IDENTIFYING FACTORS OF INFLUENCE ON FAMILY PLANNING PRACTICES AMONG RURAL HAITIAN WOMEN

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Haiti, a country located in the Caribbean, is considered to be the poorest country in the Western hemisphere. With a population of more than eight million, Haiti is amongst the poorest of the poor with majority of the population living in abject poverty. In Haiti, a large majority of women have unmet needs for family planning or child-spacing which inevitably leads to high maternal mortality. In Haiti, most births occur at home without trained health care personnel, and the country has the highest prevalence of HIV/AIDs in the region. Increasing access to reproductive health services, including family planning, to women who want them is of critical public health concern. The purpose of this thesis is to examine factors that may affect rural Haitian women's choice in utilizing family planning services by using the Social Ecological Framework as a guide. A comprehensive literature search was conducted through multiple search engines and two themes were identified as factors of influence including contraceptive use and desired family size. Increasing the availability of family planning services to women who want them would increase the likelihood of saving lives and improving the overall health of women in rural Haiti by increasing socio-economic status, empowerment, education, and reproductive health.

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PREFACE

In March of 2008 and 2009, I traveled to and stayed in both urban and rural parts of Haiti. The stay in both Port-au-Prince (urban) and Hermitage (rural) were life changing events that assisted in defining the purpose, and driving force, of my thesis. Because of these experiences, personal expertise will be presented throughout the thesis. I may have the opportunity to travel back to Haiti within the next few years to do field research in the Arbonite Region of Haiti where I will facilitate focus groups among rural Haitian women to identify factors of influence on family planning practices.

1.0 INTRODUCTION

The country of Haiti is located in the Caribbean, (see Figure 1) between the Caribbean Sea and the North Atlantic Ocean, west of the Dominican Republic. The former Hispanola Island, now Haiti and the Dominican Republic, was divided in the early 1700s between France and Spain. Haiti was settled by the French and required thousands of slaves (Africans kidnapped into slavery) to work the fertile plains and rain forests. The agricultural industry of Haiti was soon joined by the lumber industry which gradually eliminated forests leading to irreversible erosion of the exposed mountainsides that still remain today.

In 1804 the slaves of Haiti revolted and created the first black republic. The United States failed to recognize its independence, thus forcing the people of Haiti to remain isolated from partnerships in world affairs. From then, Haiti developed into two separate entities, north and south, and was ruled by all-powerful Haitian emperors. For the past 200 years, foreign commercial interests have controlled Haiti's economy, creating a very small proportion of Haitian elite and a large population of peasants (Ford 2004). Haiti, once a lush land able to provide for itself, has become an impoverished country that relies on foreign aid and cannot provide the basic needs for its people to survive including food, health care, stable employment, and infrastructure.



Figure 1: Map of Haiti (CIA World Factbook. 2010)

1.1 PROBLEM IDENTIFICATION

Haiti is considered to be the least developed and poorest country in the Western hemisphere that can be defined as a low-income, chronically food-deficit country, with poor infrastructure suffering from repeated natural disasters. USAID (2005) suggests that in addition to poverty and poor infrastructure, "the level of maternal mortality in a population is an indicator not only of the status of the population but also the level of national development" (pg. 9). In most developing countries, women are amongst the poorest of the poor. Women are forced to depend on their partners, their fertility, and their ability to stay in a relationship to maintain a sense of economic

stability. According to the International Planned Parenthood Federation's (IPPF) *PROFAMIL Project* (IPPF 2003), Haiti has a very high maternal mortality rate (MMR) at 1,100 deaths per 100,000 live births. The infant mortality rate (IMR), also high was recorded at 80 deaths per 1000 live births. The *PROFAMIL Project* shows that only 24% of all births are assisted by trained health personnel; meaning that more than 75% of all births are unattended by professionals (IPPF 2003). An article entitled, *Haiti on the Edge, As Family Planning Goes Global, a Case and Point*, written by Charlotte Griggs (2009), reports that,

Of 261,000 documented births in Haiti, only 26% are attended by appropriate health care workers, and only 85% of these documented women have received prenatal care. Only 30% of women, both single and married, use some form of contraception; while more than 50% of these women are not satisfied with the available family planning options (pg. 2).

1.2 PURPOSE AND OBJECTIVES OF THESIS

The purpose of this thesis is to examine factors that may affect rural Haitian women's choice in utilizing family planning services, to recommend strategies for improving family planning services and to propose ways to increase the number of women who use effective contraceptives. Increasing the availability of family planning services to women who want them would increase the likelihood of saving lives and improving the overall health of women in developing countries by increasing socio-economic status, empowerment, education, and reproductive health. The Social Ecological Framework will be used to organize the discussion and highlight influences experienced by rural Haitian women in their choice to use family planning services, and identify ways to strengthen such services being provided.

Chapter 2 presents an overview of information on a global scale relating to family planning practices worldwide. A profile of Haiti and family planning initiatives in Haiti will also be presented in this section. The last section in this chapter outlines the Social Ecological Framework and gives the reader examples to assist in understanding the levels within the framework. Chapter 3 describes the methods used for the literature search including, search terms used, decisions regarding relevancy, and limitations experienced. Chapter 4, Results summarizes findings from the literature search and presents Haiti-specific information. Contraceptive use and desired family size are two themes that emerged through the literature search and are presented in this section. Chapter 5 highlights and summarizes some of the important findings from the results section using the Social Ecological Framework as a guide. Personal reflections of the author are presented throughout the discussion section. Chapter 6 contains a summary, limitations experienced throughout the overall process of the thesis, and recommendations.

2.0 BACKGROUND

This chapter presents information on family planning worldwide, a profile of Haiti, fertility and family planning in Haiti, family planning initiatives, and the Social Ecological Framework. Section 2.1, family planning worldwide, provides a brief background on how family planning is seen worldwide, including decisions made for family planning stemming from the International Conference on Population Development, how maternal mortality is linked to unmet needs for family planning, and the continued argument about what comes first, economic development or family planning programs. Section 2.2 provides a profile of Haiti which will cover topics including poverty, health, unemployment, infrastructure issues, education, fertility differentials, debt related to natural disasters, and food deficit in the country. Section 2.3 provides a more detailed discussion of fertility and family planning in Haiti. Results from the DHS Report, The Context of Women's Health: Results from the Demographic and Health Surveys, 1994-2001(USAID 2005) are presented comparing Haiti with the Dominican Republic. Section 2.4 presents information regarding the *PROFAMIL Project*, a family planning initiative in Haiti. The last section in this chapter, Section 2.5, provides information regarding the Social Ecological Framework.

2.1 FAMILY PLANNING WORLDWIDE

In 1994, 179 nations came together in Cairo at the International Conference on Population and Development (ICPD) to address issues of population growth and sustainable development. These nations emphasized the importance of social and economic development and individual and family well-being of achieving reproductive health for all. During the conference a *Programme of Action* was developed to set out a series of recommended actions targeting population growth and development. Included in this *Programme of Action* was a pledge from all 179 nations to transform and fund reproductive health services around the world including the assurance that everyone who wanted to limit or space their children could do so with appropriate access to relevant services (Daulaire et al. 2002). The ICPD redefined the term reproductive health as:

...a state of complete physical, mental and social well-being and not merely the absence of infirmity, in all matters related to the reproductive system and to its functions and processes. Reproductive health, therefore, implies that people are able to have a satisfying and safe sex life and they have the capability to reproduce and they have the freedom to decided if, when and how often to do so. Implicit in this last condition are the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods for the regulation of fertility which are not against the law, and the right of access to appropriate health-care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a health infant (ICPD Programme of Action1994 as cited in Daulaire et al. 2002, pg. 6)

Specific attention should be drawn to the part of the definition of reproductive health that clearly states that both men and women have the right "... to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods for the regulation of fertility which are not against the law." In rural parts of

Haiti, men and women do not have access to family planning, which likely leads to unmet needs and increased unwanted pregnancies.

Six years after the conference in Cairo the Global Health Council set out to measure progress made toward achieving the ICPD goals that were set in 1994. This report, entitled *Promise to Keep; The Toll of Unintended Pregnancies on Women's Lives in the Developing World*, supports the idea that unmet needs for contraception lead to unintended pregnancies (Daulaire et al. 2002). According to this report, between 1994 and 2000, 1.3 billion women globally experienced a total of 1.2 billion pregnancies with more than 300 million of them being unintended (Daulaire et al. 2002). The Global Health Council also reported that during this sixyear time period over 700,000 women died from unintended and unwanted pregnancies due to problems with pregnancy, labor and delivery. Of the 700,000 deaths, more than 400,000 were attributed to botched abortions.

Maternal mortality is not the only problem that stems from unintended pregnancies. According to the World Health Organization, (WHO) "for every maternal death an estimated 30 additional women suffer pregnancy-related health problems that are frequently permanently debilitating" (WHO 1997, pg. 3 as cited in Daulaire et al. 2002). Overall, an estimated 17 million women suffer from pregnancy-related health problems which include uterine rupture, prolaspe, hemorrhage, vaginal tearing, urinary incontinence, pelvic inflammatory disease and obstetric fistula (a muscle tear that allows urine or feces to seep into the vagina). These conditions are more likely to occur among women who are on the cusp of childbearing age, very young or very old, suffering poor health, malnutrition or have had multiple live births (Daulaire et al. 2002). The cost associated with such debilitating problems can lead to social and economic isolation as well as increasing the risk of maternal mortality during future pregnancies.

Family planning saves lives and can improve the health of women, children and society as a whole. According to Bernstein et al. (2006) gaining control of one's reproductive choices and fertility has health benefits for both mother and child. In 2000, about 90% of global abortion related and 20% of obstetric related mortality and morbidity could have been averted by the use of effective contraception by women wanting to either postpone or stop having children. In some cases, a mother's death is considered to be the death of the household (Daulaire et al. 2002). Daulaire et al. (2002), reports that children of deceased mothers are likely to be farmed out to relatives, forced on to the street, and have a greater risk of dying themselves. In addition, using family planning to increase the interval at which women bear children not only has benefits to the mother, but also to the child (Daulaire et al. 2002). Children born within eighteen months of each other (live births) are at a greater risk of fetal death, low birth weight, prematurity, malnutrition and being small size for gestational age in both rich and poor communities (Bernstein et al. 2006).

In September of 2000, world leaders came together at the United Nations (UN) headquarters in New York to adopt the United Nations Millennium Declaration which formed the Millennium Development Goals (MDGs) to reduce extreme poverty in UN member states. The eight MDGs include the following: ending poverty and hunger; providing universal education; achieving gender equality; assuring child health and maternal health; combating HIV/AIDS; working for environmental sustainability; and establishing global partnership. Goal five, related to maternal health, addresses maternal mortality, proportion of births attended by trained professionals, contraceptive use, birth rate among adolescents, antenatal care coverage, and unmet need for family planning (UN 2008). The MDG report for 2009 states that measuring maternal mortality is challenging at best due to systematic underreporting and misreporting of

maternal deaths. To aid in the measurement of maternal mortality and reproductive health, two benchmark indicators were created and include: 1. the percentage of births attended by trained health care personnel; and 2. the knowledge of how to prevent HIV/AIDS (Dixon-Mueller & Germain 2007).

A question that arises is, whether developing countries have family planning programs that decrease fertility and stabilize population growth. Cutwright and Kelly (1981) compare various studies on what has to happen first, development or family planning programs and which way is more effective. They suggest that

Family planning programs are more likely to result in cost-effective decrease in birthrates than are development programs in the majority of less developed countries. It is noted however that, just as successful family planning programs enhance the effect of socioeconomic development on changes in fertility, the level of development also increases the impact of family planning program activity... in the long run, the reduction of fertility to replacement levels will require strong efforts on behalf of both development and family planning programs (pg.150).

Some people have argued that enhanced living standards and life expectancy, education, and women's emancipation are the most effective ways to reduce fertility and curb populations growth, though of course contraceptive methods should be available. However, it has been noted that having family planning programs and services available speeds up fertility decline and slows population growth (Bernstein et al. 2006). Some believe that fertility will decrease and population growth will slow when people change their opinions about modern contraception use and small family size. This change must be accompanied by knowledge of methods, access to services, affordability, counseling services especially clarifying misinformation regarding health concerns and sides effects.

This leads to the next issue, whether providing family planning services to women who want them increases the overall health of women and children in developing countries.

According to Bernstein et al. (2006),

Promotion of family planning in countries with high birth rates has the potential to reduce poverty and hunger and avert 32% of all maternal deaths and nearly 10% of childhood deaths... Family planning promotion in countries with high birth rates would also contribute to increase women's empowerment, achievement of primary schooling and long term environmental stability (pg. 1810).

However in half of the 75 poor developing countries, mainly in Africa but including Haiti, contraception use remains low while fertility, population growth, and unmet needs for family planning remain high (Bernstein et al. 2006).

So what are the factors involved with population growth? In an article entitled, Family Planning: the Unfinished Agenda (Bernstein et al. 2006) the authors describe three factors that may account for future population growth: population momentum; unwanted births (as a result of unmet needs for contraception); and the desire for a large family. Population momentum refers to birth rates in many developing countries that are sustained at raised levels because of the high proportion in the population of individuals of reproductive age. Unwanted births, due to an unmet need for contraception, are the second factor that largely accounts for future population growth. Bernstein et al. (2006) note that "elimination of such births would reduce population growth by about 20%" (pg.1811). The final factor contributing to population growth is the desire for large families. The authors state that many couples report that they want or need more children than the number that could stabilize population growth. This factor accounts for another 20% of the population growth that could be reduced in developing countries (Bernstein et al. 2006). Connecting family planning initiatives with development initiatives may assist in

decreasing population momentum, unwanted births, and the desire to have large family, which may in turn decrease population growth.

2.2 PROFILE OF HAITI

This section presents a profile of Haiti and covers topics that include poverty, health, unemployment rates, infrastructure issues, religion, education, fertility differentials, debt from natural disasters, and food deficit in the country.

As noted above, Haiti has an estimated population of more than 8.5 million in 2006 and is considered to be the poorest country in the Western hemisphere. According to the CIA World Factbook (2010), 80% of the Haitian population lives under the poverty line and 54 % in abject poverty. The health of the Haitian public is of dire concern. According to the UN's Human Development Index Haiti ranks 154 out of 177 countries on life expectancy at 49.1 years. The two benchmark indicators identified in the introduction suggest that Haiti, has inadequate health care and services directed at reproductive health. Some of Haiti's reproductive health statistics show that more than 70% of births occur at home without trained health care personnel and the region has the highest prevalence of HIV/AIDs (USAID Investing 2009). In addition, more than 600 women die in childbirth annually and the under five infant mortality rate is 60 per 1000 live births (CIA World Factbook 2010; USAID Investing 2009).

The most common occupations, in 1995, can be grouped into three categories agriculture (66%), industry (9%), and services (25%) (CIA World Factbook 2010). Jobs in Haiti are difficult to establish resulting in an unemployment rate as high as 80%. Of the Haitians who are

fortunate to find employment, 54% live on less than \$1 US/Day. In addition to the lack of job opportunities, Haiti lacks basic infrastructure with limited to no access to clean drinking water (more than 46% of the population has no access to clean drinking water), health services, basic sanitation, electricity, and primary education. Haiti is also defined as a low income chronic food deficit country only able to produce less than half (43%) of the food needed to feed its ever growing population (USAID Country profile 2009). The predominant religion practiced in Haiti is Roman Catholicism. More than 80% of the Haitian population is Catholic followed by 16% Protestant, 3% other and 1% no religious affiliation. In addition to Haitian people practicing the above religions, more than half of the population practices Voodoo concomitantly (CIA World Factbook 2010).

More than 44% of the Haitian population is illiterate (USAID Country Profile 2009). In 2003, Population Council published information about education achievement in Haiti. Of particular interest for this thesis are the data related to women (see Table 1). Forty-one percent of rural Haitian women surveyed had no education at all. Educational disparities between rural and urban Haitian women become increasingly apparent when looking at the percentage of women who completed a primary level of education, 2.6% of women living in rural parts of Haiti compared to 5.9% of women living in urban areas (Population Council 2003).

Table 1: Percentage of Distribution of Women Surveyed, By Highest Education Level Attained,
According to Residence 1995-2000.

Percentage distribution of women surveyed, by highest education level attained, according to residence, 1995-2000.

Education Level	Rural	Urban	Total	
None	41.4	16.4	31.4	
Preschool	16.9	8.6	13.6	
Primary Incomplete	34.0	37.1	35.2	
Primary Complete	2.6	5.9	3.9	
Secondary Incomplete	4.6	28.6	14.2	
Secondary Complete	0.1	1.2	0.5	
Higher	0.1	1.7	0.8	
Missing	0.3	0.4	0.3	
(N)	(11,878)	(7,932)	(19,809)	
Total	100	100	100	

Source: Population Council, Haiti 2000: Results from the Demographic and Health Survey, 2003.

Haiti's total fertility rate is 3.81 children per woman and is ranked 49th to the global total fertility rate. Disparities among rural and urban women of Haiti exist when considering the fertility rate among these women. The fertility rate of women living in rural areas is as high as 5.8 compared to a fertility rate of 3.3 for their urban counterparts (Population Council 2003). There may be a correlation between a woman's education level and her choice to use family planning services.

Rapid population growth exacerbates the issue of poverty, especially in countries with high unemployment rates or where food security is a major concern (Bernstein et al. 2006). Haiti is a perfect example of how rapid population growth can spiral its people into deep poverty. Note here that poverty in Haiti did not happen overnight; years of ineffective governmental policies to promote population control and family planning services are in large part responsible.

Year after year Haiti is struck with natural disasters and prior to the earthquake in January 2010, was suffering an estimated 900 million dollars in hurricane related damages. The devastation from this earthquake reached a scale that the people of Haiti have never seen. The severity of loss has been reported to be more than 300,000 deaths which suggests that Haiti was in no way prepared for the 7.0 earthquake. As stated previously, Haiti in general lacks basic infrastructure and now with the media portrayal of Haiti after the earthquake; other countries are seeing how poverty stricken this country is. The family planning practices, service centers, and programs that did exist, have been lost amidst the catastrophe. However, Haiti is no newcomer to natural disasters. During almost every hurricane season Haiti is hit and is faced with rebuilding an area that already lacks basic infrastructure, pushing its people into deeper poverty. In addition to the \$900 million in hurricane related debt, Haiti currently owes more than \$428 million to external sources (CIA World Factbook 2010).

2.3 FERTILITY AND FAMILY PLANNING IN HAITI

Table 2 shows comparative data for Haiti and the Dominican Republic from 1995 to 2000 for the following measures: number of women aged 15-44, pregnancies, births, abortions, maternal abortion deaths, maternal mortality ratio, maternal deaths, unintended pregnancies, unintended births, and deaths due to unintended pregnancies. The number of women aged 15-44 is an important factor in terms of fertility because these are the prime years for childbearing for women in both developed and developing countries (Daulaire et al. 2002). The measures for Haiti are compared to those for Dominican Republic to show the differences between

neighboring countries subject to similar environmental factors. Comparing Haiti to the United States would not be suitable.

In Haiti, more than 1.4 million women are of childbearing age, compared to 1.8 million women in the Dominican Republic. From 1995 to 2000 there were more than 2.0 million pregnancies in Haiti with more than 872,191 of these pregnancies being unintended. Of the 2.0 million pregnancies reported only 1.3 million resulted in live births. The results for the Dominican Republic show that of the 2.1 million pregnancies that occurred between 1995 and 2000, 652,571 pregnancies were unintended and resulted in 1.2 million live births. These results suggest that Haiti and the Dominican Republic are similar in terms of fertility. However, disparities emerge when looking at maternal mortality. The maternal mortality ratio for Haiti is 1,100 compared to 110 for the Dominican. The total number of maternal deaths in Haiti is over 14,000 compared to the Dominican Republic maternal death total of 1,404. The number of unintended pregnancies in Haiti is greater than that in the Dominican Republic by 219,620 and resulted in approximately 4500 more deaths in Haiti due to unintended pregnancies in 1995-2000. According to USAID (2005), some of the main causes of maternal mortality include hemorrhage, obstructed labor, and puerperal infection.

Table 2: Totals for Haiti, Dominican Republic, and difference between them, 1995-2000.

Category	Haiti	Dominican Republic	Difference
Name 15 44	1 420 077	1 000 470	440.501
Number of Women aged 15-44	1,438,977	1,888,478	-449,501
Pregnancies	2,045,656	2,128,663	-83,007
Births	1,307,115	1,276,814	30,301
Abortions	431,693	532,551	-100858
Maternal Abortion Deaths	928	907	21
Maternal Mortality Ratio	1,100	110	990
Maternal Deaths	14,378	1,404	12,974
Unintended pregnancies	872,191	652,571	219,620
Unintended births	440,498	120,020	320,478
Deaths due to unintended	5,461	953	4,508
pregnancies			

A report entitled, DHS Comparative Reports, The Context of Women's Health: Results from the Demographic and Health Survey, 1995-2001 (USAID 2005) show the disparities between Haiti and other Latin American / Caribbean countries including the Dominican Republic (see Table 2). The DHS surveys collect data on contraceptive use of women, aged 15-49, who are married and who report to be currently using some type of contraceptive method (USAID 2005). The findings from this report show that Haitian women aged 15-49 report the lowest current use of contraceptive methods. Less than 30% of Haitian women reported using either modern or traditional methods of contraceptives compared to more than 60% of current contraceptive users in the Dominican Republic. Lack of contraceptive use may be associated with the increased number of unintended pregnancies Haiti experienced between 1994 and 2001.

In addition to collecting information about current contraceptive use, the DHS collects information regarding unmet needs for contraception. Women who have an unmet need for contraception can be defined as women who have stated, "that they would like to stop having

contraception" (USAID 2005, pg. 48). Sub-Saharan African, which is known to have high fertility, reports 25% of women have an unmet need for family planning or child-spacing. The results for the Dominican Republic show that less than 15% of women report having unmet needs. In Haiti 40% of married women aged 15-49 have an unmet need for family planning or child-spacing. This is the highest percentage of unmet needs reported by the DHS.

The main causes of maternal mortality can be attributed to the type of assistance women receive during childbirth. According to the DHS report (USAID 2005), the presence of a skilled attendant, doctor, nurse, or midwife, is associated with lower levels of maternal mortality. In the Dominican Republic more than 90% of both urban and rural mothers have medical professional present at live births. In rural areas of Haiti the percentage of live births attended by medical professionals is less than 20% compared to urban areas, where more than 50% of births are attended, illustrating a disparity that exists not only between neighboring countries but also within rural and urban areas of Haiti.

2.4 FAMILY PLANNING INITIATIVES IN HAITI

Attempts have been made by United States Agency for International Development (USAID) and International Planned Parenthood Federation (IPPF) to increase the use of family planning services among rural Haitian women. International Planned Parenthood Federation, the leading non government organization (NGO) in Haiti, funds the *PROFAMIL Project* which specializes in promoting and providing sexual and reproductive health services. In January of 2000 to

December of 2004, the *PROFAMIL Project* worked to increase the availability of quality, sexual and reproductive health services and information to some of Haiti's poorest populations. This project was funded by International Planned Parenthood Federation Vision 2000 Fund and was focused on working with people in rural or remote areas who had not been reached by the Ministry of Health. According to the IPPF article on the *PROFAMIL Project*, "until recently, many Haitians did not have access to even the most basic information materials to help them make informed sexual and reproductive health choice" (IPPF 2003, pg. 2). Not only did this project provide care to the people that the Ministry of Health did not, but it also provided information materials in Creole, which is the predominant language of the poor. However, even though the materials were written in their language less than 50% of the adult Haitian Population can read. In urban areas of Haiti, health communication messages can be found throughout the capital advertising the use of oral contraceptive methods to prevent pregnancy, but the messages are written in French, which is the language of the Haitian elite (Maternowska 2006).

The *PROFAMIL Project* uses multiple strategies to provide services to the hard-to-reach people in Haiti. Stationary clinics which offer a broad range of family planning services are complemented by mobile medical teams and community based services that include community health promoters who distribute information directly to the underserved populations of remote areas (IPPF 2003). The *PROFAMIL Project* report also states, "The breakdown of consultations is 83% for general health services, 12% for pediatrics, 5% for gynecology, and 0.4% for family planning" (IPPF 2003, pg. 2). Although the *PROFAMIL Project* attempts to provide quality sexual and reproductive health care to people of rural areas, this breakdown of consultations suggests that there may be a gap between family planning service and people who use them.

2.5 THE SOCIAL ECOLOGICAL FRAMEWORK

In the field of public health, professionals utilize theories, frameworks, and models to guide their research. For the purpose of this thesis, the Social Ecological Framework (SEF) will be used to identify factors that influence women of rural Haiti in their decision about using family planning services. The SEF is useful for identifying multiple factors that influence an individual's behavior. According to McLeroy et al. (1988), authors of *An Ecological Perspective on Health Promotion Programs*,

The importance of ecological models in the social sciences is that they view behavior as being affected by, and affecting the social environment. Many of the models also divide the social environment into analytic levels that can be used to focus attention on different levels and types of social influences and to develop appropriate interventions. Thus, ecological models are systems models, but they differ from tradition systems models by viewing patterned behavior-of individuals or aggregates- as the outcomes of interest (pg. 355).

There are five levels within this framework the: individual, interpersonal, community, institutional, and societal. In order to effectively change a person's or a community's behavior, it is important to be aware of influences from each level. This gives the researcher the ability to adapt the program of choice to fit the specific needs on multiple levels for the target population. To further demonstrate the use of the SEF, examples of possible factors within the different levels will be discussed in this section. Haiti-specific examples will be presented in the discussion chapter of this thesis. Presented below are factors of influences that may influence teen pregnancy, to illustrate how the SEF can be applied.

2.5.1 The Individual Level

In the SEF, the first level to analyze is the individual level. Some individual level factors that may influence teen pregnancy include education, personal knowledge about where to get and how to use different methods of contraception, fear of getting in trouble, personal history of contraceptive use, biological factors, and accessibility to such information and contraceptive methods. If a teen has received "abstinence only" sex education, she may lack the necessary education to prevent pregnancy. She may fear getting in trouble if she asks an adult about how to access or how to use contraception. Certain biological factors may influence a teen's choice to use contraception, such as severe side effects of some methods, thus putting her at an increased risk of becoming pregnant if no other method is used. In the case of rape, a teen girl does not plan on becoming sexually active; the choice was made for her and if there is no method of prevention in place, she may become pregnant.

2.5.2 The Interpersonal Level

The second level of the SEF is the interpersonal level, which involves relationships, and peer influences that may influence teen pregnancy. One example of a factor at this level is the relationship between the parents or guardians and the teen. If the teen is supported by her parents or guardians and has open, honest communication with them about her needs for contraception, she may be at less risk of getting pregnant. Conversely, if she is not supported by her parents or guardians, she may lack the support necessary to address her need for contraception. Influence from the teen's partner is another example of an interpersonal factor. If

the teen's partner insists on using condoms she may be at less risk of getting pregnant. On the other hand, if the teen's partner resists using a condom to prevent pregnancy she will likely be at an increased risk.

2.5.3 The Community Level

Social norms and social networks are considered to be community level factors of influence. Depending on the teen's peer group, she may be at an increased risk of pregnancy. For instance, in the United States it has been reported that peer groups of teen-aged girls have made pacts to get pregnant at the same time. If a social norm exists that supports teen pregnancy, then the teen may be more likely to become pregnant. Another example of a social norm that may adversely influence a teen's decision to practice safer sex is that sex is more pleasurable without a condom.

2.5.4 The Institutional Level

The fourth level of the SEF, the institutional level, involves rules, regulations, and structures of institutions and organizations that may influence a person's choice or behavior regarding a specific health issue or situation. If an institution requires parental consent for teenagers to receive methods to prevent pregnancy, teens may not seek contraceptives. Regulations that have been placed in schools to prevent distribution of condoms to students may also be an influential factor leading to teen pregnancy.

2.5.5 The Societal Level

The fifth level of the SEF is the societal level. This level involves local, state, and federal policies and laws that may influence personal behavior. An example of a societal level factor that may influence teen pregnancy is the Bush administration's policy to fund abstinence-only sex education in schools.

Each level of the SEF involves important factors that should be analyzed to gain a full understanding of the factors that influence into a person's behavior in regards to certain health issues or situations. Public health issues are not effectively addressed solved by focusing on one factor. It is important to look at factors in multiple levels and then decide how best to implement effective interventions. Only then will programs or services be adapted to an individual's or community's true needs.

3.0 METHODS

This thesis is based on an extensive literature review. This chapter describes the strategies used for the literature search, presents the key search terms used, and describes the method used to narrow the search results. A section labeled limitations presents the challenges experienced throughout the literature search.

3.1 THE LITERATURE SEARCH

A comprehensive literature search was conducted using three search engines: PittCat, PubMed, and Google Scholar. Search terms include: "family planning Haiti," "family planning," "Haiti," "contraceptive use among Haitian women," "social ecological framework," "focus groups," "lay health workers," "social norms Haiti," "gender norms Haiti," "birth control methods," and "family size Haiti".

3.2 DECISIONS REGARDING RELEVANCY

The approach for selecting articles to be further analyzed was to answer a series of questions: Was the article from a scholarly peer reviewed journal? Was the URL of the article a reliable source, for example .gov, .edu, or .org? Was the title relevant to the purpose of the thesis? For example, a title that was relevant to the subject of the thesis was *Reproductive Health and the Millennium Development Goals: The Missing Link*, written by Barbara Crossette. A title not directly relevant to the subject of this thesis was, *Environmental Vulnerability in Haiti*. Once an article passed the screen of questions, the abstract was read to determine if the material showed relevance. If the abstract was relevant, the article was printed and reviewed for inclusion in the study. Articles were also chosen from relevant coursework from classes taken by the author, including, BCHS 2562 Seminar in Family Planning, PIA 2730 Community Development and Focus Groups, and BCHS 2504 Health Communication, offered by the University of Pittsburgh's Graduate School of Public Health and Graduate School of Public and International Affairs.

In addition to conducting a literature search, the author emailed NY Times reporter, Nicolas Kristof and M. Catherine Maternowska, author of *Reproducing Inequities: Poverty and the Politics of Population in Haiti*. Both are experts in the area of family planning in Haiti, and interviews with them were identified as potential sources regarding the thesis topic. Although emails were sent twice to Kristof and Maternowska, none generated a response.

3.3 LIMITATIONS

Limitations were experienced within each search engine. Search terms had to be exact when using PubMed, thus limiting the number of articles that were available to review. One of the university librarian assistants was called upon for assistance with navigating through both PubMed and PittCat. The majority of articles found using PubMed and later PittCat were written in French, which were not analyzed due to the author's limited expertise in reading French. Using a translator for these articles was considered, but due to strict time constraints, was not a feasible option. Therefore, English language articles published in scholarly peer-reviewed journals from reliable sources were used for compiling the literature review.

4.0 RESULTS

Using the methods described above, thirteen Haiti-specific articles and one book were reviewed. Findings from the articles and book will be discussed in further detail below. Section 4.1 presents information regarding both male and female contraceptive use in Haiti. Section 4.2 presents information regarding desired family size in Haiti.

4.1 CONTRACEPTIVE USE

The role of the male partner must be considered when talking about controlling fertility and family planning. Men have the ability to use or not use certain methods of contraception such as periodic abstinence, condoms, and vasectomy independent of women's contraceptive intentions and methods. Included in their role to control fertility is their support, or lack thereof, around their female partner's decision about family planning. According to Judith Frye Helzner (1996), author of *Men's Involvement in Family Planning*, evidence from many cultures suggest that men's resistance to women's use of contraception is common. Such resistance can influence women's decisions about contraceptive use.

Male dominance, supported in Haiti by gender and social norms, can lead to disempowerment of women, especially in terms of family planning use. Gage and Hutchinson

(2005) describe the effect that male dominance including power, control, and intimate partner violence can have on the reproductive health of women. Gage and Hutchinson's discussion of power suggests that in intimate relationships, power is relative, multidimensional, and may influence the behaviors of others. As they explain,

...culture confers power on individuals by defining the values and meanings associated with men's and women's roles and statuses; that power involves some degree of inequity in the distribution of resources, and that the concept of power embodies both a sense of personal control and the ability to influence the behaviors of others (Gage & Hutchinson 2005, pg. 13).

According to this article, women who have experienced adult sexual abuse by their partners may have adverse reproductive and physical health consequences including but not limited to: STDs/STIs, inconsistent condom use, fear of perceived consequences of negotiating condom use, fear of talking with one's partner about pregnancy prevention, low perceived control over one's sexuality, and unwanted pregnancies (Gage & Hutchinson 2005).

Ezeh and Mboup (1997) compare results of contraceptive use among men and women from Central African Republic, Ghana, Haiti, Kenya, and Zimbabwe. According to Ezeb and Mboup, in Haiti (see Table 3) 30% of the men who reported using contraception most frequently used periodic abstinence (8%) followed closely by the withdrawal method (7%). The third most frequently reported use of contraception among men was reliance upon female sterilization (3%). Of the 18% of women who reported using contraceptives, female sterilization (4%) was most frequently used, followed by the pill (3%) and injectables (2%). For both men and women, female sterilization was one of the primary methods of contraception reported. Even though less risk is involved with male sterilization, less than 1% of both men and women reported using this as a primary method of contraception. In some cases, condom use among men is associated with them having extramarital relations. Low reported numbers of condom use, 3% for men and

a slightly more than 1% for women, suggests that this is not a highly preferred method (Ezeb & Mboup 1997).

Table 3: Current Contraceptive Use in Haiti

Methods	Husbands	HAITI Wives
Pill	3.28	3.45
Injectables	2.78	2.67
IUD	0.00	0.49
Condom	3.28	1.69
Female Sterilization	3.88	4.08
Male Sterilization	0.52	0.19
Periodic Abstinence	8.60	0.33
Withdrawal	7.23	1.85
Other Methods*	1.50	1.89
Other Traditional**	0.14	1.77
Total Use (CPR)	31.21	18.40
Non Using	68.79	81.60
Couples (N)	(558)	(588)

herbs, strings, charms, and amulets.

Source: Ezeh & Mboup, 1997.

Certain unions and relationships are considered to more stable and faithful than others. Some researchers (Helzner 1996; Maynard – Tucker 1996; Allman & May 1979) suggest that the nature of a couples union may directly influence family planning utilization including contraceptive use to limit fertility. In an article entitled Haiti: Unions and Fertility, Gisele Maynard-Tucker (1996) examines the influences that different types of Haitian unions may have on the prevalence of pregnancy and contraceptive use. Maynard-Tucker describes Haitian unions as not always based on commitment; but rather primarily affected by economics, migration and the personal involvement of partners. Maynard-Tucker describes the following types of unions present in Haiti: *Maryaj or Marye* (Marriage), *Plase or Plasaj* (to set up a household), *Vivav'ek and menaj* (to live with someone, to live as a pair), *Remen* (lover), *Antente* (getting along with), *flirte* (flirt), and *wik'en* (weekend) (Maynard-Tucker 1996).

The first union type described is the Maryaj or Marye which is a legal marriage recognized by the Catholic Church. This type of union is the most coveted because it generally involves cohabitation, stability, and high social status. Maryaj unions are rarely seen among the poor because of high costs associated with ceremonies related to this union type, and therefore are more common among Haitian elite. The second preferred union is *Plasaj or Plase* which means setting up a household. When a couple enters a Plasaj union they commit to an understood agreement that the husband will have a plot of land to work and the wife will keep house and bear children. Although the *Plasaj* union involves cohabitation and a strong sense of stability like that of *Maryaj*; there are two distinct differences of these unions. The differences between the *Plasaj* and *Maryaj* unions are that 1. the Catholic Church does not recognize *Plasaj* unions, and 2. there are no costs associated with entering a *Plasaj* union. For the reason of low cost, the *Plasaj* union is more common among the poor. Vivav'ek and Menaj unions (to live with someone, to live as a pair) are less stable than either Maryaj and Plasaj unions, but are more stable than Remen (lover) Antente, flirte, and wik'en (getting along with, flirt, and weekend) which are regarded as more casual relationships. (see Table 4).

Table 4: Characteristics of Union Types, 1995.

Union Type	Cohabitation	Economic Support
	V	W
Maryai	Yes	Yes
Plasaj	Yes	Yes
Vivav'ek and Menja	Yes	Slight
Remen	No	No
Antente, Flirte, and Wik'en	No	no

Source: Maynard-Tucker, 1995.

A stable marriage may provide a sense of security and social support for women, and unstable or polygamous relationships may put women at an increased risk of sexually transmitted infections and pregnancy. In Haiti, it is acceptable for men to have multiple partners while women are expected to remain monogamous. According to the DHS report, (USAID 2005), the percentage of Haitian women living in a polygamous union is 20%. The Ezeh and Mboup article (1997), *Estimates of Gender Differentials in Contraceptive Prevalence Rates*, presents a table that shows the percentage of husbands and wives reporting use of any contraceptive method by country according to the husband's extramarital sexuality. The findings for Haiti consisted of 'NA' (non-applicable) throughout the table. This suggests that future research should be done to examine the contraceptive prevalence among polygamous couples in Haiti and what impact this has on a woman's decision to use family planning services.

4.2 DESIRED FAMILY SIZE

Another major theme that emerged from the literature was the connection among desired family size, religious beliefs, and social norms. The explanation for desiring large family size is that poor people need many children to help with household chores, farming work, and in some cultures for security in old age. Still, households with many children are more likely to become poor and are less likely to recover from poverty than families with only a few children (Bernstein et al. 2006).

Some researchers think that family planning promotion among poor populations will not succeed. In an article entitled, *The Role of Family Planning Programs in Fertility Declines in Less Developed Countries*, 1958-1977, (1981) Phillip Cutwright and William R. Kelly argue that,

...women in developing countries usually want more children than are actually needed to balance deaths; therefore, even if family planning programs were to virtually eliminate unwanted fertility, they would not significantly slow the world's population growth (pg. 145).

Those who share this conclusion argue that governments should not invest in setting up family planning programs, but should focus resources on promoting smaller families by motivating people to reduce their desired family size (Cutwright & Kelly 1981).

Haitian Attitudes toward Family Size, written by J. Mayone Stycos (1964), describes the work of William Nibbling, who carried out interviews with Haitian couples to clarify their

attitudes toward family. Nibbling's research was designed to answer the following research questions:

- 1. Does the participant perceive families in terms of size? i.e., is the concept of number of children salient?
- 2. Does the participant prefer a larger or smaller family?
- 3. Does the participant perceive a connection between numbers of children and economic status?

To carry out his research, Nibbling used four photographs to depict small and large families considered to be either well-to-do (phrasing by Nibbling) or poor. Photos of two small families each included a man and woman with three children. The well-to-do family wore nice clothing and shoes while the poor family wore rags or nothing and had no shoes. The photos of large families were the same except that they had six children instead of three (Stycos 1964).

Participants were shown photos of small, then large families, and asked to identify the differences. Some participants did not distinguish a difference between the two photos in front of them and looked to Nibbling for the answer. Responses made by participants who distinguished a difference were categorized into "differences in family size, difference in economic or social status, and differences in other characteristics" (Stycos 1964, pg. 43). In terms of distinguishing a size difference between families, less than 40% of the sample did so. More than 75% of the participants distinguished a difference in socio-economic status and less

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¹ The author attempted to locate William Nibbling's original work and was unable to do so. It appears that and unpublished manuscript by Nibbling was later published by J. Mayone Stycos.

than 43% were able to distinguish differences in other characteristics including skin color, beauty, quality of the photo and other miscellaneous features of the photo (see Table 5).

After viewing both sets of photos, participants were asked to choose which family they preferred if they had the choice. Some participants had difficulty responding to this question because for them family size was out of their control:

I can't make a choice. It's the work of God whether one is poor or well off. How can I say that I choose one or the other (Stycos 1964, pg. 44).

I don't prefer one over the other because both families are child(ren) of God...God makes all people (Stycos 1964, pg. 44).

Table 5: Percent who Distinguished Differences of Photos, Stycos 1964

	Set 1	Set 2	
Size	35	39	
Socio-Economic	78	73	
Other	30	42	
N	(69)	(66)	

^{*}Percentages total more than 100 because some respondents cited difference in more than one category.

Even in the most extreme comparison where the small family was well-to-do and the large one poor, only half chose the small family (Stycos 1964). When asked why they picked photos of certain families instead others, participants responded as follows:

Because he (is) like me, poor (Stycos 1964, pg. 44).

I like her because it is a poor family. If I knew them I could give them a gift (Stycos 1964, pg. 44).

^{*}Percentages are based on those who cited a difference Source: Stycos, 1964.

God loves poor people... because they think of God often... but when they are rich, they don't think of God. They forget him. They have money, they have auto, they drive to H, they drive here and there; and God likes children too (Stycos 1964, pg. 44).

Based on these results Stycos states, "we have seen that the poorer family was often preferred since the poor are viewed as children of God. Similarly, the large family was occasionally chosen specifically since the larger numbers of children were seen as a gift from God" (Stycos 1964, pg. 45). To further examine the idea that Haitians did not believe they had any control in the number of children they have or their social-economic status, the following questions were asked:

- **1.** How do you think it came about that some had few children and some had many?
- **2.** Why was one family better off than another?
- **3.** Could they have done anything to keep from having many children?
- **4.** What do you think is the best number of children for a person in your circumstances (Stycos 1964, pg. 45)?

The participants' responses reiterate the points made before: "I can't know that, it's up to God" (Stycos 1964, pg. 45). Stycos reports that regardless of which family was chosen neither was preferred as any number of children that God sent was the right number.

If God gives me ten I would be happy. If he gave me two I would be happy too...God gives the poor people many children (Stycos 1964, pg. 45).

What God gives me. I made eight children and lost six. If he gives me more I will say Thank You (Stycos 1964, pg. 45).

Of the participants who did prefer a family, 50% chose the small well-to- do family over the large poor family. So these participants opted to be a part of the smaller family. However, Nibbling's research suggests that they do not perceive this as their choice; it is viewed as the will of God. In order to reconcile this belief, the church should be involved in effort to decrease fertility rates among rural Haiti women.

5.0 DISCUSSION

In developing countries, lack of family planning services for women who want to prevent or postpone future pregnancies inevitably leads to increased rates of maternal mortality, morbidity, and has both social and economic costs (Daulaire et al. 2002). Women who have recurrent pregnancies leading to live births and breastfeeding are stripped of valuable minerals and resources needed to maintain a healthy lifestyle. Such stores of minerals and resources are also critical for women to withstand the process associated with childbirth. In a country like Haiti with high maternal mortality rates (MMR) and infant mortality rates (IMR) one ponders why more family planning services are not available and if they are available why people do not use them.

5.1 APPLYING THE SOCIAL ECOLOGICAL FRAMEWORK

The SEF is used to interpret and highlight important findings from the literature. As noted above, the SEF is a useful tool used by researchers to identify multiple factors that influence an individual to behave or not behave in a certain way. The SEF's five levels include individual, interpersonal, community, institutional, and societal. Each level allows the researcher to identify factors that may, in this case, influence rural Haitian women to use family planning services

including contraception. The results from the previous section will be discussed at the relevant level of the social ecological framework based on the author's choice of fit (see Figure 2). Personal reflections are presented throughout the discussion section.

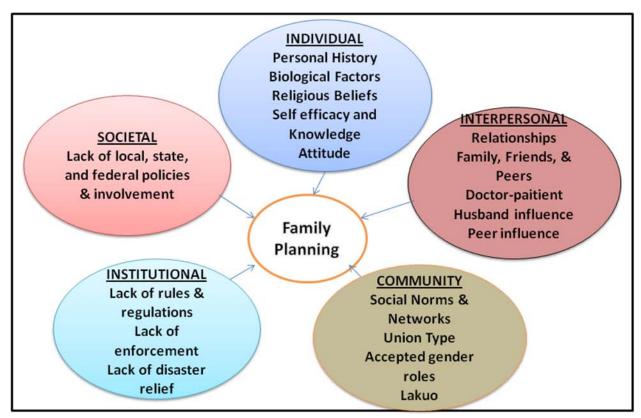


Figure 2: Factors of Influence within the Social Ecological Framework

5.1.1 The Individual Level

Individual factors that may influence women of rural Haiti to utilize or not utilize family planning services include a woman's personal history as well as biological factors. Some examples of individual influences are a woman's knowledge about contraception, her religious beliefs about taking contraception, her genetic makeup which may cause infertility issues,

poverty, attitudes towards using contraception, and personal history of taking contraception. For instance, if a Haitian woman receives antibiotics for an STD /STI and is not aware that the medication may make her birth control method ineffective, she may become pregnant and believe that birth control does not work and is a waste of money. A woman who experiences side effects from oral contraceptives, including severe headaches, blood loss or depression may believe that they are responsible for the way she feels and she may quit taking it. Education is also a factor that may influence a woman's choice to use family planning services with this level of the framework. As little as 2.6 % of rural Haitian women complete primary education and the percentage falls to 0.1% for secondary level education.

Another critical example of an individual level factor is the religious beliefs that women hold. A woman's personal beliefs or religion may influence her choice to use family planning services. She believes that the number of children she has is a gift from God and going against this would be going against her God.

5.1.2 The Interpersonal Level

The second level of the SEF is the interpersonal level which involves relationships with family, friends, peers and others that may influence a woman's decision to use family planning services. One example of a factor at this level is the doctor-patient relationship. Women who perceive their doctor as someone who is trustworthy and trying to help may be more likely listen to the doctor's advice. Conversely, a Haitian woman who views the doctor-patient relationship as one where she feels discriminated against or disempowered may be less likely to listen to her doctor's advice.

In addition to the doctor-patient relationship, her partner's attitude about using condoms may influence a woman's own attitude about using condoms and other contraceptive methods. In some cultures if a woman asks her partner to wear a condom, she runs the risk of his beating her or leaving her because he may think she is cheating on him. In Haiti, a man's use of condoms is associated with having affairs. Single Haitian women are among the poorest of the poor; they may not be willing to take the chance of raising children as a single mother and therefore will not utilize a method that will drive their partner away.

Another example of an interpersonal level factor is be peer influence. If the peer group has decided to take control of their sexual health and have supported each other through the process of getting family planning services, a woman may be more likely to also utilize family planning services. If the group is against the idea of using family planning entirely, the woman who chooses to utilize family planning services may be shunned by her group of friends. Haitian women stand together to help with each other's families; being shunned or ridiculed for being different would harm a woman's relationships with her "helpers."

5.1.3 The Community Level

The community level involves understanding the social networks and social norms of a community which may influence a woman's choice to use or not use family planning services. The social norm, shared by many Haitians, is that women should be in appropriate attire, not "everyday rags" when going to the doctor (Maternowska 2006). Another social norm is related to the types of marriages and sexual relationships among Haitians. As described in Chapter 4, Maynard-Tucker (1996) illustrates the different kinds of marriages and sexual unions among

Haitians. Legal marriages, Maryaj, which are rarely seen in poor rural areas because of the cost associated with the ceremony, usually involve steady cohabitation and an increased level of Plasaj marriages (also spelled plase) are second to legal marriages in economic stability. number. In rural Haitian communities the term *plasaj* refers to marriages that are more common among the poor because of the low cost associated with being in this type of a union. Within this type of marriage, it is understood that the man will have a plot of land to work and the woman will bear children and keep house. This social norm for rural Haitian communities may influence women to use or not use contraception as it is her duty to have children for her husband. Other types of unions include, vivav'ak and menaj (to live with someone or to live as a pair), remen (lover), fyanse (engaged), and antente, flirte, and dwik'en (getting along, flirt an weekend) which are assumed to be less stable in terms of cohabitation and economic status (Maynard-Tucker, Gisele 1996). Maynard –Tucker also describes a double standard of cultural social norms for men and women in regards to monogamy. It is culturally acceptable for men to have sexual relationships outside of the marriage, but women are expected to be faithful and monogamous (1996).

Another example of a community factor that may influence the use of family planning practices is the social norm about family. The word *lakou* in Creole refers to families in a small area that consider themselves to be extended family. The members of the *lakou*, consisting primarily of women, look after each other's children as if they are their own. Together as a small community, they have a better chance at a higher quality of life. The norms of the *lakou* emphasize the roles of motherhood and the value of children, which may have a strong influence, both positive and negative, on an individual's choice to use contraception. If the *lakou* supports

the idea of family planning, more women in rural villages will be supported in their decision to prevent or plan their pregnancies.

The results of Nibbling's work (Stycos 1964) suggest that the poor feel that they do not have control of their economic status nor the number of children they have. This is an example of a social norm surrounding economic stability and the number of children a woman bears. To go against this community norm could result in being ostracized as a non-believer of God and thus influence the choice to use or not use family planning services.

An important example of social norms is related to natural disasters in Haiti. Almost every year families are forced to rebuild their homes from the scraps left behind or purchase small amounts of concrete or lumbar which they cannot afford. A mother of five knows, through the agreement of the Plasaj, that she must keep house (if it is still there) and bear children. It is expected that women keep-up their homes and provide food for their families prior to fulfilling their needs to receive family planning services and contraception. The mantra of "feed my family and rebuild my home" outweighs the need to control their reproductive health.

5.1.4 The Institutional Level

The fourth level of the SEF is the institutional level which involves rules, regulations, and structure of institutions and organizations that may influence a person's choice or behavior regarding a specific health issue or situation. The lack of rules or regulations in Haiti for building homes to code is an example of influencing factors of the SEF within the institutional level. Without proper disaster relief in place, Haiti will never be prepared to withstand the effects of reoccurring natural disasters. They will constantly be rebuilding structures that will last

them until the next natural disaster strikes. Without basic infrastructure the women of Haiti are forced to choose between their families and themselves: a battle that undoubtedly they will never win. Some questions to be asked related to this level would be these; Are hospitals or clinics in place for a woman to visit the doctor? Are there regulations set at family planning service centers that mandate what contraception methods are available? Are family planning service centers within a manageable walking distance to all rural women in need of the services? What is the cost for contraception and is it reasonable given the poverty of most, if not all Haitian women? Lack of access to quality health care centers or programs that provide quality health care services, especially family planning services, is one of the institutional factors of influence on these women's choice to use such services. Treacherous roads, mountains, and miles separate this population from obtaining quality health care including family planning services. (IPPF 2003)

USAID had a strategic plan to pursue five objectives that were directly linked to priority economic, social and political instability factors in Haiti including, peace and security, economic growth, governing justly and democratically, investing in people, and humanitarian assistance (USAID Strategic Plan 2009). For the purpose of this thesis, investing in the people is of particular interest. The objectives for investing in people includes improving the health and well-being of the most vulnerable Haitians, particularly women and children; helping the Haitian government provide visible high value services to the poor, and improving Haiti's lows social indicators. Future research should be done to follow up and measure the success of this plan.

Although IPPF and USAID have made valiant attempts to increase the use of family planning services, Haitian women still are not utilizing the services. Family planning centers may be available to rural Haitian women, but lack of understanding about the influential factors

within other levels of the framework may be preventing organizations from providing tailored and culturally appropriate services.

5.1.5 The Societal Level

The fifth level of the Social Ecological Framework is the societal level. This level involves local, state, and federal policies and or laws that may influence a person's behavior. For example, China has implemented and strictly enforced laws regarding the number of children a couple may have. Lack of policies and or laws may be an influence in the poor utilization of family planning services. If the one child policy was implemented in Haiti would more women be influenced to use family planning services? The short answer to this question is that if this child policy was implemented in Haiti, it would not be a choice, but a mandatory condition that may or may not influence Haitian women to use family planning services.

Another example of a societal factor is presented in the Cutwright and Kelly article (1981), which suggests that;

Family planning programs are more likely to result in cost-effective decrease in birthrates than are development programs in the majority of less developed countries. It is noted however that, just as successful family planning programs enhance the effect of socioeconomic development on changes in fertility, the level of development also increase the impact of family planning program activities. In the long run, the reduction of fertility to replacement levels will require strong efforts on behalf of both development and family planning programs (1981, pg. 150)

This suggests that policy regulation from the government that could be an influential factor on rural Haitian women and the choice they make to use or not use family planning services. If the Haitian government provided a policy that enabled development groups to

promote family planning services, more women may be positively influenced to utilize such services.

6.0 CONCLUSION

Identifying factors of influence among rural Haitian women and their choice to use family planning services would help to controlling fertility and population growth. Promoting family planning services in rural parts of Haiti will not change the fertility rate, employment rate, education level, and or level of poverty of Haitian women overnight; but addressing these issues and placing them on the long list of important issues not to be ignored may lead the way to improved health, empowerment, education, and poverty reduction among women in these areas. This section describes the limitations experienced by the author in addition to presenting recommendations, future research, and final thoughts.

6.1 LIMITATIONS OF THE STUDY

A major limitation of this thesis is that it is based exclusively on a literature search and not original data. Although the literature search produced relevant findings, articles written in French, which were not used due to a language barrier, may have increased the author's ability to identify additional factors of influence that Haitian women experience when choosing to use family planning services including contraception.

6.2 **RECOMMENDATIONS**

After completing the literature review, which identified gaps in existing research, I recommend that extensive research be conducted to gain increased understanding of the factors that influence women of rural Haiti around family planning. The two themes that emerged throughout the literature review were contraceptive use and desired family size. Contraceptive use among both men and women in rural parts of Haiti is lacking. The primary choice of contraception used by women and men is female sterilization. Research showing contraceptive prevalence rates among polygamous couples is needed to gain a better understanding of the impact that extramarital relationships have on women's choice to utilize family planning services. Both women and men should be encouraged and educated on how to properly use contraceptive methods as a way to reduce unwanted pregnancies in addition to preventing the spread of STIs and HIV / AIDs. Research should also be conducted to identify influences surrounding the choice or decision, made by women, to use family planning services.

The other theme that emerged throughout the literature review was the desire to have a large family. Two distinct reasons were identified that influence the desire to have large families among the poor, which include; 1. Assistance with the daily chores and 2. Ensuring someone is there to care for the parents as they age. Whatever the reason, there has to be a way to encourage smaller families in rural parts of family. I recommend that the Catholic Church collaborates in developing strategies to decrease the desire for large families. According to the Stycos article (1964), Haitians feel that they have no control over the number of children they have, that it is in the hands of God. The Catholic Church could help shift current attitudes and beliefs surrounding family size by spreading the word that God wants parents to be able to properly care and provide

for their children. The Catholic Church could perhaps encourage families to plan and properly space their pregnancies by using natural family planning methods like Cycle-Beads, and be linked as a positive influence promoting family planning instead of posing barriers.

Cycle beads are a natural family planning method, based on the Standard Days Method developed by the Institute for Reproductive Health at Georgetown University (Cycle-Beads 2007). When used correctly, the Standard Days Method is more than 95% effective in helping women prevent unwanted pregnancy. The Standard Days Method works best for women who have menstrual cycles lasting between 26 and 32 days. Cycle-Beads consist of a color-coded string of beads that represents a women's menstrual cycle (See Figure 3). Each bead represents a day within a woman's cycle which in theory, would increase her awareness of which days she and her partner should abstain from unprotected sex to prevent pregnancy. To use Cycle-Beads, a woman would place the black ring on the red bead the day she starts her cycle. As she progresses daily through her menstrual cycle, the ring would be moved to the next bead which represents a new day within the cycle. When the ring is on the red and dark brown beads, there is a very low likelihood of pregnancy if unprotected intercourse is initiated. When the ring is on the white beads, a high likelihood of pregnancy exists if she has unprotected intercourse. Like most contraceptive methods, there are limitations. If a woman has abnormally short or long menstrual cycles, (less than 26 days or more than 32 days) Cycle-Beads are not as effective and should not be used (Cycle-Beads 2007). There is also an underlying association that women who use this method are supported by their partner, and that he not only understands, but will abstain from having unprotected sexual intercourse on days 8 through 19, (white beads) when pregnancy is likely to result. In Haiti, Cycle-Beads could be used to empower women to gain control of their reproductive health in preventing unwanted pregnancies. Cycle-Beads could also be used

to encourage men to fulfill a supportive role and help them to understand the importance of family planning methods.

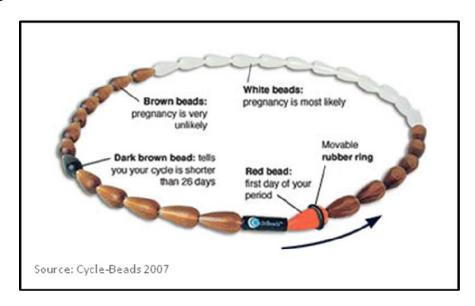


Figure 3: Cycle-Beads (2007)

Maynard-Tucker (1996) suggests that informal education and teaching practical skills to women in a mother's club setting would give women the opportunity to seek economic dependence so they would no longer have to rely on their partner or their fertility to survive. This may be an effective way to boost the education levels among women in rural parts of Haiti. To extend on Maynard-Tucker's idea of an educational mothers club, I propose educating certain women within the *lakou* groups on how to use Cycle-Beads as an effective method to prevent unwanted pregnancy. To reiterate, the word lakou refers to the Haitian concept of extended family and consists of a group of women who rely and provide for each other and their families. Linking strongly knit social networks, like the *lakou*, to promoting reproductive health and family planning services could be extremely influential in the shared choice and support of using contraceptive methods to prevent unwanted pregnancies.

6.3 FUTURE RESEARCH

Qualitative research methods are widely used to gain insight into people's attitudes, behaviors, value systems, concerns, motivations, aspirations, culture or lifestyles (QSR International 2007). According to Shoshanna Sofaer, author of Qualitative Research Methods, she states that, "the use of rigorous qualitative research methods has been on the rise in health services and health policy research" and that such research methods "can enhance the development of quality measures" (2002 pg. 329). Qualitative research can be used to assist in the development of appropriate survey tools, interventions, to aid in implementing policies, in addition to initiating future research. There are multiple approaches used to gain qualitative research data, which include focus groups, in-depth interviews, content analysis, ethnography, and evaluation. Although multiple methods are available, focus groups are considered to be the paramount research tool particularly when exploring unknown topics, sensitive topics, or studying a population whose voice is rarely heard. Focus groups allow researchers to obtain extensive qualitative data from participants about their beliefs, attitudes, opinions, and knowledge surrounding a health issue in a group setting. Although quantitative research is crucial to public health research, qualitative data gives a broad understanding of why certain behaviors occur. For example, epidemiological studies tell you how, when, where, and what may have caused a certain health issue or situation, but they cannot tell you why. Focus groups allow the researcher to find out why things are happening directly from the people being affected by situation of interest.

For these reasons, I propose using focus groups among rural Haitian women. The assumption is that the women may share similar stories regarding specific influences that affect

their decision to use family planning services including contraception. By identifying specific needs for, or barriers to such services, focus groups can help inform the design of programs to make it easier for women to receive such services.

Discussed previously was the concept of collaborating economic development with family planning initiatives to decrease fertility and stabilize population growth. I propose implementing policies that encourage family planning services to be viewed as a strategy for women to bring an increased state of economic stability to the family, which may encourage them to independently participate in family planning practices. Implementing such policies may also aid in shifting social norms and gender roles surrounding family planning and may perhaps increase support networks surrounding a woman's choice to utilize such services. Without exploring the factors of influence directly from the participants, a gap will remain in identifying strategies to best provide family planning services to women who want them. As a public health professional, I propose conducting focus groups in rural areas of Haiti to ask the direct questions about the influences that they experience. I hypothesize that the data collected from the focus groups would facilitate in the design of family planning services tailored to and based on their expressed needs. The following section provides a focus group proposal aimed to indentifying factors of influence of family planning practices among rural Haitian women.

6.3.1 Focus Group Proposal

Prior to implementing focus groups in rural Haiti, review and approval from the Institutional Review Board (IRB) is required. If and when approval is granted, the following proposal will be

used to implement focus groups to identify factors of influence on family planning practices among rural Haitian women.

Recruiting Strategy

In order to contact women to join the focus groups, I will have a recruiter travel with mobile community health workers into remote rural areas near the Arbonite Region of Deschapelles, Haiti. The recruiter will be a Haitian woman, best case scenario a member of surrounding *lakou*, who is respected and trusted by other Haitian women. The recruiter will talk with the women about the purpose of the focus groups and offer them a chance for their voices to be heard and for them to assist in the process of developing a better service based on their specific needs surrounding family planning. Women in Haiti are usually the ones in charge of going to market to sell whatever they can to make money. Because of this, incentives of fabric and food may be offered to the women who join the focus groups to give them the option of coming without debating over the decision of , "feed my family or go and talk." It is also the job of the woman to take care of the young children. Women will be able to bring children who are not able to care for themselves with the option of letting a volunteer take care of their children while they are in the focus group.

Sampling Scheme

After speaking with Dr. Ian Rawson, Director of Hopital Albert Schweitzer Haiti, I understand that the area in which the recruiter will be traveling to find participants for the focus group has an estimated population of about 50,000. The goal for the focus groups would be to have five groups, recruiting at least twelve to fifteen participants for each one, with underlying anticipation of six to eight women per group. Ideally, each group will consist of six to ten

women who are of childbearing age who will be chosen at random and asked to join the group while traveling throughout the remote regions. In order to reach homogeneity within the group, participants will consist of women who are within their reproductive years (15-45) who are also in a *plasaj* union. Single participants will not be considered for this set of focus groups because there may be social norms associated with single women having children outside of a stable union. Future focus groups should be done with single women to compare the findings at a later date.

Questions

- Tell me your name and if you have any children, tell me about them?
- What does the term "family planning" mean to you? What do you think of when you hear the term Family Planning?
- What things might influence a woman's decision about using family planning?
- Have you ever used family planning services, if so tell me about your experience? (How far did you have to travel, is what you expected, why did you go?)
- Why do you think women don't choose to use family planning services?
- What would make it easier for women here to use family planning services, if they wanted to?

6.4 FINAL THOUGHTS

The purpose of this thesis is examine factors that may affect rural Haitian women's choice in utilizing family planning services, to recommend strategies for improving family planning services, and to propose ways to increase the number of women who use effective contraceptives Although extensive gaps in the research were identified, findings show that education, desired family size, contraceptive use among both men and women, social norms, gender roles, the *lakou*, the *Plasaj*, and the lack of institutional and societal level support are all influential factors to a woman's' choice to use contraception,

In conclusion, extensive future research is necessary for gaining increased representation, understanding, and plan to help rural Haitian women limit unintended pregnancies. I propose using focus groups as a research tool to identify such factors of influence directly from rural Haitian women who are experiencing them. Once the factors are identified I propose continued involvement of Haitian women to assist in the development and implementation of strategies and interventions aimed to increase access to women who want to limit or space their children. Encouraging the women of rural Haiti to use their strengths and assets of their community, such as the *lakou* will help to strengthen them as individuals. Increasing the availability of family planning services to women who want them would increase the likeliness of saving lives and improving the overall health of women in Rural Haiti.

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