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Case Document

Nigerien Population Growth: Addressing Extreme Poverty through Family Planning

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"Every day 24 women die giving birth and 72 newborn children die in my country."
- Nigerien Prime Minister Brigi Rafin,
speaking in regards to Niger and the annual congress
of the African Society of Gynecologists and Obstetricians[1]

Presented by:

Vanderbilt Institute for Global Health VIGH | Student Advisory Council

Introduction

Amadou,* a 37 year old father in Niger, picks up his eighth son and looks across their dusty, small field, sighing. "It's going to be a couple of hungry months," he quietly tells his son, "the rains aren't coming again." Amadou has 15 children and his second wife, Cherifa, is pregnant with her eighth. He married his first wife, Halima, when they were both 16 years old and, showing the community that she was fertile, had their first child the following year. Halima had three girls and two boys when he married Cherifa, who was 17 years old. Soon Cherifa, in an effort to show her worth as a wife, had three boys of her own, which entitled her to Amadou's small inheritance because she had more sons. Halima was certainly not going to let Cherifa be the more fruitful wife and so ensued an internal competition between the women to see who could bear more sons. Amadou enjoyed the large family – having many children is a sign of wealth and success in his country, even though ironically, he and many others struggle to feed their children and send them to school.

Problem Statement

The Millennium Development Goals (MDG) were created to meet the needs of the world's poorest citizens. MDG 4 aims to reduce child mortality by two-thirds and MDG 5 aims to reduce maternal mortality by three-quarters by 2015. Although Niger, a land-locked country in Africa's Sahara desert region, is on target to reach MDG 4, they are falling short of MDG 5.[2] Currently, the total fertility rate in Niger is a staggering 7.6 children per woman,[3] putting women at an increased risk for maternal mortality. Niger is also one of the poorest countries in the world and as the country struggles to maintain such a growing population, it is paramount to address the issue of family planning in Niger. The country has both the highest birth rate and the lowest human development ranking in the world.[3,4]

In 2010, Niger's former president made a formal commitment to the United Nations Secretary-General's maternal and child health initiative to improve health outcomes.[1] Now Niger's current president, backed by both national and United Nations Population Fund funding, has issued a Request for Proposals* to curb its population growth rate and to reduce maternal and infant mortality rates. The grant will support a five-year, $25 million project in Niger, with the aim to reduce the 3.9% annual growth rate[3] to 3%.

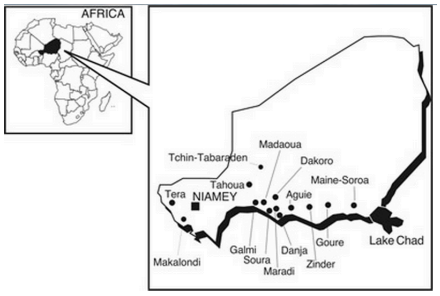
Drawing on your team's expertise and research, **develop a strategy to help Niger manage population growth by decreasing the birth rate through family planning. The strategy should consider issues involving health, economics, education, religion, culture, and politics, as well as the potential impacts that your strategy will have on these areas. The grant is for up to $25 million USD in seed funding, to be spent over a five-year period. The plan must demonstrate self-sustainability after the five years.** Successful projects will include male head of households and involve local tribal and religious leaders.

*Note: All names and stories are fictitious but mirror actual events. The call for RFPs is also fictitious, but mirrors current trends in funding to support MDGs 4 and 5, as well as Niger's commitment to reducing the growth rate.

Instructions

Working with your multi-disciplinary team of 4-6 members, create a 12-minute, in-person, oral presentation with supporting slides to respond to this Request for Proposals (RFP) from the President of Niger. One or more members of the group can deliver the presentation, but all members must attend and be available to respond to questions. There will be 5 minutes of questions and answers immediately following your presentation. Please cite all sources and include a slide with references, which you do not need to cover during your presentation. Please bring 3 copies of your slide deck for the judges and conserve paper by printing on both sides and placing 3 or 4 slides per page. All slide decks should be labeled with your team number and submitted via REDCap by 12:00pm on Saturday, February 7, 2015. Late entries will not be accepted.

Niger at a Glance



Niger, a former French colony, is located in west Africa. This land-locked country is about twice the size of Texas. The northern four-fifths of Niger is desert, plains, and sand dunes and the southern one-fifth is savanna and most suitable for agriculture. A majority of Niger's 17.2 million inhabitants[3] is clustered in the west and far south of the country, where the main river, the Niger, runs. Eighty-two percent of the population lives in these rural areas and relies on subsistence farming.[5] The rural settings make access to healthcare and interventions a challenge for many people.[3]

Niger is a low-income country and ranks last in the world on the United Nations Human Development Index (HDI), which is a composite statistic of education, income, and life expectancy that is used to rank countries.[4] Families are large and parents often struggle to feed all of their children. There is often little money left to provide school uniforms, fees, and books for children, which prevents many children from attending school. Only 70% of boys and 57% of girls attend primary school and less than one-third (29%) of adults are literate.[3] Smaller families would decrease the strain on parents to provide food and education, and mothers would have the opportunity for employment and education if they are not constantly engaged in child bearing and rearing. Periodic drought, reliance on subsistence farming, poor healthcare and education, and lack of infrastructure challenge Niger's development. The Nigerien government spends just 3.9% of its gross domestic product (GDP) on education and only 2.4% of GDP on health.[3]

Over 80% of Nigeriens are Muslim and there are five distinct ethnic groups, including the Hausa and the nomadic Tuaregs.[5] The official language is French but there are various tribal languages. These varying languages and customs can present challenges to implementing change, and it is wise to work with local tribal leaders, as they have great political power.

Niger Facts

total population
17.2 million

50%
of the population is
under 14 years old

3.9% annual growth rate

there are projected to be 56 million Nigeriens
by 2050

average woman will have
7.6 children

590
per 100,000 women
die during childbirth

63
per 1,000 infants
die annually

14%
rate of contraceptive use

32%
use mobile phones

less than 29%
of adults are literate

almost 44%
survive on less than
$1.25/day

82%
of the population is rural

Statistics are from UNICEF: http://www.unicef.org/infobycountry/niger_statistics.html

The Pressing Health Issue

Booming population

The current population is 17.2 million, but with a total fertility rate around 7.6 children per woman, the population is projected to triple to 55 million by 2050.[6] Almost half of the current population is under 14 years old[3] and, in line with traditional young marriages, many of these children will soon be married and having children of their own.[3] Thirty-six percent of youth are married by age 15 and 75% are married by age 18. In some regions, girls are married when they are 12 or 13 years old. It is vital that such a young and poor country curbs its growth sooner rather than later. No other country has a higher birth rate than Niger. The high birth rate is attributed to cultural and religious factors, including the lack of family planning and limited use of effective contraception, education, and economics.[6]

Religious influence

Imams (Muslim religious leaders) have considerable influence in village politics; however, villages are controlled by a traditional leader or chief.[7] The Islamic faith does not disprove of contraceptive use but it does promote procreation and consequently, in Niger a majority of the population are weary of family planning (or consciously spacing children). Only 14% of Nigeriens use contraceptives.[3] Polygamy is common and wives often rival each other to prove their worth and fertility through bearing more children.[8] A large family has traditionally been a sign of wealth and success for Nigerien men.[9,10] Successful interventions have targeted men, since they control the household and birth decisions.[11] Engaging religious leaders in discussions on healthy timing and spacing would be beneficial to family planning programs.

Lack of healthcare

Professional healthcare during pregnancy, or antenatal care (ANC), is largely underutilized in rural Niger. Most women in rural areas do not travel the long distances to a clinic for ANC nor for childbirth. Only 21% of births are attended by a skilled healthcare worker, such as a midwife, nurse, or doctor.[3] Instead, many women use traditional healers, herbal medicines, and rituals and although these practices are culturally traditional, they often promote ineffective contraception and treatments.[12] Furthermore, there is also a shortage of nursing and midwifery personnel.[13] Compared to other countries, Niger ranks 14th for maternal mortality and 7th for infant mortality (5.9 maternal deaths and 63 infant deaths per 1000 live births, respectively).[5] Being pregnant in Niger can be life threatening and the country's high birth rate only compounds the dire situation. Statistically, one out of 16 women die from pregnancy-related causes during her lifetime.[12]

Poor health outcomes

In the absence of contraception and ANC, maternal and fetal health rapidly decline. Every two hours, a woman dies while giving birth in Niger, and nearly 20% of children die before their fifth birthday.[14] With an estimated seven children per mother, families struggle to provide food and shelter. The rainy season in this mostly desert country is only three months long, adding to the challenge of feeding Niger's booming population. Famine is also common. The scarcity of food leaves many children undernourished. Through hunger and a weakened immune system, many

small children succumb to illness, especially malaria and diarrhea.[12] Furthermore, poor sanitation and lack of fresh water in Niger foster the growth of diseases, which is exacerbated by the growing population.

Overall, population growth caused by high fertility rates compounds the health issues of poverty and puts mothers and infants at risk. When women in developing countries delay their first pregnancy until their early 20s, they are 10-14 times more likely to survive.[15] Additionally, women in developing countries who space their children every three years are twice as likely to have newborns that survive their first year.[15] As infant and mortality rates decline, population growth rates also decline because parents are more confident that their children will survive childhood.

However, if Niger's growth rate remains unchanged, the country's population will rise to shocking numbers that exacerbate current health and economic problems. Research shows that investments in voluntary family planning, maternal health services, and girls' education generate substantial positive returns in development, economic growth, and poverty reduction and are crucial to improving health outcomes.[16] For example, when Ethiopia increased women's education about and access to contraceptives, the country's GDP per capita increased 47%.[15] When women have access to contraceptives, they are able to work for income and provide stronger financial support for their families. A regional analysis in West Africa found that every $1 invested in family planning initiatives results in a $3 savings in other development sectors.[17]

Intervention Considerations

Contraceptives

Despite contraceptives being offered for free in Niger since 2002, the prevalence of women who use them remains low. Furthermore, of women aged 15-49, less than 5% use modern methods such as oral contraceptives or intrauterine devices (IUDs).[18] Condoms have also not proven to be an effective solution for family planning, as 0.8% of contraceptives used are male condoms.[18] While contraceptives have begun to gain more traction in some urban areas, rural areas have remained largely resistant. Many men believe that contraceptives defy Islamic traditions and this has emerged as a major force in resisting the use of contraceptives. In light of this resistance, there has been a shift in focus from women to men in contraceptive education because men are largely responsible for family planning decisions and whether contraceptives are used.[18] The emerging presence of radical Islam in surrounding countries such as Mali and Nigeria has increased the belief that family planning and contraceptives specifically go against the teachings of Allah and is part of Western attempts to stop childbirths.[18]

Data Analysis and Research

The concept of family planning and contraceptives is still a relatively new idea in Africa. Therefore, there is very little data about the effective methods for family planning.[18] While statistics about the need for family planning are abundant, continued research about what

methods yield the best results for family planning is lacking. What is known is that any solution will need to be culturally accepted and cannot rely on men initiating a form of birth control, such as male condoms. Additionally, effective use of birth control pills has been dismal and female condoms are not practical due to Islamic beliefs that prohibit a woman from inserting her finger into her vagina. However, it is permissible for a nurse to insert a tool, and IUDs have gained popularity. Birth control hormonal shots have also proved effective in this region.

Maternal Health and Education

Niger has one of the highest infant mortality rates in the world.[3] In addition, 14,000 mothers die annually in Niger during pregnancy or childbirth.[11] Efforts to promote and educate about maternal health have typically not involved men due to cultural norms. However, men still make the majority of decisions in traditional Niger families and have been a barrier in maternal health education. Therefore, it is essential that men be included in efforts to help educate women on the importance of maternal health.[7] With 83% of Niger's population living in rural areas, it is also important to use grassroots efforts to educate men and women on the importance of maternal health.[19] One successful program has been Niger's school for husbands (see Appendix 1).

Counseling

The U.S. Agency for International Development provides family planning guidance and counseling to young women across western Africa, but has not yet made an impact in Niger. Counseling aids women with essential knowledge about ANC clinics, skilled birth attendance, active management of the third stage of labor, essential newborn care, and use of long-term family planning.[8] However, with Niger's exploding population, it has proven difficult to provide enough services for all of the emerging counseling needs.[18]

Government Intervention

One of the largest family planning success stories in Africa is Ethiopia. Its government reduced the birth rate from 5.5% to 4.8% by focusing its Ministry of Health's resources and efforts towards family planning.[20] The country successfully used health extension workers to bring education and contraceptives to rural areas.[21] The Ethiopian government worked to overcome unmet need for contraceptives, shortages of supplies, high staff turnover, and uneven distribution of health workers.[21] Niger faces similar obstacles and much can be learned from Ethiopia's success. Fortunately, the president and first lady are supportive of reducing this run-away birth rate. Niger has already begun to implement government initiatives outlined by the World Health Organization in order to create more community health posts, regional clinics, and a national maternity clinic to improve maternal health. However, transportation and willingness to attend these clinics persist as barriers to the large rural population. Government participation mainly focuses on the distribution of contraceptives and establishment of maternal health services, but ignores religious and cultural factors that affect the success rate of family planning. However, the scale up of high-impact child health services, such as eliminating fees for pregnant women, has decreased the annual mortality rate by 5.1%.[1] Further government intervention is still in the planning phase with the hope of implementation in 2015.[22]

Concluding Remarks

As your team develops a family planning intervention, remember to consider all aspects of life and community – health, education, economics, religion, and culture – and how these elements are intricately tied, impacting one another in both positive and negative ways. Successful development interventions are also culturally relevant and achieve sustainability through involving and empowering local leaders and communities to bring about change. We look forward to hearing your proposals!

Judging Rubric

Category	Possible Points
Justification (data and evidence) Proposed intervention… • Has a logical approach • Accounts for education, economic, political, cultural, and religious factors • Is evidence-based • Includes relevant data to support project • Analyzed strengths, weaknesses, opportunities, and threats/challenges	20
Creativity and Innovation Proposed intervention… • Integrates multiple disciplines • Uses resources creatively • Reflects "outside-the-box" thinking • Is culturally acceptable • Is feasible with regard to financial, human resource, and time constraints • Has potential for expansion and growth	25
Clarity and Organization Proposed intervention has… • Clear definition of problem • Outcomes are specific, measurable, achievable, realistic, and time-bound • Plan for assessment and evaluation of goals and outcomes • Logical implementation of activities	20
Case Specific Information Proposal addresses … • How it will alleviate the critical global health issue • How it will impact education, economics, politics, and culture of Niger • Feasibility of implementation in Niger • Sustainability beyond funding period • Cultural acceptability and involvement of local communities and leaders	25
Delivery (voice, body, eye contact) Presenters… • Effectively use visual aids (PowerPoint, Prezi, etc.) • Have a clear voice, appropriate use of body language, make eye contact with audience • Show knowledge and command of Q & A	10

Appendix 1

Box 5.3: Accelerating progress on maternal health in Niger through 'School for Husbands' on reproductive health

In Niger, 74 percent of women are illiterate and about 60 percent of girls are married before the age of 15. The use of family planning is low, with a contraceptive prevalence rate of only 5 percent, and the rate of maternal death is high. Patriarchy and men's dominance and attitudes are major obstacles to women taking advantage of reproductive health care. In 2007, the Government of Niger in collaboration with the United Nations Population Fund (UNFPA) established the 'School for Husbands' initiative (*Ecole des Maris*) with the aim of transforming men into allies for promoting women's reproductive health, family planning and behavioral change towards gender equality.

The project is anchored on a spirit of volunteerism and community participation involving health authorities, health agents, national non-governmental organizations (NGOs) and married men from local communities (25 years or older). Each school meets twice a month to discuss and analyse specific challenges related to reproductive health in the community, to propose solutions and raise awareness on the issues. Initially, 11 pilot schools were set up in two districts in the Zinder region. In 2010, the strategy was expanded to all six districts of this region, and as of 2011, a total of 131 schools were operational in Zinder. In another region, Maradi, 46 schools were established in 2011.

Results obtained in three years are impressive. The coherence of the *Ecole des Maris* with socio-cultural and religious values and needs of a community makes it easy to replicate in many other settings. It led to enhanced political and financial commitment and country ownership, using the national budget line to procure reproductive health commodities, and in the first year, more than $1 million was mobilized from in-country partners for reproductive health commodities. Behavioral change among men has proved extremely transformative: men are provided with a better understanding, thus contributing to ending certain taboos and misconceptions. According to the figures from the Bandé Integrated Health Centre, use of family planning services has tripled and childbirths attended by skilled health personnel have doubled. The rate of antenatal visits rose from 28.62 percent in 2006 to 87.30 percent in 2010. Post-natal consultations in the Bandé community in Zinder increased from 13 percent in the first trimester of 2009 to 40 percent in 2011. The success recorded has led to the construction of public lavatories for health centres, building of houses for midwives, and men's participation in awareness raising during vaccination campaigns and other health activities. The Governments of Burkina Faso and Guinea have expressed interest in replicating the programme as a way to build demand for family planning services. To sustain progress, governments should address how to ensure a continuous motivation of the husbands and to transfer to the next generation of husbands.

Source: *UNFPA, 2012.*

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