% at baseline and increased to 72.3% post-intervention among men. The main reason cited for not using family planning was a lack of information on available contraceptives and where they could be found (Roble, 2003).

Often, the men's lack of knowledge of family planning overrides a woman's knowledge of family planning and her desire to stop having children. In a Cambodian refugee camp, 82% of women wanted to stop or delay childbirth, and yet focus group discussions with men showed that they lacked knowledge on contraceptive use and had restrictive attitudes regarding women's access to it (Morrison, 2000). This suggests integration of men into couples education and community education.

Misinformation around family planning is also an issue of concern. Some members of a focus group discussion reported that condoms resulted in abnormal deliveries and caesarian sections, while others believed that condoms coming from Europe contained viruses (Tanaka et al., 2008). In other cases, men have shown to know less about reproduction, anatomy, and contraception as compared to women, and possess misconceptions about these issues (Ezeh et al., 1997). A KAP survey conducted among Palestinian refugees in Gaza showed that despite favorable attitudes towards family planning, ignorance persists and contraceptive use remains low. Again, the lack of proper knowledge contributes to a gap between fertility preference and fertility achieved (Donati, 2000).

The sources of family planning knowledge between men and women refugees can differ as well. In a study from a refugee camp in Guinea, it was found that men obtained their information from non-health settings, such as radios, friends, and dramas. Women, on the other hand, obtained their information from life experiences (Howard, 1998).

2.4 Men and Family Planning Communication

The problem of male-female communication with regards to family planning is evidenced

globally, but it is exacerbated among certain more vulnerable groups, such as adolescents, the illiterate, and also refugees.

In Madagascar, Norplant continuation rates were higher after one year among couples where the husband was involved in decision-making than those in which only the wife was counseled (Tapsoba et al., 1993). DHS data from African countries (Botswana, Burundi, Ghana, Kenya, Senegal, Sudan, and Togo) shows that the percentage of women using modern contraceptives is higher in the group that discussed family planning with their husbands compared to the group that had not done so. Therefore, spousal communication is positively associated with contraceptive use (JHU/PIP, 1994). In a study carried out in Tanzania, it was discovered that men are rarely asked about their participation in family planning. Contrary to the assumption that men are unwilling or apathetic towards family planning, they welcome the opportunity to become involved (Popoola, 1999). Additionally, due to a lack of communication, many women do not know what their husbands think about FP. Many women think that their husbands disapprove of FP, when in fact the husband approves (Toure,1996).

The husband's support of family planning is found to be a good predictor of future practice and continued use. A study among couples in South Korea found that 71 percent of women whose husbands approved of family planning had used contraception at some point in time, while only 23 percent of women whose husband did not approve had done the same (Population Reports, 1994). A study in Kanembwa refugee camp in Tanzania showed that 39% of women discontinued use of family planning largely because their partners forbade them from continuing. The same study also found that men felt excluded from family planning services. Frequent meetings with men helped ensure the continuation of family planning services, and men even began to escort their partners to the clinics (Muhingo, 2003). Among refugees in Rwanda, men's disapproval of contraceptive use by women led to many women taking birth control in secret or relying solely on natural methods of birth control. However, they admitted to having little voice regarding when they can have sex, so natural methods have proven to be difficult to use (Pavlish, 2005). In a study conducted in Nigeria, above 80% of both husbands and wives separately reported that men have greater influence over the family decisions. Given

this dramatic figure, the common image of African men as being obstacles and opponents of family planning can be reversed to make them potentially excellent advocates for it (Isuigo-Abanihe, 1994). However, if their decision-making power is not, they will not become advocates and consequences will not be positive for the promotion of family planning.

The issue of communication and family planning with men is not isolated to communication between a man and his partner. Communication between client and provider has also proven to be of exceeding importance to a successful integration of men in family planning. This includes respectful treatment, confidentiality, voluntary and informed choice, and inclusion of a gender perspective. Part of men's dissatisfaction with family planning services stem from the fact that they are not evaluated to see what services they want, what information they want, and determine an appropriate mode of communication. When asked what type of family planning counselor men desired, they responded by saying that an effective worker should have knowledge about masculinity, gender roles and values, and men's position in the family. Counselors should also have the ability to speak comfortably and openly with men about sexual behavior (Ezeh et al., 1997). Program managers, health care workers, and other providers serve as gatekeepers to family planning, but they can block men's involvement, often unaware of their own personal attitudes and biases. Many providers simply lack the knowledge and training to work with men (Wegner et al., 1998). In order for men's participation to be the most effective, implementers need to have a good understanding of the socio-cultural factors involved in the gender relations and understand the gender dynamics which define the relationship with increasing age (UNFPA, 1998).

2.5 Family Planning Involvement in Refugee Camp and Home Country

In the family planning study done in the Guinean refugee camp, researchers found that the current use of modern contraceptives was 17%. The modern contraceptive usage rate in Sierra Leone, where the refugees migrated from, was only 3.9% (Howard, 2008). Congolese refugees in Tanzania, like many other refugee groups around the world, experienced improved health indicators as compared to their country of origin including neonatal mortality, maternal mortality, and low birth weight. This has been attributed to better access to preventative and

curative health services within post-emergency camp settings (Hynes, 2002). The International Rescue Committee (IRC) carried out extensive operations in western Tanzanian camps integrating reproductive health services into primary care. The strategy proved successful, as rates of gender-based violence and abortion decreased (Krause, 2002).

The importance of family planning extends beyond simply the refugee camp setting. Congolese refugees who returned to their homes in the Maniema province came to find that the health system was bankrupt. Maternal mortality climbed to 1,289 deaths per 100,000 live births, and child mortality was 243 per 1,000 live births. Resettlement processes often neglect family planning as a second or third tier post-crisis need (Toth, 2007). Therefore, it is valuable for men to be knowledgeable of family planning beforehand because the services available in the camp, despite their limitations, may not be available at all in the refugees' home country.

In the war-torn DRC, a household survey indicated that some homes have more than 10 children, citing high infant mortality as the main reason for desiring a large family. The study indicated that 36.8% of the families said they would accept however many children God wanted. Child spacing between two previous births was less than one year for 28.6% of the women, and between one and two years for 35.7% of them. Family planning was in general difficult to implement due to the desire of a large family and men's disapproval of their wives using family planning methods (Toth, 2007).

Approval of family planning was higher in women than in men among refugees in Guinea, and the women also knew more about family planning than the men. Almost half of the participants reported not having spoken with their partners about family planning practices. However, the usage of family planning was far higher within the camps in the host country compared to usage rates in the home country of the refugees (Howard, 2008).

2.6 Refugees and Fertility Preferences

A seminal report by the Women's Commission for Refugee Women and Children concluded that fertility is high within refugee settings, and many pregnancies occur in women who are at

a high risk for obstetric complications (Wulf, 1994). Contradictory findings exist with regards to fertility rates among those affected by war. In Sarajevo in the mid-1990s, the mean annual number of births declined, likely due to marital separation and postponement of births and to the general insecurity of the situation (Carballo et al., 1997). Two ethnic groups of Sudanese refugees in Ethiopia experienced opposite patterns in birth rates. One group showed an increase due to better camp organization but also a desire to repopulate following a massacre. The other group showed a decline in birth rate due to poor health services and harsh conditions (Centre for research on the Epidemiology of Disasters, 1997). In Tanzania's Mtendeli camp, 71% of sampled refugees noted that more children were born in the camp as compared to Burundi, and 35% of them attributed this phenomenon to their idleness in the camp (Morof et al., 2007). As a result, it is difficult to generalize on fertility trends in refugee camps. However, the one pattern that does emerge is that stable camp settings create fertility rates comparable to those found in the home country of the refugees (McGinn, 2000).

In a Ugandan IDP camp, some men reported that they expected their wives to produce children from marriage until menopause. To them, women's interest in contraceptives translated into an interest for infidelity. The women also cited a definite need for general sensitization within the camps regarding family planning, especially for men. Many suggested that going from home to home within the camp could help increase the very low practice of family planning. In the conflict-affected areas of Uganda, the contraceptive prevalence rate is the lowest and the abortion rate is highest. The inevitable conflict that arises in this situation is that men desire as many children as possible, and women desire birth spacing. This situation has been commonly identified in refugee camps in the Great Lakes region of Africa (UNFPA, 2007).

2.7 Policies and Programs Concerning Men and Family Planning

The IAFM offers some of the main guidelines for the involvement of men refugees in family planning. Men are encouraged to become involved in family planning services via couples counseling, condom promotion, special health facility times for men, peer-group sessions, and social groups. Men's perspectives and motivation are important for planning activities. Men's usage of contraceptives allows for joint responsibility for family planning with their female

partners. Therefore, the services need to be tailored for the needs of men. The CPR is to be collected at the health-facility level to see the percentage of women who are using a method of contraception or whose partner is using a method at a given point in time. At the community level, community-based surveys should be carried out to assess knowledge, attitudes, and practices of refugees concerning family planning services. Lastly, regular skills training and assessments of health personnel who implement the family planning program should be carried out. An indicator should therefore be in place to measure the competency of the workers (UNHCR, 1999).

The United Nations Population Fund similarly recommends building on men's approval of family panning, using mass media to communicate with men, reach out to young and unmarried men, understand the influence of gender, encourage couple's communication, bring information where men gather, inform men about condoms and vasectomy, counsel men with respect and sensitivity, and offer men a range of health services (UNFPA, 1998)

The UNHCR's Strategic Plan for Reproductive Health, 2008-2012, touches on issues regarding refugee men and family planning. The United Nations Strategic Objective 3.3 is to "establish effective and supportive family planning programs" with the indicator being the percentage of women who use (or whose partner uses) modern family planning method. Strategic objective 6 focuses on assessment, surveillance, monitoring and evaluation and operational research. Coverage and quality of programs should be checked, along with a functional HIS, every 2 years in a stable camp setting.

Indicators of achievement under family planning include the percentage of operations involving men in reproductive health activities, including family planning. The target is 100% with annual periodicity, and the country office serves as the source of measurement (UNHCR Strategic Plan, 2007).

It is important to note that refugees exist in very different stages of conflict, and the family planning services expected differ accordingly. Generally, the phases are divided into the exodus/emergency phase, the post-emergency phase, the stabilization phase, and the

settlement/repatriation phase (Busza et al, 1999). Stabilization is required for a more comprehensive family planning program to be in place, and stabilization is defined by a crude death rate of less than 1/10 000 per day, no major epidemics, and no expected repatriation or relocation within six months (UNHCR, 1999b).

Although the international community has developed guidelines of meeting refugee family planning needs, countries often delegate reproductive health service provision to other organization whose policies sometimes differ in standard. Therefore, refugees can suffer from serious gaps in reproductive health services due to management by different organizations. Operational policies may also create a barrier, due to frequent absence or turnover of personnel, restrictions on the personnel permitted to distribute contraceptives, administer drug treatment, require spousal consent, limited choice of contraceptive, inadequate pre- and in-service training, burdensome reports for management and a lack of understanding how service statistics can be used (USAID, 2008). Differing ideological approaches to reproductive health have been cited as an inhibiting factor to the availability of family planning methods. Christian and other religious based relief organizations explicitly prohibit the provision of certain contraceptives, regardless of the demand expressed by refugees (Wulf, 1994).

Prior to the conflict in Sierra Leone, knowledge, access, and use of family planning by nationals was quite limited. During the conflict, refugees who were in the camp experienced an increase in family planning use. When refugees entered Largo camp in 2002, the focus was on basic necessities such as food, water, and shelter, and condoms for men became available in 2004, provided by NGOs dedicated to HIV prevention. Men and adolescents said condoms were provided from NGOs, hospitals, and pharmacies, but they were not always free. Condom promotion often was reserved for the sake of HIV prevention and was not used to simultaneously raise awareness regarding the benefits of fertility control. The attention given to men's reproductive health needs was cited as a barrier to improved family planning quality and access. Costs were reportedly transferred to the clients, with a package of condoms costing 17 cents. The lack of consistent guidelines led to differing rules as to who could and could not receive injectables. Staff try to dissuade women from hiding their injections from their

husbands (USAID, 2008).

2.8 Other Barriers to Family Planning

In a Zambian refugee camp for Angolans, barriers to family planning included the need to rebuild the tribe after thirty years of war. Other barriers included lack of husband's permission, women's difficulty in persuading partners to use a condom, religious and cultural beliefs that accept as many children as God desires, the idea that family planning methods should only be for those who already have children, and a lack of community-based distribution programs. Condoms were out-of-stock occasionally, and the lack of privacy and confidentiality in obtaining contraceptive devices proved to be an impediment. Women were serious in saying receiving greater food rations was an incentive to have more babies, (WCRWC, 2001).

A focus group discussion in Nyarugusu camp found that family planning was avoided due to a desire to have many children, which is a sign of power in the Congolese culture. The children can be used as a source of labor, especially when so many children died during the displacement process (Tanaka, 2008).

In the study conducted within the Guinean refugee camp, formal education increased the likelihood that refugee men knew about family planning methods. However, knowledge of family planning did not differ significantly among those who were above the age of 20 and those who were below the age of 20. Their reasons for choosing a specific contraceptive source were related to service quality, such as the friendliness of staff, privacy, and staff competence (Howard, 2008).

The refugees' perceived incentives and disincentives from international relief organizations in the camp have resulted in a pursuance or avoidance of family planning. The desire to receive greater food rations can stimulate heightened fertility (Busza et al, 1999). This may be in part due to the scarcity of sufficient food rations in camp settings. Despite public health interventions, malnutrition was still found in under-fives in a Rwandan refugee camp in the DRC. Factors cited contributing to this outcome included inadequate general food rations, lack

of supplemental dietary foods due to economic restrictions within the camp, and inequities in food distribution as a result of food siphoning by military leaders (Renzaho et al., 2003). Use of Depo-Provera was thought to help chances of resettlement in the United States in Thailand during the 1970s (Potts, 1980). On the other hand, Cubans in Panama thought that pregnant women and large families would make access to the United States easier as asylum-seekers (Lawler and Hansch, 1995).

Despite all of the aforementioned studies which have been conducted with regards to family planning, men's involvement, or refugees, very few studies incorporate all three elements. This proposed study intends to build on the literature to offer more insight into the specific area of refugee men's involvement in family planning.

CHAPTER THREE:

3.0 METHODOLOGY

3.1 Study Site

This study was carried out in Nyarugusu refugee camp located in Kasulu District of Kigoma Region during June of 2010. Kigoma Region is one of the 26 administrative regions of Tanzania, bordered to the north by Kagera Region, to the east by Shinyanga and Tabora Regions, and to the south by Rukwa Region. Lake Tanganyika lies to the west forming a border with the DRC, while Burundi forms the northwest border with Kigoma Region. According to the 2002 census, the population of Kigoma was 1,679,109. The people of this region are ethnically related to Burundians. Kigoma has hosted refugees since 1993 from both Burundi and the Congo, and at one point was the site of the largest refugee population in the world. In the 1990s, refugees constituted nearly one-third of the region's population. Today, the majority of refugees have returned to their home countries, and only two camps remain - Mtabila for Burundians and Nyarugusu for the Congolese (UNHCR, 2010).

Kasulu District is one of the four districts within Kigoma Region, and as of 2002, it was reported to have a population of 628,677. Kasulu is home to both of Tanzania's remaining refugee camps (Figure 2). Nyarugusu was chosen for this study since it is a stable post-emergency phase camp, which is defined as having less than 1 death/10,000 persons/day. The average crude and under-5 mortality rates for 2009 were 0.9 and 0.6 per 10,000 persons per day respectively, indicating that the situation is under control. Voluntary refugee repatriation has been non-existent in 2010 as the conflict in South Kivu, DRC continues. Mtabila was not chosen as the study site due to ongoing repatriation efforts of the refugees back to Burundi and per recommendations from TRCS and UNHCR. The UNHCR strategic plan strives to repatriate or naturalize all Burundian refugees by December of 2011, but it predicts that thousands of Congolese refugees will still be in Nyarugusu camp at that time (UNHCR, 2009).

According to UNHCR, the population of Nyarugusu camp stood at 63,275 individuals as of January 2010. Nyarugusu camp has been operating since 1996. The camp occupies approximately 52 km^2, and it is divided into 7 zones, 50 villages, and 440 clusters. Each

cluster is comprised of an average of 24 plots, with one plot allocated per refugee family. The Congolese refugees are members of the Bembe tribe, and they speak both Bembe and Swahili, while those who attended secondary school can also speak French (Tanaka, 2008). The Tanzanian Red Cross Society (TRCS) has been serving as the health provider in the camp since 2004 through the main dispensary, a second out-patient department, and three other health posts. TRCS also employs a group of refugee health workers known as the HITs (Health Information Team), who go into the communities to educate fellow refugees on health issues. There is one HIT member for every 1000 refugees.

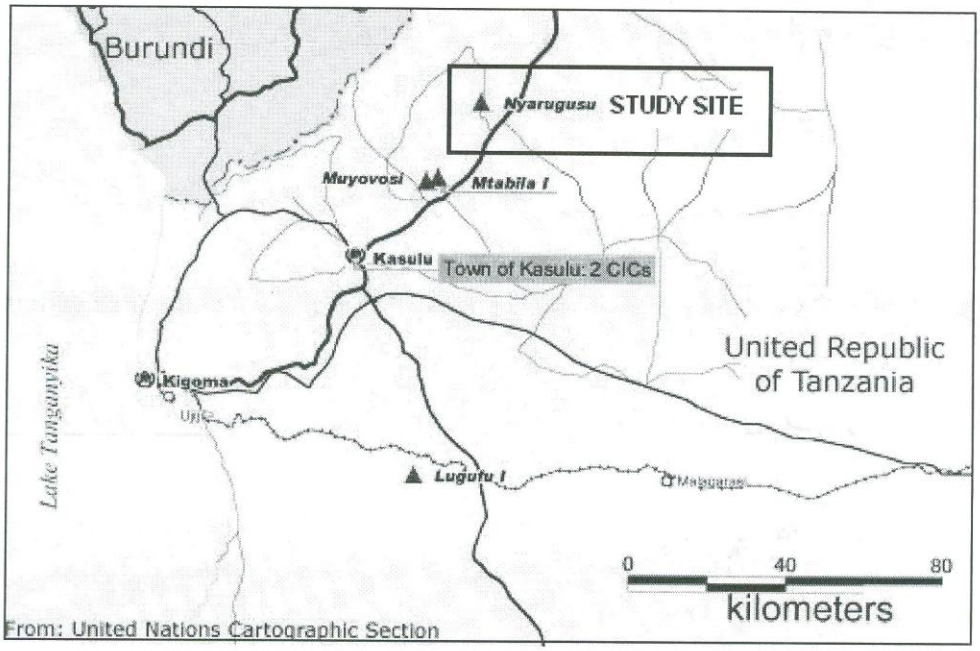


Figure 2 : Nyarugusu refugee camp, Kasulu District, Kigoma Region (note: due to certain camp closures, only Nyarugusu and Mtabila I remain open as of 2010)

3.2 Study Design

This study was a cross-sectional analytical study by design using an interview schedule. In order to complement the quantitative data, additional information was collected through focus group discussions and in-depth interviews.

3.3 Study Population

The study population consisted of refugee men age 20 years and above who self-reported as married and were living in Nyarugusu camp. For the focus group discussions, both married refugee men and women were selected from the camp, along with a couple of unmarried individuals. Key informant interviews were conducted among TRCS health staff in the camp, which included both refugees and Tanzanian nationals.

3.4 Sample Size

- $\frac{z^2 p(100-p)}{\varepsilon^2} = n$

  - z = standard normal deviate value that corresponds to some confidence level, set at 1.96 for the 95% confidence level
  - ε = margin of error allowable on proportion, set at 5%
  - p = magnitude of proportion, set at 16.0% based on the contraceptive prevalence rate in Nyarugusu refugee camp (TRCS, 2010)
  - n = sample size

- $\frac{(1.96)^2 (16)(100-84)}{25^2} = 206.5$

- (280)(2) = 413

The sample size of 206.5 was multiplied by 2 to take into account the design effect of multi-stage cluster sampling. The design effect of 2 was utilized, as it is the commonly accepted value for studies with this particular type of sampling as per WHO guidelines on sample size determination for health studies (Lwanga, 1990). Therefore, twice as many individuals were included in this study as compared to a study which uses simple random sampling. Adding 10% of 413 to this calculated value accounted for possible non-response and gave a minimum required sample size of 454 refugee men for this study.

3.5 Sampling Procedure

The administration of the questionnaire using face-to-face interviews was carried out with a multi-stage sampling method to obtain a representative sample of married refugee men age 20 and above within Nyarugusu camp:

Stage 1: Three zones were randomly selected from the seven camp zones.

Stage 2: Within each zone, three villages were randomly selected.

Stage 3: Within each village, three clusters were randomly selected. In each cluster, every plot was visited to administer the questionnaire via face-to-face interviews among eligible men. If there were two eligible men in one plot, one was randomly selected. If there were no eligible men within the plot, the interviewers moved on to the next plot.

Focus group discussion participants were selected using a similar methodology to the interview schedule. However, part of the aim was to hear voices from parts of the camp that had not been interviewed in the questionnaire portion of the study. As a result, of the four zones which were not used in the interview schedule, three zones were randomly selected. One village was randomly selected in each zone, and then three clusters were randomly selected within each of the villages. The research assistant randomly selected two to four male participants from each of the three clusters within the village to create the three focus groups. The same procedure was undertaken for the women's focus groups. There were originally going to be three women's focus groups, as well, but due to time constraints, the third focus group was not conducted. Therefore, five focus group discussions were conducted in total, three for men and two for women, each with six to ten participants.

Key informant interviews were conducted at the provider level. These individuals were selected by purposive sampling to elicit the opinions of those who had an expert knowledge of family planning within the camp setting. Ten key informant interviews were conducted in total with individuals who worked for TRCS.

3.6 Data Collection Techniques and Tools

Questionnaire

A questionnaire containing mostly closed-ended questions with some open-ended questions was administered doing face-to-face interviews with each respondent. The questionnaire was based on the research questions, study objectives, literature review, conceptual framework, and

previous studies done on men's involvement in family planning. Several exploratory variables were included, as follows.

The questionnaire specifically asked for refugee men's socio-demographic characteristics, including age, years in the refugee camp, place of living in the DRC, education, and employment status. The questionnaire also focused on the respondent's history of family planning use, which included if he had used family planning in the DRC, if he had ever used family planning in the camp, and if he was currently using family planning. The usage of family planning was defined as either the man himself or his wife using a modern method of contraception. To accompany that, the questionnaire asked for the respondent's frequency of condom usage during sex with his wife. Ever having used family planning in the refugee camp was used as the outcome variable in this study.

The questionnaire targeted the respondent's knowledge of family planning by asking him to name as many methods of family planning for both men and women, without any probing. The questionnaire asked the respondent to provide what his idea of healthy child spacing was in terms of years and then evaluate his own personal child-spacing. Similarly, it asked for the man's current number of children, his desired number of children, and the reason for why he desired the number of desired children cited.

The questionnaire also focused on communication with the respondent's wife regarding family planning. This included whether or not the respondent agreed with his wife on the number of children to have, the frequency of family planning discussions between the couple, and the initiator of those conversations. It asked about the respondent's willingness to accompany his wife to the family planning clinic, his desire to be more involved in family planning decisions with his wife, and whether or not he saw a benefit to men's involvement in family planning. It asked for the respondent's reaction if his wife hypothetically used family planning without the respondent's knowledge.

A major portion of the questionnaire served to see whether the respondent's perceived any

benefits or drawbacks to having a large family within the camp setting. Lastly, to understand the men's perception of the family planning providers, the questionnaire asked whether the respondent felt family planning methods were easily available, if the respondent thought services were inviting and friendly towards men, if the respondent preferred to be seen by a refugee or by a Tanzanian at the clinic, if the respondent preferred to be seen by a man or a woman at the clinic, and where the respondent had heard about family planning.

The questionnaire was translated from English to Kiswahili and pre-tested. The questionnaire was administered by two research assistants within the refugee camp, and it was completed one zone at a time. Consent of each refugee respondent for the study was obtained prior to their participation via a consent form which was read and signed. The consent form was also translated from English to Kiswahili for use in the field.

Focus Group Discussion

The focus group discussion served to further explain responses found in the questionnaires, but it also allowed for the women's perspective on men's involvement in family planning to be heard by including groups of refugee wives. Finally, it was able to reach out to the zones in the camp which were not reached in the interview schedule. The discussions were carried out loosely following the focus group discussion guide created for the men and the women. Some of the questions derived from certain responses or particular trends observed from the questionnaire portion of the study. The questions for the men's group and the women's group were almost identical, although the wording of some questions was altered depending on the sex of the group. However, the questions were simply a guide, and the discussion was allowed to carry on naturally unless the participants digressed significantly. The focus groups were conducted in Bembe, with occasional Swahili, as this was the method of response that participants were most comfortable. Because Bembe is mostly a spoken language and not a written language, the discussions were translated into English in real-time by the research assistant. Consent of participation was received from each respondent in the focus group.

Key Informant Interviews

Key informant interviews were carried out using a semi-structured interview guide and were conducted by the principal investigator. The guide was not translated from Kiswahili, because the key informants themselves had been identified as English and French speakers. The guide revolved around a set of key themes, including the individual's background, a description of health staff, a description of health facilities and supplies, the promotion of family planning in the camp, the camp policies regarding family planning, and associated challenges of men's involvement in family planning within the refugee camp setting. The interview was loosely structured around the themes with more detailed questions listed under each theme to ensure that sub-topics were discussed at some point, depending on the specific area of strength of the informant.

Again, the interview guide was based on the research questions, study objectives, literature review, conceptual framework, and previous studies done on men's involvement in family planning. The principal investigator took notes during each interview. However, each interview was also tape-recorded and later transcribed as necessary using a word processor for clarification and reference. Prior to participation, a consent form separate from the form used for the questionnaire was provided to obtain consent.

3.7 Recruitment and Training of Research Assistants

Two research assistants were recruited as per the recommendations of the TRCS team leader in Nyarugusu. One was a HIT supervisor, and the other was a former HIT member who was currently a VCT counselor. Both were intensively trained together for one day in how to do face-to-face interviews for administering the questionnaire. The assistants were both men to match the sex of the research participants, and they were fluent in English, French, Bembe, and Swahili. The training emphasized the objective of the study, the data collection process, selection criteria for participants, obtaining consent, using the instrument, understanding the questions, explaining why and how each question is asked, recording data, and assuring confidentiality. This contributed to the efficiency of carrying out the study as well as the quality of data. Potential problems encountered during the research period were addressed

daily, each morning and afternoon. The VCT counselor was additionally trained on moderating the focus group discussions, although he had conducted them in a prior study within the camp.

3.8 Plan for data processing and analysis

Data from the face-to-face questionnaire administrations were coded, entered, cleaned, and analyzed using SPSS Version 13.0. Translations from Swahili to English and coding of open-ended answers were done as needed, as some open-ended questions were quantified and analyzed as such. Analysis was carried out using frequencies and comparisons of proportions using the Pearson's chi-square test, or the Yates' correction for continuity if necessary, at a significance level of $p<0.05$. The categorical variable for comparison for all of the bivariate analyses was "having ever used family planning while in the camp" – the answer either being yes or no. In addition, multiple logistic regression was performed to compare the dependent variable to a set of independent variables of interest. Again, the dichotomous dependent variable for the regression was "having ever used family planning while in the camp". The independent variables selected to enter in the model for logistic regression were those significantly associated with the dependent variable at the bivariate level. Predictors were identified if $p<0.5$ at a 95% confidence interval.

For the focus group discussions, the notes and translations were discussed with the moderator immediately following the completion of each focus group for verification. The results were transcribed as necessary and organized into major themes for analysis. Major themes were already indicated in the discussion guide, but additional categories were created as needed when other themes emerged in the discussions. These themes were identified across both the men's and women's groups, and they included knowledge, attitudes, misconceptions and stigma, men's role, communication, abortion, and education all with regards to family planning. Results from the men's and women's groups were initially analyzed separately. Patterns were identified within the three men's groups, and the same was done with the two women's groups. The opinions expressed within the set of groups were assessed to see the degree of consensus. The trends which emerged within each sex were then compared and contrasted between the two sexes. Certain exact quotes were extracted from the focus groups to

emphasize major points expressed within each indicated theme under the umbrella of men's involvement in family planning.

For the in-depth interview, the notes and tape recordings were reviewed upon the completion of each interview. The results were transcribed as necessary. Although each provider who was interviewed held a different position with specialized knowledge in a particular area of refugee health services, there was definite overlap in the content of interviews. The responses were organized into major themes, which were indicated in the interview guide and in the provider-level portion of the conceptual framework. The responses categorized under each theme were compared and contrasted to one another to see the degree of consensus. Certain exact quotes were extracted from the in-depth interviews to emphasize major points expressed within each theme. Given the large amount of data generated in this study, the results were presented separately for each method - questionnaires, focus group discussions, and in-depth interviews – to prevent confusion. However, for the discussion, the three methods were triangulated in order to gain a more comprehensive understanding of refugee men's involvement in family planning.

3.9 Ethical Consideration

Ethical clearance for the proposed study was received from the Muhimbili University of Health and Allied Sciences (MUHAS) ethical review board. A month-long entry permit to Nyarugusu refugee camp was obtained from the Ministry of Home Affairs, which approved the study and allowed for research activities to take place during June of 2010. Participation in both the quantitative and qualitative portions of the study was voluntary for the respondents, and they were given the option of withdrawing at any time. The study was completely confidential and maintained the anonymity and privacy of the refugees as well as the Tanzanian health staff. Individual informed consent was sought from participants prior to the administration of all research tools.

CHAPTER FOUR

4.0 RESULTS

This chapter is organized in accordance to the three portions of the study: the quantitative analysis from the questionnaires, the qualitative analysis from focus group discussions, and the second qualitative analysis from the key informant interviews.

4.1 Questionnaires

4.1.1 Characteristics of Sample

To determine the factors associated with refugee men's involvement in family planning, a total of 454 married refugee men were interviewed in Nyarugusu camp (Table 1). The ages of the respondents ranged from 20 to 76 years with a mean age of 38.7 years (SD = 10.9 years). Their mean length of stay in the refugee camp was 12 years, and their average age upon entering the refugee camp was 26.8 years. Although employment in many regards is technically illegal as per UNHCR regulations, some have still found employment through the NGOs present in the camp or by carrying out small businesses and trade within the camp and with Tanzanians from nearby villages. Others partake in small-scale fishing in the nearby lake or agriculture on the periphery of the camp. Camp authorities have overlooked this and did not implement this law, seeing it as a mechanism to build positive rapport between the refugees and their host community. Given these opportunities, 35.7% claimed to be currently employed. All of the refugees originate from the South Kivu province in eastern DRC, but 82.4% were from a village as opposed to a town or city. Of the respondents, 8.6% had more than one wife. In terms of education, 72.5% had attained some level of secondary education. Only 0.7% had never received any type of formal education.

Table 1: Demographic Characteristics of Respondents

Variable	Total (%) n=454
Age	
20-29	106 (23.3)
30-39	142 (31.3)
40-49	122 (26.9)
50+	84 (18.5)
Years in Camp	
Under 9	21 (4.6)
9-10	64 (14.1)
11-12	147 (32.4)
13-14	222 (48.9)
Age at camp entry	
Under 20	128 (28.2)
20 and over	326 (71.8)
DRC home	
Village	374 (82.4)
City or town	80 (17.6)
Employment	
Employed	162 (35.7)
Unemployed	292 (64.3)
Education	
No formal education	3 (0.7)
Some level of primary	89 (19.6)
Some level of secondary	329 (72.5)
Some level of college	33 (7.3)
Spouse	
1 wife	415 (91.4)
More than 1 wife	39 (8.6)

4.1.2 Family Planning History

Respondents of the questionnaire were asked if they or their female partners had ever used family planning in the DRC and were also asked if they or their female partners had ever used family planning within the camp (Table 2). On the former question, respondents who left the DRC before the age of 20 were excluded from the analysis as inclusion criteria for the questionnaire required being above 20 years old. For those who were 20 and older when they left, only 4.3% had ever used a modern form of contraception in the DRC. On the other hand, 35.2% of the respondents reported that they or their partners had used a modern method during their time in a refugee camp, while less

than one-third (29.1%) reported to be current users. The Depo-Provera injection was the most commonly used method in the current users' marriage, while condoms were a distant second. From this sample, only 4.4% currently used condoms as a method of family planning. None of the current users mentioned IUD (intrauterine device), vasectomy, or female condom as their method. When the respondents were asked specifically about men's condom use with their partners, 73.6% claimed that they never used them, and only 1 respondent said that he always used a condom.

Table 2: Family Planning History of Respondents

Variable	Total (%)
Ever used family planning in DRC, n=326	
Yes	14 (4.3)
No	312 (95.7)
Ever used family planning in the camp, n=454	
Yes	160 (35.2)
No	294 (64.8)
Currently using family planning, n=454	
Yes	132 (29.1)
No	322 (70.9)
Method among current users, n=132	
Condom	20 (15.0)
Implant	14 (10.5)
Injection	66 (49.6)
Pills	20 (15.0)
Spermicide	1 (0.8)
Tubal ligation	12 (9.0)
Condom use, n=454	
Never	334 (73.6)
Sometimes	97 (21.4)
Most of the time	22 (4.8)
Always	1 (0.2)

The question with regards to having ever used family planning while in the refugee camp, shown in Table 2, formed a basis for the remaining portion of the quantitative study. It was used as the categorical variable of comparison in calculating chi-square values and p-values to determine if other exposure variables were significantly associated with family planning use within the refugee man's marriage (Table 3). The demographic characteristics described in Table 1 were accordingly cross-tabulated with 'ever used family planning in the camp.' Location of home in the DRC,

employment status, and education status were all significantly associated with having ever used family planning within the camp ($p<0.001$), as was age group ($p=0.018$). Length of time spent in the refugee camp or polygamous relations were not associated with family planning use.

Table 3: Demographic Variables Associated with Respondents' Family Planning Use

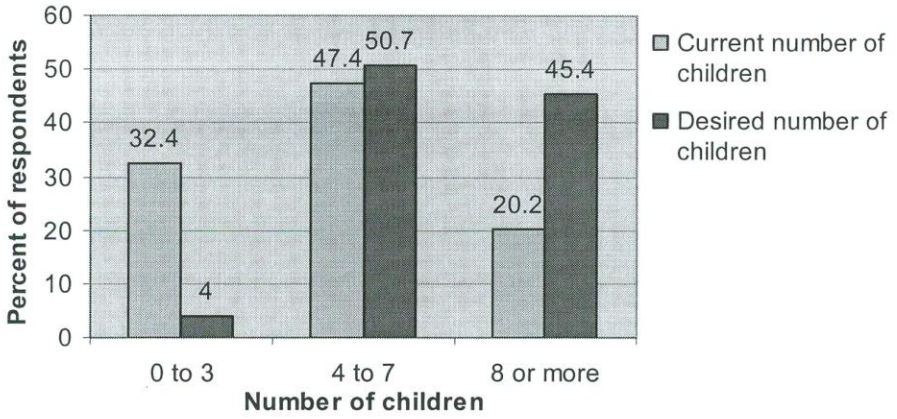
Variable	Ever used FP in camp	Never used FP in camp	Total	χ^2, p-value
Age				
20-29	37 (34.9)	67 (63.2)	106	10.1, 0.018
30-39	58 (40.8)	84 (59.2)	142	
40-49	47 (38.5)	75 (61.5)	122	
50+	18 (21.4)	66 (78.6)	84	
Years in Camp				
Under 10	12 (36.4)	21 (63.6)	33	0, 1.000
10 and over	148 (35.2)	273 (64.8)	421	
Age at camp entry				
Under 20	48 (37.5)	80 (62.5)	128	0.3, 0.602
20 and over	112 (34.3)	214 (65.6)	326	
DRC home				
Village	116 (31.0)	258 (69.0)	374	15.6, <0.001
City or town	44 (55.0)	36 (45.0)	80	
Employment				
Employed	83 (51.2)	79 (48.8)	162	27.1, <0.001
Unemployed	77 (26.4)	215 (73.6)	292	
Education				
None or primary only	18 (19.6)	74 (80.4)	92	11.6, <0.001
Secondary and over	142 (39.2)	220 (60.8)	362	
Spouse				
1 wife	145 (34.9)	270 (65.1)	415	0.1, 0.791
More than 1 wife	15 (38.5)	24 (61.5)	39	
Total	160 (35.2)	294 (64.8)	454	

4.1.3 Fertility Desire Among Refugee Men

The average number of children per married man in the study was 5.05, ranging from 0 children to 20 children. When separating the number of children into categories, the bulk of respondents, 47.4%, had between 4 and 7 children, but another 20.2% had 8 or more children (Figure 3). These figures changed noticeably when the respondents were asked how many children they desired to

have in total. Only 4% wished to have between 0 and 3 children, while nearly half (45.4%) wished to have 8 or more children. An average of 7 children was desired per refugee man.

Figure 3: Current Number of Children vs. Desired Number of Children



Association with ever having used family planning in the camp (χ^2, p-value):
Current number of children (10.6, 0.005)
Desired number of children (24.1, <0.001)

Both current number of children and desired number of children were significantly associated with family planning use in the camp ($p=0.005$ and $p<0.001$). It is also important to observe the fertility desire with regards to age group (Table 4). The majority of respondents under 40 years of age desired between 4 and 7 children, whereas the majority of respondents age 40 and over desired 8 or more children.

Table 4: Refugee Age Group and Desired Number of Children

Variable	Desire 0-3 Children (%)	Desire 4-7 child (%)	Desire ≥ 8 children (%)	Total n=454
Age				
20-29	8 (7.5)	85 (80.2)	13 (12.3)	106
30-39	6 (4.2)	81 (57.0)	55 (38.7)	142
40-49	2 (1.6)	48 (39.3)	72 (59.0)	122
50+	2 (2.4)	16 (19.0)	66 (78.6)	84

When asked why they desired to have the number of children that they cited in the previous question, the refugee men provided a wide array of answers (Table 5). The most popular reason was that they felt they had the ability to best support that number (35.7%). The second most popular reason provided was that there had been too many deaths, both from the war in the Congo and from the fact that they lived in Africa where many children die (20.5%). Another 13% stated that the tough conditions of camp life made it impossible to have more children than the number they had cited. Religion also played a role, as 10.6% claimed that God was the reason for the number of children they desired. Some provided the quote from the Bible which says, "Be fruitful and multiply" as justification for their response. Family reasons accounted for 6.8% of respondents, relating to pressure from one's extended family to have more children. This was usually due to an individual's position as the only son in the family or due to the fact that his brothers did not have any or enough children. Other reasons also emerged, such as human resources, food, gender preference for boys, and the Bembe cultural norms. The reasons for the desired number of children was significantly associated with having used family planning in the camp (<0.001).

Table 5: Reason for Desired Number of Children

Variable	Ever used FP in camp	Never used FP in camp	Total (%) n= 454	χ^2, p-value
Reason for desired #				
Ability to support	73 (45.1)	89 (54.9)	162 (35.7)	34.9, <0.001
Culture	5 (27.8)	13 (72.8)	18 (4.0)	
Deaths from war/Africa	24 (25.8)	69 (74.2)	93 (20.5)	
Difficult life conditions	30 (49.2)	31 (50.8)	61 (13.4)	
Family pressure	7 (22.6)	24 (77.4)	31 (6.8)	
Religion/God	5 (10.4)	43 (89.6)	48 (10.6)	
Wife	9 (56.2)	7 (43.8)	16 (3.5)	
Other	7 (11.9)	18 (88.1)	59 (13.0)	

The respondents were also asked about their family history. Out of the respondents, 40.1% reported that their spouse had an abortion, while another 39.6% reported that at least one of their children had died (Table 6). Neither was statistically significant with having ever used family planning in the camp.

Table 6: Abortion and Child Death among Respondents and Respondents' Wives

Variable	Ever used FP in camp	Never used FP in camp	Total (%) n=454	χ^2, p-value
Abortion				
Yes	61 (33.5)	121 (66.5)	182 (40.1)	0.4, 0.529
No	99 (36.4)	173 (63.6)	272 (59.9)	
Child Death				
Yes	55 (30.6)	125 (69.4)	180 (39.6)	2.9, 0.09
No	105 (38.6)	169 (61.4)	272 (60.4)	

4.1.4 Family Planning Knowledge Among Refugee Men

The majority of respondents, 53%, claimed that 2 year child spacing was healthy, while 36.9% responded that 3 years or more was healthy (Table 7). On the lower end, 9.7% of the respondents said that spacing of 1 year or less was healthy. Along with knowledge on child spacing, the respondents who had more than one child (n=395) were asked to assess their personal child spacing, and 82.8% said they wished to have spaced their children further apart. Only 5.8% of respondents said that they were content with their child spacing. Both knowledge of child spacing and assessment of personal child spacing were significantly associated with family planning use in the camp. The number of modern family planning methods the respondents could name varied. While 6.2% could name 5 or more methods, another 7.9% could not name a single method. However, the majority could name between 3 and 4 methods.

Table 7: Family Planning Knowledge on Child Spacing and Methods

Variable	Ever used FP in camp	Never used FP in camp	Total (%)	χ^2, p-value
Idea of healthy child spacing, n=454				
1 year and under	9 (25.7)	35 (74.3)	44 (9.7)	9.2, 0.026
2 years	79 (32.6)	163 (67.4)	242 (53.3)	
3 years	51 (42.5)	69 (57.5)	120 (26.4)	
3+ years	21 (43.8)	27 (56.2)	48 (10.5)	
Assessment of own child spacing, n=395				
Wish children were spaced further apart	131 (33.2)	196 (49.6)	327 (82.8)	8.4, 0.015
Wish children were spaced closer together	8 (2.0)	37 (9.4)	45 (11.4)	
Content with children's spacing	9 (2.3)	14 (3.5)	23 (5.8)	
# of modern family planning methods identified, n=454				
0	0 (0)	36 (100)	36 (7.9)	42.9, <0.001
1-2	31 (33.0)	63 (67.0)	94 (20.7)	
3-4	107 (34.1)	189 (65.9)	296 (65.2)	
5 or more	22 (78.6)	6 (21.4)	28 (6.2)	

When asked to name family planning methods, the respondents most commonly cited the injectable contraceptive (80%) or contraceptive pills (74.9%), as seen in Table 8. Condoms were only mentioned as a method of family planning by 61.5% of the respondents. More than one-fifth (22.2%) cited a natural method as a form of contraceptive, such as abstinence, calendar method, coitus interruptus, and traditional herbs. When comparing surgical methods, 22.3% mentioned tubal ligation compared to only 2.2% who mentioned vasectomy as method. The number of modern family planning methods known was significantly associated with having ever used family planning within the camp ($p<0.001$).

Table 8: Frequency of family planning methods identified

Family planning methods identified (multiple responses accepted)	**Total (%) n=454**
Condom	279 (61.5)
Implant	201 (44.3)
Injection	363 (80.0)
IUD	16 (3.5)
Pills	340 (74.9)
Spermicide	10 (2.2)
Tubal ligation	104 (22.9)
Vasectomy	10 (2.2)
Natural methods	101 (22.2)

4.1.5 Benefits and Drawbacks to a Large Refugee Family

The respondents also saw some perceived benefits to having many children within the camp setting (Table 9). In total, 60.8% of the respondents saw at least one benefit to having many children within the camp. More than one-fourth of the sample (26.7%) claimed that having more children resulted in a greater food ration. The World Food Program (WFP) distributes food rations to families twice a month based on the family-size only and not on the age of the individuals within the family. Therefore, no matter the number of children in a family, the equivalent rations received are always calculated as adult-sized portions. As a result, refugees claimed that the greater portion of food benefited the family and could also be used to sell to other refugees and Tanzanians from nearby villages. This was significantly associated with having used family planning in the camp ($p < 0.001$)

Free services within the camp were seen as an incentive to have many children for 21.6% of the respondents. An array of humanitarian relief agencies work to provide free education, free health care, and free water for all the refugees. One-fifth of the sample claimed that having many children was a benefit in terms of human resources, both within the camp but also upon their future repatriation to the DRC ($p=0.005$). Approximately 3.3% of the population claimed that having more children in the camp was beneficial for creating soldiers to fight when they return. When asked to elaborate, the respondents claimed that they needed more soldiers to protect their communities and to fight the Tutsi who were trying to takeover their land. About 1% claimed that having many

children will increase their chances for resettlement in a third country, typically in Western Europe, Canada, Australia, or the United States, although that claim is unsubstantiated by camp authorities.

Just over one-half of the respondents (51.8%) cited a failure to fulfill the primary needs of all their children as a drawback to having many children within the camp, which was significantly associated with family planning use (p=0.002). This also included providing their children with care. Another 18.7% cited financial reasons as the main drawback, including not having a job and having little money. Although some services are indeed free within the camp, others are not. Clothes, shoes, and additional foods have to come as personal expenses. A similar number said that having many children will lead the children to behave poorly, become bandits and robbers, and lose a sense of morals. Only 14.1% saw their eventual repatriation to the DRC as a negative aspect of having many children within the camp. Other detractors to a large family size included an increasing number of dowry payments that have to be made along with reduced health status of women and children. Over one-fifth of the respondents did not see any drawback to having many children within the camp (p<0.001). Overall, 39.6% of the respondents saw both benefits and drawbacks.

Table 9: Benefits and Drawbacks to Large Families in a Refugee Camp

Variable	Ever used FP in camp	Never used FP in camp	Total (%) n=454	χ^2, p-value
Benefit to having many children in camp (multiple response)				
No benefit	89 (50.0)	89 (50.0)	178 (39.2)	26.9, <0.001
Free services	27 (27.6)	71 (72.4)	98 (21.6)	2.8, 0.093
Increased rations	30 (24.8)	91 (75.2)	121 (26.7)	7.3, 0.005
Human resources	14 (15.4)	77 (84.6)	91 (20.0)	18.6, <0.001
Creating soldiers	2 (13.3)	13 (86.7)	15 (3.3)	2.3, 0.126
Resettlement	0 (0)	4 (100)	4 (0.9)	-
Drawback having many children in the camp (multiple response)				
No drawback	18 (18.8)	78 (81.2)	96 (21.1)	13.6, <0.001
Financial	31 (36.5)	24 (63.5)	85 (18.7)	<0.1, 0.891
Repatriation to DRC	24 (37.5)	40 (62.5)	64 (14.1)	0.1, 0.790
Failure to provide	99 (42.1)	136 (57.9)	235 (51.8)	9.5, 0.002
Bad behavior of children	29 (34.5)	55 (65.5)	84 (18.5)	<0.1, 0.979

4.1.6 Family Planning Communication among Refugee Couples

When it came to agreeing with their spouse on the number of children to have, 36.1% of respondents said that they did not agree, which was significantly associated with ever having used family planning in the camp (Table 10). The frequency of family planning discussion between the husband and wife varied, ranging from the 37.9% who claimed that they never talked about it to the 13.9% who claimed that they talked about it approximately once a week ($p<0.001$). Among the 282 respondents who said that they discussed family planning with their spouse in some capacity, 72.1% claimed that they themselves were the ones to initiate the discussion with their wives. Out of the 454 respondents, 83.3% said they would be upset if their wife was using family planning methods without their knowledge, and another 64.8% were unwilling to accompany their wives to the family planning clinic ($p<0.001$). On the other hand, 71.4% of the sample said that they would like to be more involved in family planning decisions with their wives. An even greater proportion, 82.2%, said that they saw benefits to men's involvement in family planning ($p<0.001$). The responses for the type of benefits varied widely, but included the ideas that it could reduce malnutrition, improve the health of the wife, reduce the burden of expenses, and reduce the number of men having extramarital affairs.

Table 10: Family Planning and Spousal Involvement

Variable	Ever used FP in camp	Never used FP in camp	Total (%)	χ^2, p-value
Agree with wife on # of children, n=454				
Yes	131 (45.2)	159 (54.8)	290 (63.9)	33.5, <0.001
No	29 (17.7)	135 (82.3)	164 (36.1)	
Frequency of family planning discussion, n=454				
Once a week	36 (57.1)	27 (42.9)	63 (13.9)	141.8, <0.001
Once a month	57 (67.9)	27 (32.1)	84 (18.5)	
Once a year	63 (46.7)	72 (53.3)	135 (29.7)	
Never	4 (2.3)	168 (97.7)	172 (37.9)	
Discussion initiator, n=282				
Husband	107 (53.0)	95 (47.0)	202 (71.6)	1.3, 0.259
Wife	49 (61.2)	31 (38.8)	80 (28.4)	
Upset if wife obtains FP without husband's knowledge, n=454				
Yes	128 (33.9)	250 (66.1)	378 (83.3)	1.5, 0.215
No	32 (42.1)	44 (57.9)	76 (16.7)	
Willing to accompany wife to FP clinic, n=454				
Yes	158 (47.6)	174 (52.4)	332 (73.1)	80.5, <0.001
No	2 (1.6)	120 (98.4)	122 (26.9)	
Wish to be more involved in FP decisions with wife, n=454				
Yes	159 (49.1)	165 (50.9)	324 (71.4)	92.8, <0.001
No	1 (0.8)	129 (99.2)	130 (28.6)	
See benefit to men's involvement in FP, n=454				
Yes	157 (72.7)	216 (37.3)	373 (82.2)	41.0, <0.001
No	3 (3.7)	78 (96.3)	81 (17.8)	

4.1.7 Refugee Men and Family Planning Providers

Availability of family planning methods did not pose a significant problem, as 94.7% of the men reported that they were easily available (Table 11). Additionally, 92.5% found the family planning facilities to be welcoming and friendly towards men. While more than half of the respondents

claimed that they have no preference to the sex of the family planning staff (56.4%), another 28.9% said that they preferred men. Again, over half of the respondents had no preference as to whether the family planning worker was a refugee or a host (56.4%). However, another 30.6% preferred to be with a refugee opposed to a Tanzanian. The preferences were not significantly associated.

Most of the respondents, 88.9%, claimed to have heard of family planning from health workers in the camp, either at the health dispensary or from the HIT members who visit individual plots, and this was significantly associated with having ever used family planning in the camp ($p=0.01$). Far fewer respondents had heard about family planning from their radio, fellow refugees, or IEC materials such as posters, pamphlets, and signs. Only 23.6% had heard about family planning in the DRC. However, everyone in the sample had heard of family planning through at least one of these sources.

Table 11: Refugee Perception of Family Planning Providers

Variable	Ever used FP in camp	Never used FP in camp	Total (%)	χ^2, p-value
Family planning services accessible				
Yes	159 (37.0)	271 (63.0)	430 (94.7)	-----
No	1 (11.1)	8 (88.9)	9 (2.0)	
I don't know	0 (0)	15 (100)	15 (3.3)	
Family planning services men-friendly				
Yes	155 (36.9)	265 (63.1)	420 (92.5)	-----
No	5 (16.1)	26 (83.9)	31 (6.8)	
I don't know	0 (0)	3 (100)	3 (0.7)	
Family planning staff preference – sex				
Men	46 (35.1)	85 (64.9)	131 (28.9)	<0.1, 0.994
Women	24 (35.8)	43 (64.2)	67 (14.8)	
Either	90 (35.2)	166 (64.8)	256 (56.4)	
Family planning staff preference - nationality				
Congolese (refugee)	51 (36.7)	88 (63.3)	139 (30.6)	0.2, 0.898
Tanzanian	21 (35.6)	38 (64.4)	59 (13.0)	
Either	88 (34.4)	168 (65.6)	256 (56.4)	
Hearing about family planning (multiple responses accepted)				
In the DRC	43 (40.2)	64 (59.8)	107 (23.6)	1.2, 0.267
Radio in the camp	55 (35.5)	100 (64.5)	155 (34.1)	<0.1, 1.00
Signs/brochures/pamphlets in the camp	45 (35.7)	81 (64.3)	126 (27.8)	<0.1, 1.00
Health workers in the camp	150 (35.5)	250 (64.5)	400 (88.1)	6.7, 0.010
Other refugees in the camp	45 (29.8)	106 (71.2)	151 (33.3)	2.6, 0.108

4.1.6 Logistic Regression

Logistic regressions were performed between one dependent variable, which was 'ever or never have used family planning in the refugee camp' and various independent variables which showed significant association when using the Pearson's chi-square test, as seen in the previous tables. However, there were far too many significant independent variables from the bivariate analyses to enter all of them into a logistic model together. Therefore, only a few of the most significant

variables were entered, after controlling for potential confounders (Table 12). For example, age group was no longer considered significant when controlling for other variables, such as education. The results showed that the men who were currently employed in the refugee camp were nearly two times more likely to have ever used family planning within the camp than those who were unemployed (OR=1.92, 95%CI: 1.16-3.18). Those who discussed family planning with their wives were more than 40 times more likely to have ever used family planning during their time as a refugee (OR=42.88, 95%CI: 15.26-120.54). Finally, those who did not see any benefits or perceived incentives to having a large family in the camp were also more likely to have ever used family planning in the camp (OR=1.77, 95%CI: 1.10-2.86).

Table 12: Logistic Regression Analysis of Selected Variables

Variable	Odds Ratio (95%CI)	p-value
DRC Home		
Village	1	
City or Town	1.69 (0.91-3.13)	0.095
Education		
Primary or none	1	
Secondary and above	0.82 (0.44-1.84)	0.602
Employed		
No	1	
Yes	1.92 (1.16-3.18)	0.012
Discuss family planning with wife		
No	1	
Yes	42.88 (15.26-120.54)	<0.001
See no benefits to having a large family in the camp		
No	1	
Yes	1.77 (1.10-2.86)	0.019

4. 2 Focus Group Discussions

A total of five focus groups were conducted in the refugee camp, three with men and two with women. The characteristics of each discussion are exhibited in Table 13.

Table 13: Focus Group Discussion Characteristics

Focus Group # - sex	# Participants	Minimum Age	Maximum Age	Parity	Length (min)
1- Men	9	20	38	0-7	115
2- Women	8	20	35	1-6	92
3- Men	6	21	45	0-7	75
4- Women	8	19	49	1-8	74
5- Men	10	19	43	0-9	75

4.2.1 Family Planning Knowledge

All the participants except for one 20 year-old man had heard of family planning. Answers regarding healthy child spacing varied from one year to six years. The majority had claimed to have heard about family planning from the main health dispensary, although a couple of the eldest participants claimed to have heard about it in the DRC from the Croix-Rouge Congolaise. Most were familiar with the camp's more popular contraceptive methods, such as condoms, pills, and injections. However, very few of the men had ever heard of a vasectomy, and some even approached the moderator and the principal investigator after the focus group to ask questions about the procedure. The majority of women had heard of a female condom, but few had ever seen one, and they did not understand how it worked. They said that if they were taught how to use it exactly, they would be more inclined to try it. The respondents said that when they lived in the DRC, family planning services were largely offered in secrecy, especially in the villages.

4.2.2 Family Planning Attitudes

Both the men's and women's groups agreed that there was significant fear surrounding the use of contraceptives. All of the groups cited excessive bleeding, permanent infertility, unpredictable menstrual cycles, stomachaches, and weight fluctuations as side-effects which have scared off potential users. Some of the participants had heard stories where women bled to death from using contraceptives. The groups claimed that men do not like to use condoms because they inhibit

sensitivity, but they also claimed that there was a fear that the condom would burst and remain wedged inside a woman's body. With the implants, the women claimed that a misconception was circulating which said that the implant can disappear into one's muscles forever and cause illness. Due to all of the side effects for various contraceptives, the participants raised concern as to whether they were being administered in a faulty manner or if they were expired drugs. Those who shared such stories recognized that there was no real proof and that they were simply stories, but they said that such stories had left an imprint on their minds. One participant herself experienced the symptoms and never returned to the family planning clinic. Some men said that stories like these convinced them to forbid their wives from ever using family planning.

Each group also agreed that certain stigmas were attached to using family planning, as explained by one participant below:

> *"There is some kind of stigma with family planning in that if people see either a married or unmarried woman using contraceptives, she is considered to be a prostitute. If couples go together, people will say that they both like to have lots of sex. There is only one hospital in the camp, so people are bound to see a person visiting the clinic and inform others."*
>
> *- (FGD 1, male, age 32 years)*

Some of the women said that despite being stigmatized as a prostitute, this should not stop them from attending the family planning clinic. However, for others, this was a significantly limiting factor. Another stigma was mentioned which related to the fact that certain contraceptives make users lose weight as a side-effect. Due to such weight loss, other refugees may think that the person has HIV and thus ostracize them. There was also the stigma that a man who uses a condom will be perceived as an individual who enjoys having extramarital affairs. Additionally, all three of the men's groups reported hearing a story on the radio that the condoms that were coming into the refugee camp from the USA or India were contaminated with HIV.

There was significant division over family planning approval among the men, whereas there was noticeably more agreement and approval of family planning among women. The men who opposed

family planning commonly cited population concerns as a reason, recognizing that 5 million people died in the war, places were empty, and waiting to be replaced:

> *"It is not a good idea because people are being killed day after day in the Congo. Plus, we have lived in the DRC without hearing about family planning, and yet everyone grew up without problems. I don't see the importance." - (FGD 5, male, age 43)*

As a result, some of the men were unconvinced about the importance and utility of any contraceptive methods. Some said that there are refugees within the camp who have lost everyone – father, mother, brothers, sisters, uncles, aunts, and cousins – so they need to have more children. A few of the refugees felt that those who bring family planning are enemies because they don't want Bembe families to increase in size within the camp. However, there were still a few male proponents of family planning:

> *"Family planning is okay because it can reduce expenses. With only 200 shillings a day and five children, how will everyone be fed and clothed? Having more kids and then having them die is like a second war." -(FGD 5, male, age 30 years)*

The groups agreed that Bembe culture has much to do with the reluctance to use family planning, and that use of contraceptives would require a clear departure from customs. The preference for sons over daughters was cited as a cause for additional pregnancies. The women agreed that it was better to have a small, well-educated, healthy family whereas the men did not come to agreement. A few men felt that they would rather have a large family, regardless of the children's health or education status, since their reputation was at stake. For a man who has a small family, he will earn a poor reputation signifying that he is not doing his work and that he is being dominated by his wife. However, two of the focus groups said that neighbors and friends will actually criticize you if the spacing is bad and if you are having children every year.

The men felt pressure to have large families because children are considered to be a "treasure" and thus a sign of wealth for the Bembe, although they claimed that the older generation holds to that mindset probably more strongly compared to the younger generation. The women felt pressure from their in-laws and husband because if they did not have many children, their in-laws would feel as

though the dowry payment made for her in marriage was a waste. If the husband is the only son in the family, or the only son left alive from war, there is additional pressure to have a large family. There was consensus about the high death rate of children in their tribe and in South Kivu among both men and women, but for the men, the deaths were exclusively blamed on witchcraft and war:

> *"We are Africans. The Bembe have 10 kids, and only 3 or 4 will survive. This is different from the white man. If I have 6 kids, for example, 3 will certainly die from witchcraft." (FGD 3, male, 42 years)*

The impact of religion on family planning was unclear. In one focus group, a man said he was leaving the number of children he had up to God because God disapproves of family planning, and the rest of the group laughed at him. However, this was not the case in other groups. Two of the groups said that a religious leader in the camp had told them that God was angry because many were practicing family planning. Others countered such statements by saying that God was the one who made family planning available, so it is not forbidden.

4.2.3 Communication and Family Planning

Many of the men interpreted the initiation of family planning discussions with their wives as having consequences. If a husband suggests that his wife use contraception, she will in turn think that he wants to get a second wife. If a wife suggests using family planning, the husband will think that the wife wants to have an affair. However, the women only mentioned the second part of that interpretation. The men who thought family planning use would lead to their wife's promiscuity said they would only approve of family planning if their wife is proper and stays indoors most of the time. Otherwise, the husbands would have great feelings of mistrust towards their wives.

Both the men and the women's groups agreed that it was the man who decided the number of children to have in the family and also agreed that men were obstacles to family planning use in most cases. The majority of men said that they agreed with their spouse on the number of children to have, while the women said that this was seldom the case. Even though some of the women said

they had decided on a number of children to have with their husbands prior to marriage, their husbands changed their mind and there was nothing they could do.

The majority of men said that they did not discuss family planning with their wives, although a greater proportion said that they did discuss it with their male friends in the camp. The women agreed, saying that discussions regarding family planning seldom occurred with their husbands. However, they also discussed family planning with their female friends, although they said it had to be done in secret, such as during the fetching of water or collection of firewood in the camp.

The women said that they had no choice but to abide by their husbands. There were too many consequences if they went without the husband's permission to receive family planning services. Even if they did go without their husband's knowledge, they may not be able to hide it for long. If they start bleeding excessively, the husband would certainly suspect something. The consequences of using family planning without a husband's consent were dire, as cited by both the men and the women:

> *"I am 19 years old. I have 4 kids, and life is going from bad to worse. I suggested to my husband to take a break, but he refused and didn't respond to my concern. He said that I can go to family planning, but when I come back, I will have to take all my belongings and leave, and he will get another wife."*
>
> *-(FGD 4, female, 19 years)*

All of the respondents had heard of stories in the camp where the husband kicked the wife out for using family planning, or where the husband beat the wife for using methods without his knowledge. For some of the women, the situation was described as hopeless and they wished that their husbands were more educated on family planning use and were more willing to be positively involved and discuss such matters. Others claimed that they were oppressed by the culture and that they were robbed of a voice. A couple of the women said that all they could do now was pray that their husbands would some day understand the importance of family planning. The women claimed that if a man gives permission to go for family planning, she will have to go herself unless the husband was a more open individual. However, they wished that he would accompany to better

understand the procedures and learn more about family planning. All the groups identified cases where women were the main obstacles to family planning use, although this was far less frequent. This often happened if the wife was the only daughter in her family.

The focus groups all mentioned that in the DRC, men would take trips outside of the home for family or for work thus leading to natural spacing of children. However, here in the camp, they are not technically allowed to leave (although it was mentioned that a few refugee men can occasionally go the nearby village of Makere or to Lake Tanganyika with permission or secretly). This combined with the fact that most are unemployed contributes to more frequent sex and the high birth rates observed in the camp.

4.2.4 Abortion

The men and the women agreed that while abortions were not unusual, most were unwilling abortions. These were likely caused by the fact that women did most of the heavy work within the camp, including carrying firewood and water, while taking care of the children and household. However, willing abortions did take place, and they were almost exclusively ordered by the man. The men ordered the women to get abortions if the pregnancy was outside of the marriage. Some claimed to have ordered them due to poor family planning:

> *"I ordered my wife to get an abortion because she became pregnant too soon after she had delivered our last child. I just wanted to save our last child."*
>
> *-(FGD 1, male, 34 years)*

Although illegal, abortions were said to be carried out most often by traditional healers or traditional birth attendants within the camp. To reduce the risks of complications, they sometimes qualified medical staff from the camp dispensary, especially the clinical officers. Costs varied depending on the stage of the pregnancy and how well the person knows the medic.

4.2.5 Repatriation Concerns

All the groups agreed that more children were being born within the refugee camp as compared to their homes in the DRC. The women especially complained that having big families will be a

problem upon repatriation to the DRC. Starting a new life will be difficult since materials will only be free for a few months, and then everything will have to be personally paid for. Even those with smaller families will suffer. However, some of the men claimed that there was an advantage to returning with more children:

> *"People will be given more materials from UNHCR depending on their family size, such as metal sheets, pans, and jerry cans. They will have lots of human resources to start their new life. For those who lost many relatives, they will not feel loneliness."*
>
> *– (FGD 1, male, 29 years)*

Although the respondents recognized the increase in food portions within the camp that comes with larger family sizes, they said that it was important to realize that this will not be a perk forever. Upon return, the large family size will become a burden. Furthermore, the men's groups said that repatriation also meant a more powerful presence of witchcraft:

> *"There is not as much witchcraft in the camp, but in the Congo I am afraid since the whole family will be reunited and then witchcraft will start again. Here in the camp, people are from all over so it does not happen as much."*
>
> *– (FGD 5, male, 27 years)*

The women claimed that they should try to take advantage of family planning services within the camp, because they have no idea what the situation will be like when they repatriate. One of the women said that she had repatriated to the Congo voluntarily for a few months before having to flee for a second time. In that time, she noticed that she could no longer obtain Depo-Provera injections:

> *"There will be many difficulties when we repatriate. Now, everything in the camp is free and expenses are covered, but upon return, life will be tough. My husband knows this situation, so that is why he says he is not ready to go home. The men know of the future troubles, but they don't stop reproducing and the women cannot say no." – (FGD 2, female, 28 years)*

Given the volatile situation in the Congo, each group cited concerns that they would have difficulty saving their whole family if war broke out again and if their family was large.

4.2.6 Camp-Based Family Planning Education

The groups mentioned that youth in the camp were becoming sexually active earlier, often as young as 12 or 13 and they attributed it to the congested living conditions within the camp, which is much different than their homes in the DRC.

There was no consensus as to the appropriate time to teach adolescents about family planning in either the men's or women's groups, although the most popular response was that it should be taught after marriage. There was a fear that boys and girls would misbehave if they were taught about family planning earlier:

> *"If the youths are taught at an earlier age, they will be likely to misuse the information. Boys will pressure girls. This could contribute to the spread of HIV and STIs, and the girls might become prostitutes." –(FGD 3, male, 45)*

The concern for prostitution was sometimes mentioned in light of the recent emergence of a sex worker village within the camp, referred to as 'Malaika.' Others said that family planning should be taught earlier since these youths will become mothers and fathers one day, and it is not known when. The newly married men in the focus group said that they had never learned about it in school and said it was better to know before marriage so that they are prepared to become involved. It may be harder to teach them afterwards and for them to accept. Most of the proponents of early education said that it should be taught in secondary school, starting at age 17, while another portion said that since certain girls have early pregnancies it was important to start at age 12.

Even though the HIT members make visits to their plots and villages, the men are often not home. The men's groups said that they were off working, while the women's groups half-joking, half-serious said that the men were usually off somewhere in the camp playing games or drinking alcohol. As a result, some of the men said that they had never met a HIT, and only their wives had received the health education. The wives do not always share the information with their husbands, and some men claimed that this was because they are shy to do so. They wished that the HIT would specifically talk to men.

The groups suggested that there should be training for men through NGOs and community service organizations, especially since many of the men do want to be involved. They emphasized that the refugees need to be widely informed on family planning, especially on things like vasectomy. The women said that HITs talked about family planning to them about twice a year, which is good, but it should be more often. Others claimed that if they can't see the long-term effects of having many children, they will not see the benefits of family planning. Therefore, the long-term consequences need to be highlighted in the sensitizations. A few men said that it was important to educate elderly men so they could influence the younger generations. In terms of training, the responses varied, but some said trainings should be organized by age and sex group, while others said that they should be done with the husband and wife together.

4.3 Key Informant Interviews

Ten in-depth interviews were carried out with health workers in the camp to understand any provider-related factors that could influence refugee men's involvement in family planning. The informants held various positions, including project coordinator, medical officer, assistant medical officer, reproductive and child health coordinator, family planning supervisors, HIT supervisor, and the Volunteer Testing and Counseling (VCT) supervisor who was a former HIT member. All were Tanzanian nationals except for one HIT supervisor and the VCT supervisor.

4.3.1 Staff Turnover

Staff turnover was cited as a problem by each key informant, as new staff seemed to be regularly cycling through the camp and then leaving. However, between the refugees and the nationals, it appeared that the Tanzanians presented the bigger problem:

> *"Turnover is more of a problem with the nationals. A lot of retraining has to be conducted and recruitment of new staff. Of course, the refugees notice. Someone is used to seeing a certain face and all of a sudden you see a new face. One doesn't know how that new one is professionally. Sometimes, there is skepticism. With time, they get used to if they perform as expected." –TRCS key informant*

Retention of qualified health professionals was a problem largely because the nature of the operation does not guarantee job security. The job can be challenging, and there was no telling when the refugees will be told to repatriate. Retaining the younger staff was the biggest challenge as they desired to move towards greener pastures, especially government jobs. Although the current staff strength is reasonable, the key informants said that the situation has greatly affected work plans. There was refugee staff turnover at times, but only during periods of repatriation, as was the case in 2008. The repatriation rate in the last year has been virtually nonexistent in Nyarugusu. Given the nature of family planning, the some informants said that trust is very important, and the rotation of clinic staff or community outreach staff could be a deterrent.

4.3.2. Camp Employee Description

The key informants said that the facilities for family planning were adequate, as they were currently being distributed at two dispensaries, and a third will be completed this year. However, one dispensary was preferred over the other one due to a lack of privacy in the arrangement of the family planning clinic. Additionally, four of the informants claimed that the staff was insufficient and that it would be better to have more people dedicated to family planning. In general, there is one Tanzanian health staff for every five or six refugee health staff. However, the Tanzanians are always in the highest of the supervising positions. In the family planning unit, there is one female Tanzanian supervisor and two refugee men. Key informants claimed that there was no preference from their clients regarding the nationality of the provider, although such a preference was evident in HIV/AIDS related services for the sake of privacy. The sex-ratio among the staff in preventive care is relatively balanced. However, among the HITs, there are 42 men and 20 women. The informants claimed that the women HIT members were still well-received by men in the community. The HITs were carefully recruited and given an oral practical as an exam. They trained for 1 to 2 months before going to the community, and they also observed other HITs educate a group. Problems cited with the HITs included that they were not satisfied, since they were paid very little monthly as per the regulations set for the refugee camp. This could be translating into their work, and one key informant said that the HITs had two sides. On the one hand, the HITs served as a bridge to the community, but on the other hand, they were not necessarily teaching everything as it was being taught to them.

4.3.3. Challenges of Men's Involvement

The health staff tries to invite all the male partners to the third and final PNC (post-natal care) visit, which occurs 42 days after delivery. During this visit, the health staff gives out the birth certificates for the newborns, which in a way is an incentive for the men to come. Additionally, they talk about family planning methods and the importance of using family planning. Although men do turn up, their ratio is usually 1 for every 2 or 3 women at best. The informants mentioned that this occurs due to either a lack of interest from the men, repeated visits from the man for each of his newborn, or from the fact that the baby was born outside of wedlock. The camp had also recently changed the

Maternal and Child Health clinic to the Baba, Mama, na Mtoto (Father, Mother, and Child) clinic to assure that reproductive health services were outwardly inviting to men.

Even though men do not always support their wives' decision to pursue family planning, the providers have to carry on in supplying the method without involving the men:

> *"We are supposed to ask if they [the women] have the husband's permission. We ask them, is your husband willing for you to come here to join family planning? Some say they are willing. For those who are willing, we invite the husbands to come. Those who say no, we leave it as is, but we continue to provide." –TRCS key informant*

Although the key informants said it would be ideal if the men were more supportive of women's family planning use, this is not the case. Therefore, the provider has to proceed without the client's spouse, knowing that there may be harsh consequences if the unsupportive husband finds out. Even if a female family planning user defaults and does not return for follow-up, the HIT members are sent to find the defaultors at their homes to see what went wrong and bring feedback to the family planning clinic. However, the HITs have been trained to maintain the confidentiality of the woman, which is necessary if the husband is home during the home visit.

The key informants all expressed a level of frustration with involving men in family planning and having them open to the idea of family planning:

> *"They want many children. You know, they've been killed during the war. But that's not a reason for not using family planning. You may need to replace, but you still need to space!" –TRCS key informant*

The key informants hypothesized that the lack of spacing was leading to many of the children's admissions in the dispensary, as parents were not properly caring for all of their children. Some said with conviction that the poor spacing was the cause of a significant portion of the severe malnutrition in children who were weaned too quickly or not given sufficient food and attention by overwhelmed parents.

The key informants also said that women were sometimes the problem for the lack of family planning acceptance. Traditionally, the Congolese women receive nice clothes, kitenge, shoes, and other gifts after each birth. This serves as an incentive for them to have more children as they would receive more goods in what is a severely resource-limited setting. Therefore, it is sometimes the women who are reluctant if their husbands suggest that they use family planning. One key informant said that both the men and the women were victims of their circumstances in the refugee camp – "*kula na kulala*" – eating and sleeping is all the refugees can do with all their idle time. This combined with the low contraceptive usage has created a crisis.

Men's involvement was cited to be generally high in reproductive health as a whole. In Lugufu, a recently-closed Congolese camp, men's involvement was reported at 84%, according to one key informant. However, this was mostly men's involvement in PMTCT and VCT, but for family planning it was quite a different situation. Although men's involvement and the contraceptive prevalence rate have been gradually increasing, it has not been rising with the expectations of the key informants. There was disagreement as to whether the issue with men's involvement was an issue of knowledge or not:

> *"They have the knowledge but the problem is the willingness to use it. Not at all a question of ignorance, there is no knowledge vacuum." – TRCS key informant*

Others claimed that there were some misconceptions, although few, which could be hampering men's approval or usage of family planning.

4.3.4 Family Planning Campaigns

Family planning messages are delivered in a few methods. Primarily, the HITs go from plot to plot sensitizing each household or they hold group meetings in the clusters. Otherwise, they can organize meetings that will be spearheaded by each village leader in the camp. Each month, the HITs have a different health topic which serves as the theme. Family planning is usually the topic for one of the months. However, HIT members are free to teach about family planning whenever they feel it is necessary throughout the year, or suggest it to a family in his or her assigned area where it seems like it is necessary. Often, family planning messages are connected to safe motherhood, HIV/STI

prevention, VCT, PMTCT, early pregnancy, and condom use campaigns. The key informants agreed that there are so many topics to cover with refugee health, especially when there is an outbreak within the camp. This makes it difficult to continuously promote family planning on a mass scale. As a result, a mass campaign was carried out zone by zone last year using a drama group, songs, and a puppet show. However, the turnout was not as high as desired.

> *"When they hear the songs and drums, they come, but then they run. Especially men. 'Oh, they're talking about family planning' and then they leave. Still, we did see an improvement between the first and second campaign." –TRCS key informant*

Compared to women, the men were more reluctant to participate in family planning discussions headed by village leaders, according to the informants. When a HIT member visits plots in his or her assigned areas, the men are not always present to hear the health messages. It was also reported that on occasion, a village leader had misinformed his refugee community about family planning and encouraged them not to use a condom because it would reduce the population. When that knowledge came to be known by the HITs, they had to correct that information through additional sensitization with the leader.

4.3.5 Family Planning Supply Chain

There were few problems with provision of men's contraceptive methods. Vasectomies were provided for free, although one key informant said that in her twelve years in the camp, only one man ever came forward to have the procedure done. Condoms were distributed at the health dispensaries and posts, youth centers, and other meeting places in the camp. However, most of the key informants showed skepticism on the use of condoms as a means of family planning by refugee men. They appeared to mostly be used by youth or for extramarital affairs:

> *"When the HITs distribute the condoms, they have to ask each man what the condom will be used for. But some men, they say they will use for family planning but they lie and instead use it for an extramarital affair." –TRCS key informant*

There were also stock-outs of injectable contraceptives, the most popular contraceptive in the camp. All family planning supplies come from the Kasulu District Hospital, so there are sometimes delays in receiving supplies, especially if the district hospital is not receiving timely supplies from the

Medical Store Department. However, the informants said that this probably did not have a large impact on men's involvement.

4.3.6 Repatriation

Given that repatriation is the most likely eventual solution to the refugee crisis, certain staff members are assigned to go to the DRC to see the situation. One of the key informants went on a fact-finding mission to the DRC in January of 2010 and visited the districts where most of the Nyarugusu refugees are from in South Kivu. These areas included Fizi and Kalemie, and they appeared to be the most affected by war. The infrastructure was extremely poor, and health services were functioning with great difficulty, although all services required payment. The contraceptive prevalence rate was close to 0%.

A few of the key informants observed that the some men may be motivated to have a greater number of children in order to receive a greater portion of aid from the humanitarian agencies within the camp. They gave the example of food rations from WFP as such an incentive, although one key informant said that additional incentives existed for refugees, as well:

> *"Even non-food item distributions through UNHCR are sometimes based on family size. Although not common, they do sometimes distribute soap, cooking utensils, water collection buckets, nets, plastic sheets. For example, if you have more than 5 children you get 2 sheets." –TRCS key informant*

In the informants' opinions, such incentives may be clouding the refugees' ability to think of their family size in the context of repatriation. They felt as though the refugees don't give much thought to the fact that they will be going into a situation that will be altogether different. However, they said that upon repatriation, food, health services, and school costs will be covered for only the first six months before the refugees must become self-sufficient.

4.3.7 Health Agencies in the Camp

There was concern from both the refugee and national staff that the rotation of health service providers in the camp is having an impact. TRCS only came into the Kasulu camps in 2004 to

provide the healthcare after UNHCR sequentially ordered three other health organizations to be replaced due to their poor performance. Under the previous organizations, refugees did almost everything even though they did not have the skills, such as distributing drugs. There were very few national staff. Therefore, when TRCS arrived, there was much resistance from the refugees, leading almost to a boycott of health services. Slowly, things improved because there was no other choice for healthcare. The refugees complain to UNHCR when they are given a chance, but the indicators all show that almost all of the health targets are being met now that TRCS is in charge. Due to a possible lack of emphasis on family planning during the tenure of previous organizations, key informants cited that there may be repercussions which are manifesting in the low men's involvement and family planning usage rates today. Also, UMATI served as a family specific donor in the past, but they have since left leaving little funding specifically for family planning.

4.3.8 Camp Family Planning Guidelines

The guidelines used for provision of family planning are those of the Ministry of Health and Social Welfare of the United Republic of Tanzania. TRCS does not have its own guidelines. The guidelines are applicable, they would only differ if it was an emergency situation. We must change the mindset. The Sphere guidelines were used during the emergency phase, but now the situation is stable. Data is managed by the HIS system as per the UNHCR indicators. While there is no current indicator for men's involvement in family planning as required by UNHCR, there is such an indicator for TRCS which measures the number of men who accompany their partners to the family planning clinic.

4.3.9 Ideas for Increasing Family Planning

The key informants mostly agreed that not enough was being done in the field of family planning within the refugee camp. While it has not been completely neglected, the message of men as equal and supportive partners in family planning has not been as heavily emphasized. They said that low family planning support from men may be due to the lack of updated skills in the providers. They had not been updated on the techniques necessary to recruit more men to become supporters and users of family planning:

> *"Between January and December last year, there were so many trainings conducted in the camp for the health staff. TB and leprosy, management of severe malnutrition, rift valley fever, cold chain and vaccine delivery, HIV/AIDS training for traditional healers, mental health problems with people living with HIV/AIDS, nutrition for people living with HIV/AIDS, so many topics. Each training lasted for some days, and many of the staff participated. There was nothing for family planning." –TRCS key informant*

Still, they said that the staff was trying their level best to increase the contraceptive prevalence rate and reduce the high crude birth rate. The suggestions provided varied regarding strategies to increase the CPR. They agreed that increasing men's involvement was key, especially since they have more of a voice. One of the informants said that the HITs emphasize family planning but don't emphasize men's involvement specifically, and this may contribute to the fact that many men still feel that it is a woman's issue. Others said that women need to be empowered to negotiate with their husbands so that they, too, have a voice.

They suggested that more modes of communication have to be used to sensitize the men. One said that it would be good to use Congolese music and video shows, but that idea has not yet been put in place. Most of the men listen to the radio, so it would be good to broadcast messages. There used to be Radio Kwizera, a station that was run directly out of a refugee camp in Ngara, but that has since closed. However, radios in Nyarugusu still pick up signals from other Tanzanian and Burundian stations.

CHAPTER FIVE

5.0 DISCUSSION

5.1 Family Planning Use

The current contraceptive usage rate among men and their wives in this sample was reported to be 29.1% within the camp. This rate is noticeably higher when compared to the 4.3% of respondents who claimed to have used family planning in the DRC. This marked difference has been observed in other refugee settings, as well, but it cannot be said with certainty whether this difference is due to greater need, better access, or better knowledge (Howard, 2008). However, accessibility likely plays a role, given the severe lack of health and family planning services currently available in the DRC (Toth, 2007). Additionally, it is easier to realize positive change in the camp since there is continuity to the family planning program, as opposed to the violent interruptions and disturbances which occurred in the DRC due to conflict. The overall contraceptive usage rate in this study is also markedly higher than the reported monthly contraceptive prevalence rate in camp reports, which was cited at 16.1% in May of 2010 (TRCS, 2010). Although this was a relatively small sample given the population of the camp, there may have been an element of social response bias from the respondents.

The male latex condom is said to be one of the most important family planning methods in refugee settings, as it can also have dual use as an HIV/STI prevention tool (IAFM, 1999). However, reported condom usage in this study was low, as almost three-quarters (73.6%) had never used a condom with their partner. It was also among the less popular choices of family planning among the current contraceptive users (15%). Findings from the focus groups suggested that condoms were perceived to be more of an HIV prevention tool than a family planning method, as their usage was tied more to extramarital affairs or adolescent sexual activity.

5.2 Men's Knowledge of Family Planning

Knowledge of family planning methods among men was higher among this sample compared to other refugee family planning studies (Howard, 2008; Roble, 2003). However, low identification of vasectomy as a family planning method (2.2%) and the confusion expressed by focus group

fostering men's involvement in family planning. These findings in the camp match the low use and knowledge of vasectomy in rural East Africa (Bunce et al., 2007).

Despite the fact that 100% of the respondents had heard of family planning from various sources, 7.6% could not name a single modern method. While other studies suggest that men tend to receive family planning information from non-health settings, such as the radio and dramas (Sternberg, 2004), it was unclear if that was the case in this study. Fewer said they had heard about family planning from the radio or IEC materials, and attendance at dramas was limited. Most said they received information from health workers, but some work in the health facilities while others, such as the HITs, work outside of a health setting in the community. Using a participatory approach to health services during humanitarian disasters, such as the HITs, has proven to be an effective way of increasing positive health-seeking behaviors in a refugee camp (Tanaka, 2004). However, discussions and interviews suggest that the men are often not present when the HITs pass by their homes and women do not always pass along the information to them when they return. They also only briefly attend family planning campaigns before quickly losing interest, many assuming that family planning is more of a women's issue. This suggests that they may have only heard of family planning due to the efforts of the HITs, but they lack a more comprehensive understanding of it.

The majority of respondents identified healthy child spacing as being two years. This is less than the most recent recommendations that '3-5 saves lives' of both children and mothers (Setty-Venugopal et al., 2002). Additionally, the majority of respondents (82.8%) wished they had spaced their children further apart, suggesting an unmet need for family planning.

5.3 Misconceptions and Stigma

Most of the misconceptions and stigmas which emerged in relation to using family planning are consistent with other studies done in rural sub-Saharan Africa as well as conflict and post-conflict African settings (Adongo, 1998; WCRWC, 2007). Prostitution, sex addictions, and HIV-associated weight-loss emerged as widely understood stigmas that were obstructing their approval of family planning. While some of the concerns regarding side-effects are warranted, they did not seem to understand that if one method produced discomforting side-effects, the family planning clinic could

find a more appropriate method to their needs. Some men still had a concern of HIV contamination of imported condoms, even though the same finding was reported during an HIV risk study conducted five years ago within Nyarugusu camp (Tanaka, 2008). Such pervasiveness of misconceptions regarding side-effects and contraceptive malfunctioning suggests that the myths among the refugees have not been directly addressed en masse. This occurrence may be tied to findings in another report which suggested that refugee situations may intensify existing barriers with regards to contraceptive use, such as cultural norms and misinformation among refugees before departure (Seicean, 2004). Additionally, the violence, exile, and strife experienced by refugees can create a situation where rumors flourish since the camp has removed the sense of normalcy of their previous lives (Turner, 2001).

5.4 Men's Desired Fertility

Previous findings suggest that fertility for long-term refugees tends to be influenced by the same social and demographic factors typically associated with fertility change (McGinn, 2000). In this study, urban/rural residence, employment, and education were significantly associated with having ever used family planning, although only employment was found to be a predictor.

Although the average number of children per man in the sample was 5, the reported desired number of children was much higher, with nearly half (45.4%) wishing to have 8 or more children. The desired average within the camp was approximately 7 children, which is higher than the average of 6 children desired by those who currently live in the DRC (WHO Country Profile DRC, 2007). This corresponds with the observation made in the focus groups that more children were being born in the camp than in their original homes, and it parallels findings in a Burundian camp in Kibondo, Tanzania (Morof et al., 2007). The reasons provided for fertility desire varied, but of the reasons mentioned, deaths (20.5%) and difficult life conditions (13.4%) seemed most related to the refugee experience. Studies have shown conflicting evidence of the effect of child mortality on fertility, but such studies have been conducted in non-refugee settings and the mortalities tend not to be related to conflict (Randall, 2003; UN, 1985). Despite expressing a need to replace those who perished in the war in the DRC, key informants said that the issue was not simply the size of the families but it was the extremely poor spacing that they have observed.

The rate of abortion in a given population can be indicative of an unmet need for family planning. The reported rate of abortion in the sample was high (40.1%). While the abortions may have been willing or unwilling, it is also important to note that this figure is based on the men's response only, and the actual figure may be higher according to the women themselves. Additionally, the willing abortions were most often ordered by men, according to the focus groups. TRCS reports that around 99% of deliveries take place within the health facility in Nyarugusu, which is excellent in terms of ensuring safe motherhood (TRCS, 2010). However, in terms of abortion, focus groups said that unskilled or semi-skilled staff carried them out in secrecy. Even though abortion was not significantly associated with family planning use in the camp, it does suggest that safe motherhood and family planning need to be emphasized together, since the health risks from contraceptive use are far less than the risks associated with pregnancy and abortion (Bulatao, 1998).

5.5 Family Planning and Couples Communication

Discussing family planning was significantly associated with, and a predictor of, family planning use, which is in line with other studies undertaken in both refugee and non-refugee settings (JHU/PIP, 1994). However, the refugee women suggested that disagreement regarding the number of children to have was more common than the men claimed (36.0%). In contrast to a study conducted among the Yoruba in Nigeria which said that men and women's fertility preference was equal after the fourth child, men's fertility preference was found to be more influential in Nyarugusu (Bankole, 1995).

A greater number of respondents saw the benefits of men's involvement in family planning as compared to the number of respondents who actually wished to become more involved in family planning decisions with their wives. This suggests that while many of the men understand the importance of their involvement, the other factors mentioned in this study may be limiting their actual plans to be more involved. While 73.1% claimed that they would be willing to accompany their partners to the family planning facility, TRCS reports from the last year said that male involvement only ranged from 2% to 25% depending on the month (TRCS, 2009). Overall, it shows a willingness and eagerness to be more involved. This is also reflected in the fact that while most

were willing to accompany their partners to the family planning clinic, a majority said they would be upset if their wife used family planning without their knowledge.

5.6 Perceived Benefits and Drawbacks to Large Family Size

One of the perceived benefits of having many children in the camp was an increased amount of food received with the refugee ration card, which has been mentioned in other studies undertaken in refugee camps (Tanaka, 2008; WCRWC, 2001). However, the extra food was not only used for family consumption, but also for trade and selling, which was not previously mentioned. This study also found that 1% cited an increased chance for third-country resettlement as a benefit, even though such a claim is unsubstantiated as per refugee resettlement guidelines. The finding is in line with reports from Cubans refugees (Lawler and Hansch, 1995), but in contrast with Thai refugees who believed that use of Depo-Provera would increase the chance for resettlement (Potts, 1980).

This sample was unique in citing other free services, such as health care and education, as a benefit which was not the case in the literature. The ideas that a larger family size benefits during non-food item distributions and upon repatriation to the DRC were also not found in previous studies. While the increase in human resources is a common response for avoiding family planning in non-refugee settings (Caldwell et al, 1987), the desire for human resources may be more pressing in Nyarugusu as it involves rebuilding the family, community, and region. The creation of soldiers as a benefit was also an alarming response, even though it was not as commonly cited by the respondents (3.3%). That response is certainly a more context-specific response for this refugee group in relation to the ongoing war in eastern Congo. A portion of the sample did not see any benefit or incentive to having many children in the refugee camp, and this was a predictor of ever having used family planning in Nyarugusu. Although such a finding does not appear in another study, it suggests that certain incentives, either policy-related or social, may be hampering contraceptive use and men's approval of family planning.

On the other hand, the perceived benefits of having many children in the camp mentioned by the respondents were not frequently cited again as the same reason for their desired number of children. This suggests that the benefits may not be the primary reasons for having more children, but they

may still influence the thinking or mitigate any discomfort caused by large family size within the camp. Studies show that the low socioeconomic condition of a country has an impact on fertility size (Myrskyla et al., 2009), and while Nyarugusu is not a country, this may relate to the refugee setting where socioeconomic conditions are extremely poor across the population. Women seldom cited the benefits to a big camp-based family, as they were more concerned with controlling the number of children. However, key informants mentioned that the women have their own incentives and may feel encouraged to have more children in order to receive more gifts for childbirth.

Previous studies have not examined camp family size in the context of repatriation, but only a small minority of the respondents said that repatriation was the potential drawback of having many children while others saw no drawback at all. The staff claimed they have told the refugees to be mindful of their family size since this was a temporary situation where all services are free, but they said that perhaps the emphasis has not been strong enough or that the message has not been delivered properly. However, given the fact that the average length of stay in Nyarugusu camp has been 12 years, it may also be difficult for refugees to see this as a temporary situation. Given the extremely uncertain nature of their future, they may be most interested in making the best of their current situation.

5.7 Cultural Barriers to Men's Involvement in Family Planning

Culture and religion have been found to play an important role in the behavior of any community, and refugee communities are not an exception (Muhuhu, 2008). The findings in both qualitative and quantitative portions of the study showed that cultural factors played a large role in men's lack of involvement in family planning. Traditional gender roles continued to persist where the refugee men had the dominant voice in decision-making and where their reputation rested on the number of children they produced. Only a small proportion (3.5%) said that their wife was the reason for the desired family size. The women claimed that there were threats of abandonment, physical violence, and social shunning from their husband's family for unauthorized use of family planning. Although to a lesser degree, women were also cited as barriers by both men and women alike, regardless of men's involvement and support of modern contraceptive use.

The fears of witchcraft associated with infant and child mortality expressed by the respondents were tied to the perceived need to have many children, a finding that corresponds to a study done in rural Tanzania (Plumer et al., 2010). Witchcraft was cited not to be prominent feature within the camp, but the men's focus group participants agreed that it would reemerge full force upon return to their home communities in the DRC. Therefore, the camp may be viewed as a safe haven of sorts to the men where they could have as many children as possible without facing the danger of losing some them to witchcraft until repatriation.

As much as culture played a role, however, many respondents from the focus groups suggested that the inability for the men to make trips and the idleness in the camp were to be blamed for frequent sex, and thus higher birth rates. Lack of employment has been cited as a potential reason for more children in a Burundian refugee camp (Morof et al., 2007), and these findings showed that employment was actually a predictor of ever having used family planning within the camp.

5.8 Provider Level Factors

Studies have found numerous operational barriers to proper provision of reproductive health services in refugee camps (USAID, 2008), but only a few of them corresponded with the findings of this study. The first was in relation to staff turnover, as key informants were in consensus that the turnover of Tanzanian nationals is interrupting health operations. This may affect refugee uptake of family planning if they are accustomed to certain providers or health educators. The majority of refugee respondents were comfortable with both sexes and both nationalities as their health workers, and this was not significantly associated with family planning use. However, some refugee respondents did express a preference, contradicting the thoughts of key informants from the reproductive health unit who seemed to think that none of their clients had a preference. A lack of understanding between health providers and users was found in studies of resettled refugees (Minkler et al, 1988), which created a barrier to family planning use. This did not seem to play a significant role, because although the cultures of the two countries are different, Swahili serves as a shared language for communication between Tanzanians and the Congolese refugees, eliminating most difficulties.

Inadequate in-service training was a second operational barrier to family planning use which corresponded to previous studies (USAID, 2008). Key informants in Nyarugusu agreed that despite all of the annual trainings that occur in the camp, none have focused solely on family planning or anything related to men's involvement. This may be in relation to the overall waning of international funding and promotion of family planning within the last decade (Cleleand et al., 2006).

Improper provision of reproductive health services have been cited as challenge in refugee camps (RHRC O'Heir, 2003). However, the findings in this study show that the vast majority found health facilities to be men-friendly and the contraceptives to be easily available suggest again those issues on the actual provision of services is minimal. All family planning methods, including surgical procedures, are provided for free within the camp, and despite occasional issues with the supply chain from the district, there have been few other shortages. Given the nature of the refugee camp where everyone lives in a relatively small area, accessibility to health facilities is not an issue, which is reflected in the fact that many said that the health indicators are better now than they were in the DRC. That observation has been documented in numerous refugee situations, where refugees have improved reproductive health outcomes in comparison to their home country (Hynes, 2002).

A significant detractor from the provider end was the fact that since the camp's opening, there has been a rotation in providers. Change in management seemed to cause a shift in the refugee-national staff balance, leading to dissatisfaction from the refugees. There may be some repercussions from previous organizations, as the current management is unsure about how family planning provision, education, and involvement of men was handled. Such management issues have also been observed in other refugee camps (USAID, 2008; Wulf, 1994).

5.9 Family Planning Campaigns

There was no agreement as to the age at which individuals should be taught family planning, although more responded that teaching before marriage is best. HITs have an overwhelming number of topics to discuss with the camp population, making it difficult to spend sufficient time on family planning. However, overall it was not prioritized as a theme until recently.

The findings showed that the campaign creation is mostly done by TRCS supervisors, although it does include some input from HITs, who are refugees. Still, valuable input may be missing by not including non-staff refugee men or other influential refugees, such as religious leaders and teachers. If men are not regularly seen by HITs, the refugee staff may not be aware of all of the underlying issues contributing to low family planning use. A focused approach to men has not been explicitly adopted in any of the campaigns, even though the emphasis of men as equal and supportive partners in family planning improves reproductive health outcomes (Raju, 2000). Additionally, posters and radio messages have not been optimally used as modes of health education. Key informants claimed that family planning has been integrated with other campaigns as much as possible in the camp, and studies show that such integration is feasible and effective. However, the respondents in this study associated condoms more with HIV/STI prevention than with family planning, which leads to questions raised in other studies on whether such integration is hindering the involvement of more men in family planning (Spaulding et al., 2009).

5.10 Limitations

This study was a cross-sectional analytical by design. While these studies allowed for the exploration of multiple exposure variables to the outcome variable, there was potential for reverse causality since explanatory and outcome variables are measured at the same point in time. Given the amount of independent variables which were significantly associated with the outcome via bivariate analysis, it was difficult to create an all-encompassing model. However, the logistic regression was able to provide at least some major predictors. The multistage sampling technique is known to have higher sampling errors, but this was accounted for with the design effect in calculating the sample size.

The questionnaires were administered using face-to-face interviews, which could have led to response biases, but this was countered as best as possible through piloting the questionnaire and training the research assistants. The research assistants were recommended by the TRCS Team Leader, which could be seen as a potential bias to the study. However, in order for the study to be carried out with ease, it was necessary for the research assistants to be fluent in four languages:

Bembe, English, French, and Swahili. Given these specific qualifications, the recruitment pool for research assistants was extremely limited, and thus the recommendation of the Team Leader was sought. The questionnaires also did not allow for significant probing, which is why the focus group discussions were used to complement the quantitative study. Although this was a study on men's involvement in family planning, it would have been valuable to also administer a questionnaire to the women. However, due to time restrictions, focus groups were used to account for the women's perspective regarding the topic. While most of the respondents in this study were married men, the adolescent perspective was not well represented, even though it is important to know their knowledge, attitudes, and practice towards family planning. A few unmarried individuals were included in the focus groups to expand perspectives.

Key informant interviews conducted with the TRCS staff were helpful, although it was difficult to confirm all of the information, especially if the interviewees were the sole provider of information regarding certain subjects. Response biases were minimized since the study was being done for the benefit of TRCS operations and the camp and in order to meet the UNHCR indicators.

CHAPTER SIX:
6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The low uptake of family planning within Nyarugusu camp can be attributable in part to low men's involvement in family planning. However, there are many factors associated with men's involvement in family planning, relating to demographics, knowledge, attitudes, and camp policies. Of those, being employed, discussing family planning with one's wife, and not seeing any incentives to a large family size in a refugee camp were statistically significant as predictors of having ever used family planning within the camp. Condom use remains low, especially as a method of family planning, since it is more seen as an HIV prevention tool. Cultural factors identified by both the men and the women play heavily on limiting potential family planning users from going forward with usage. Knowledge on family planning methods was greater than that found in other refugee studies, although most men did not know proper child spacing. A majority saw benefits or incentives to having many children within the camp due to supposed camp policies, which may be influencing the high number of children in their families currently and the even higher number of children desired. The findings show that there are many factors hindering men's involvement in family planning, but the fact that the majority of men wished to be more involved in family planning with their wives is a positive sign. Providers have been trying to increase the usage of family planning, but men have yet to be specifically targeted in any of the campaigns.

6.2 Recommendations

Because cultural factors and family planning discussion played a role in pursuing family planning, it is recommended to carry out gender sensitizations for men and promote healthy discussions among couples. Since the findings show various perceived incentives to large family size in the refugee camp and during repatriation, relief agencies such as UNHCR and WFP need to examine and revise their policies accordingly while other misconceptions need to be rectified. Men have not been specifically targeted in family planning campaigns, so it is recommended that such campaigns be realized in order to increase their knowledge and acceptance of family planning. Employment was

seen as a predictor of family planning use, so it is important to also focus on the unemployed who make up the majority of the camp when implementing a campaign. A greater number of in-service trainings for health staff regarding family planning need to be undertaken in order to best equip the staff with necessary and updated skills. Due to the general dearth of studies regarding family planning and refugee settings, more research needs to be done, especially in protracted refugee situations. Future studies should also include more adolescents, women, and unmarried individuals in their samples.

REFERENCES

Adongo, P., Phillips, J., Kajihara, B., Fayorsey, C., Debpuur, C., and & Binka, F (1997). Cultural factors constraining the introduction of family planning among the Kassena-Nankana of Northern Ghana. *Social Science and Medicine, 45*(12), 1789-1804.

Austin, J., Guy, S., Lee-Jones, L., McGinn, T., & Schlecht, J. (2008). Reproductive Health: A Right for Refugees and Internally Displaced People. *Reproductive Health Matters, 16*(31), 10–21.

Bankole, A. (1995). Desired Fertility and Fertility Behavior among the Yoruba of Nigeria: A Study of Couple Preferences and Subsequent Fertility. *Population Studies, 49*(2), 317-328.

Bulatao, R. (1998). *The Value of Family Planning Programs in Developing Countries*. Santa Monica, CA: Rand.

Caldwell, J., & Caldwell, P. (1987). The Cultural Context of High Fertility in sub-Saharan Africa. *Population and Development Review, 13*(3), 409-437.

Carballo, M., Simic, S., & Zeric, D. (1996). Health in countries torn by conflict: lessons from Sarajevo. *Lancet, 348*(9031), 872-874.

Clark, S.D., Brunborg H., Rye S., Savenmyr, J., & Austveg, B (February, 1999). Increased Participation of Men in Reproductive Health Programs: A Resource Document for the ICPD+5 Follow-up Process. Paper written for Royal Norwegian Ministry of Foregin Affairs under a contract between the Norwegian Board of Health and DIS/Centre for Partnership in Development, Oslo, Norway.

Cleland, J., Bernstein, S., Ezeh, A., Faundes, A., Glasier, A., & Innis, J. (2006). Family planning: the unfinished agenda. *The Lancet, 368*(9549), 1810-1827.

Donati, S., Hamam, R., & Medda, E. (2000). Family planning KAP survey in Gaza. *Social Science and Medicine, 50*(6), 841-849.

Editorial (1993). Reproductive Freedom for Refugees. *The Lancet, 341*(8855), 929-930.
Ezeh, A., Seroussi, M., & Raggers, H (1996). *Men's Fertility, Contraceptive Use, and Reproductive Preferences, Demographic and Health Surveys Comparative Studies*. Calverton, MD: Macro International.

Ghosh, R. (2004). Involvement of Men in Family Planning: Use of Contraception by Men in India. Population Association of America Annual Meeting.

Howard, N., Kollie, S., Souare, Y., von Roeene, A., Blankhart, D., Newey, C., Chen, M., & Borthert, M. (2008). Reproductive health services for refugees by refugees in Guinea I: family planning. *Conflict and Health, 2*(12), 1-10.

Hynes, M. (2002). Reproductive Health Indicators and Outcomes Among Refugee and Internally Displaced Persons in Postemergency Phase Camp. *JAMA, 288*(5), 595-603.

IAWG (2007). Report of an Inter-Agency Global Evaluation of Reproductive Health Services for Refugees and Internally Displaced Persons. Geneva: UNHCR.

IAWG (2004). Inter-agency Global Evaluation of Reproductive Health Services for Refugees and Internally Displaced Persons. Geneva: UNHCR.

ICPD (1994). Program of Action. Cairo,

Burger, M. (2004). Reaching Men to Improve the Reproductive Health for All: Resource Guide. IGWG Men and Reproductive Health Task Force.

Isuigo-Abanihe, U. C. (1994). Reproductive Motivation and Family Size Preferences Among Nigerian Men. *Studies in Family Planning, 25*(3), 149-161.

Johns Hopkins Population Communication Services/Population Information Program, Male Involvement in Reproductive Health, Summary of Activities, For distribution at AVSC Meeting, November 30, 1994.

Krause, S., Oteino, M., & Lee, C. (2002). Reproductive Health for Refugees. *The Lancet, 360*, s15-s16.

Lwanga, S.K. (1990). *Sample size determinants in health studies. A practical manual.* World Health Organization.

McGinn, T. (2000). Reproductive Health of War-Affected Populations: What Do We Know?. *International Family Planning Perspectives, 26* (4), 174-180.

Mgwabati, F. (2010, April 14). "High birth rate at Nyarugusu worries UNHCR." *Daily News*. Retrieved from http://www.dailynews.co.tz

Morof, D.F., Atwine, B., Luguku, G., & Purdin, S. (2007). Refugee Family Planning: User Profiles From Mtendeli Refugee Camp in Kibondo, Tanzania. *Contraception, 76*(2), 157-178.

Morris, K. (2009). Research Vital to Improve Sexual Health of Refugees. *The Lancet Infectious Diseases*, 9(4), 212.

Morrison,V. (2000). Contraceptive Need Among Cambodian Refugees in Khao Phlu Camp. *International Family Planning Perspectives, 26*(4), 188-192.

Muhuhu, P., Obichere, U., & Berhane, E. (2008). Lessons Learned in Programming and Implementing the Religious Leaders RH/FP Program: A Case for Dadaab Refugee Camp. USAID.

Myrskyla M., Kohler, H., & Billari, F. (2009). Advances in development reverse fertility decline. *Nature, 460*(7256), 741-743.

O'Heir, J. (2003) Review of literature: Evaluation of reproductive health services for refugees and internally displaced persons. Presented at the Conference 2003: Reproductive Health From Disaster to Development, Brussels, Belgium, UNHCR.

Pavlish C. (2005). Refugee Women's Health: Collaborative Inquiry with Refugee Women in Rwanda. *Health Care for Women International, 26*(10):880-896.

Plumer, M., Wamoyi, J. Shigongo, Z.S., Mshana, G.H., Obasi, A.I.N., Ross, D., & Wight, D. (2010). "Seek any means, and keep it your secret": Young women's attempts to control their reproduction through contraceptive and fertility practices in rural Tanzania. *Tanzania Journal of Health Research, 12*(3).

Popoola, D. (1999). Involving Men in Reproductive Health Advocacy in the United Republic of Tanzania. *Promotion & Education, 6*(2), 20-23.

Raju, S., & Leonard, A., eds. (2000). *Men as Supportive Partners in Reproductive Health: Moving from Rhetoric to Reality.* New York: Population Council.

Randall, S., & Legrand, T. (2003). Reproductive strategies and decisions in Senegal: the role of child mortality. *Population (English Edition), 58*(6), 687-715.

Renzaho, A., & Renzaho, C. (2003). In the shadow of the volcanoes: the impact of intervention on the nutrition and health status of Rwandan refugee children in Zaire two years on from the exodus. *Nutrition and Dietetics, 60*(2), 85-91.

Sapa-Associated Free Press (30 November, 2009). "Tanzanian Refugee Population Falls Below 100,000." *Africa: The Good News*. Retrieved from http://www.africagoodnews.com.

Schreck, L. (2000). Turning Point: A Special Report on the Refugee Reproductive Health Field. *International Family Planning Perspectives, 26*(4), 162-166.

Seicean A. (2004). Refugee Health: Making a Difference in Sub-Saharan Africa: A literature Review.

Setty-Venugopal, V., & Upadhyay, UD. (2002). Birth Spacing : Three to Five Saves Lives. Population Reports, Series L, No. 13, Baltimore: Johns Hopkins Bloomberg School of Public Health.

Spaulding, A.B., Bricley, D.B., Kennedy, C., Almers, L., Packel, L., Mirjahangir, J., Kennedy, G., Collins, L., Osborne, K., & Mbizvo, M. (2009). Linking family planning with HIV/AIDS interventions: a systematic review of the evidence. *AIDS, 23*(S79).

Tanaka, Y, Kunii, O., & Hatano, T., Wakai, S. (2008). Knowledge, Attitude, and Practice (KAP) of HIV Prevention and HIV Infection Risks Among Congolese Refugees in Tanzania. *Health & Place, 14*(3), 434-452.

Tanaka, Y., Kunii, O., Okumura, J., & Wakai, S. (2004). Refugee participation in health relief services during the post-emergency phase in Tanzania. *Public Health, 118*(1), 50-61.

Tanzania Red Cross Society. Nyarugusu Annual Health Report, 2009.

Tanzania Red Cross Society. Nyarugusu Annual Health Report, 2010.

Tanzania Red Cross Society. Nyarugusu Monthly Health Report. May, 2010.

Tapsoba, P., Miller, R., & Ralalaharivenţy, L.R. (October, 1993). Involving Husbands to Increase the Acceptability of NORPLANT in Antananarivo, Madagascar. Paper presented at the annual meeting of the American Public Health Association, San Francisco, CA.

Toth, C. (2007). Voices from the Village: Improving Lives through CARE's Sexual and Reproductive Health Programs Meeting Needs for Reproductive Health Services in Post-Conflict Environments: CARE's Family Planning Project in the Democratic Republic of the Congo. USAID, Number 1 May 2007.

Toure, L. (1996). Male Involvement in Family Planning: a Review of the Literature and Selected Program Initiatives in Africa. Washington, D.C: Academy for Educational Development, Inc.

Turner, S. (2001) The Barriers to Innocence – humanitarian intervention and political imagination in a refugee camp for Burundians in Tanzania. Roskilde University, December 2001.

USAID. Bureau for Africa, Office of Sustainable Development, Washington, D.C. (sponsor), 1996.

UN. United Nations Convention Relating to the Status of Refugees. 1951.

UN Economic and Social Commission for Asia and the Pacific (1985). The influence of infant and child mortality on fertility in selected countries of the Asian and Pacific region. *Popul Res Leads, 20,* 1-18.

UNFPA. A Global Need for Family Planning: Because Everyone Counts Factsheet. 2007.

UNFPA. Reproductive Health Commodity Security: Benefits of Reproductive Health Supplies and Services. RHCS Brief 3, July 2008.

UNFPA. Male Involvement in Reproductive Health: Incorporating Gender throughout the Life Cycle. Occasional Paper Series 1. New York: UNFPA, 1998.

UNHCR. Global Appeal 2010-2011: United Republic of Tanzania. 2009.

UNHCR. Reproductive health in refugee situations: An inter-agency field manual. Geneva, 1999b.

UNHCR. Strategic Plan for Reproductive Health 2008-2012. Geneva, 2007

UNHCR. Tanzania Factsheet. January 2010.

USAID. Understanding Operational Barriers to Family Planning Services in Conflict-Affected Countries: Experiences From Sierra Leone. USAID Healthy Policy Initiative, August 2008.

Wambui, C. (1995). Parents, Kenya: Male Only Centers: A New Concept in Family Planning, published in Conveying Concerns: Women Write on Male Participation in the Family. Publications of the Women's Edition Project, Population Reference Bureau, Inc.

Wegner, M., Landry, E., Wilkinson, D., & Tzanis, J. (1998). Men as Partners in Reproductive Health: From Issues to Action. *International Family Planning Perspectives, 24*(1), 38-42.

Woman's Commission for Refugee Women and Children. Assessment of Reproductive Health for Refugees in Zambia. Reproductive Health for Refugees Consortium, September, 2001.

Women's Commission for Refugee Women and Children and United Nations Population Fund. We Want Birth Control: Reproductive Health Findings in Northern Uganda. June 2007

Wulf, D. (1994). *Refugee Women and Reproductive Health Care: Reassessing Priorities*. New York: Women's Commission for Refugee Women and Children.