

KNOWLEDGE AND USE OF FAMILY PLANNING METHODS AND SERVICES IN WEST YIMBO DIVISION, BONDO DISTRICT, WESTERN KENYA

Stevie M. NANGENDO

Institute of Anthropology, Gender and African Studies, University of Nairobi

ABSTRACT The Government of Kenya, nongovernmental organizations, and donors are dedicated to promoting and improving easily accessible, affordable, acceptable, and effective family planning methods. These efforts have apparently paid off as recent demographic, health, and fertility surveys show that knowledge of contraceptive use is nearly universal, and that over 90% of men and women are aware of at least one family planning method. However, the unmet need for contraception remains at approximately 26% in Kenya, suggesting that the right of Kenyan couples to access sufficient information concerning their preferred birth control method and the actual use of such methods have not been fully realized. This study focused on a cohort of women utilizing health facilities in West Yimbo Division, western Kenya. We concluded that cultural beliefs that equate family planning methods with interference in fecundity and fertility may argue against the use of these methods in the long term. Moreover, the desire to give birth and nurture children, fear of side effects, bride wealth presentations, and disapproval by couples and others may be stumbling blocks to contraceptive use in the study region.

Key Words: Luo; Knowledge; Family planning methods.

INTRODUCTION

According to Biddlecom et al. (1996), most research on contraception has focused on the supply and demand factors determining contraceptive behavior. Demand, defined as the motivation to limit, postpone, and space births, is itself determined by an array of economic, social, and cultural factors, whereas supply refers to the accessibility and quality of family planning services. In rhetoric and in practice, this implies that supply-side factors should also entail promoting family planning and service delivery (Biddlecom et al., 1996; Easterlin & Crimmins, 1985). Casterline et al. (2001) suggested that fertility regulation is a function of the motivation to avoid pregnancy and the cost of fertility regulation. Bulato & Lee (1983) reported that the cost of contraception includes financial, time, health, psychic, social, and cultural aspects. Biddlecom et al. (1996) also suggested that the cost of contraception encompasses much more than accessibility to family planning services and that it includes all factors (social, psychological, and cultural) that may act as barriers to contraceptive practice among men and women. Casterline et al. (2001) noted that socio-cultural and religious disapprovals of contraception repeatedly emerge as important obstacles to the use of a contraceptive method. Wall (1998) identified a combination of these factors that obstruct contraceptive knowledge, adoption, and use among Hausa women in northern

Nigeria. He asserted that few Hausa women have any knowledge of birth control and they consider family planning as the moral agnate of murder. This is because birth is an antidote for bereavement in the cultural idioms of this Islamic society and children are considered a divine benefaction. Children are the desired outcome of any Hausa marriage, and giving birth is traditionally viewed as the greatest fulfillment of being a woman (Wall, 1998). Such cultural beliefs and sentiments may render the adoption and use of contraceptive methods difficult in many sub-Saharan African communities.

Lack of knowledge about contraceptive methods and concerns about health side effects and effectiveness are also major barriers to adoption of family planning services. These factors may also argue against increased continuity of contraceptive use. For example, Bangladeshi women wishing to delay or prevent pregnancy chose not to practice contraception because of some of the above factors (Bongaarts & Bruce, 1995; Casterline et al., 2001; Feyistan & Casterline, 1999). However, Luck et al. (2000), in a study of family planning services in Bangladesh, found that culturally appropriate counseling can mobilize the presumably latent demand for contraception by reassuring potential clients of the social acceptability and by allaying their fears about side effects of contraceptive methods (cf. Amin et al., 2000; Phillips et al., 1997). Various cross-national studies have also found that health and social concerns are the principal causes of the unmet need for contraception in many countries (Bongaarts & Bruce, 1995; Casterline & Sindling, 2000). Luck et al. (2000) concluded that individual face-to-face counseling by family planning service providers is an effective means of providing potential users with necessary information, particularly regarding their health concerns. For example, demand mobilization interventions resulted in increased knowledge and use of injectable contraceptives in rural Gambia (Luck et al., 2000). However, such interventions had little effect on women's knowledge and use of other methods. It appears that many women in rural Gambia perceive injectable contraceptives to be the most effective, private, and convenient contraceptive method. Similar results were reported from the Matlab region in Bangladesh (cf. Biddlecom & Fapohunda, 1998a; 1998b; Phillips et al., 1988; Simmons et al., 1988). In both of these countries, many women often practice clandestine family planning (cf. Biddlecom & Fapohunda, 1998a; 1998b). For example, Luck et al. (2000: 333) reported that Bangladeshi and Gambian women:

Hide their use of contraceptives from husbands, relatives, and neighbors. Crowded housing conditions and the general lack of privacy make clandestine storage and use of oral contraceptives difficult. In contrast, an injection is received only once every 3 months in the privacy of the room where a community health nurse provides maternal and child health services.

Luck et al. (2000) found that the principal barriers to increased contraceptive use in rural Gambia are psychological. Village-based interventions designed to provide socially appropriate counseling to potential contraceptive users can help to overcome these barriers. The demand for contraception in Africa is driven by a wish to postpone and space births rather than a desire to control family size,

and traditionally postpartum abstinence was used to achieve these goals (Caldwell & Caldwell, 2002). Now, women in some regions of sub-Saharan Africa want a contraceptive they can control themselves and that can be reversed, thus avoiding spousal quarrels or marital dissolutions (Caldwell & Caldwell, 2002; Kenya & Macro International Inc., 1999). For such purposes, women tend to prefer hormonal methods including the pill or, somewhat less frequently according to some studies, an injectable contraceptive (Luck et al., 2000). However, the 2008/09 Kenya Demographic and Health Survey revealed that most married women aged 15–49 years preferred injectables (51.5%), pills (12.1%), female sterilization (8.4%), implants (7.7%), and male condoms (2.4%) (Kenya National Bureau of Statistics [KNBS] & Measure DHS, ICF Macro, 2010).

Adeokun et al. (2002) lamented that family planning services have traditionally focused on promoting methods that are highly effective for preventing pregnancy but provide no protection against human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS). However, various strategies used worldwide since the mid-1990s have been implemented to integrate family planning with HIV and sexually transmitted infection (STI) services. These strategies are in keeping with the tenor of the Program of Action of the 1994 Cairo International Conference on Population and Development (ICPD). Specifically, this conference emphasized the need for governments to reorient and restructure healthcare systems to enable women to obtain comprehensive and quality sexual reproductive health services (Cook & Fathalla, 1996; Knudsen, 2006). Sexual reproductive health integration and provisions in Kenya have also been guided by the 1995 Fourth International Conference on Women, the post-Cairo ICPD (ICPD + 5 and ICPD + 10), and the Millennium Declaration of 2000. The New York Call to Commitment 2004, Glion Call to Action 2004, and the Maputo Plan of Action on Sexual and Reproductive Health and Rights in joint partnerships under the sector-wide approach process have also been useful. These international agreements recognize that both sexual reproductive health and HIV/AIDS initiatives must reinforce each other. The instruments state that stronger linkages between the programs will result in more relevant and cost-effective programs with greater impact (cf. Issak, n.d.; Kenya, 2005a; 2005b; 2009a; 2009b; KNBS & ICF Macro, 2010; UNAIDS, 2010a; 2010b; UNAIDS & WHO, 2006; 2007; UNGASS, 2010a; 2010b; USAID/Health Policy Initiative, Task Order 1, 2010; USAID/Kenya, 2010a; 2010b).

Indeed, in many parts of the world, reorienting and restructuring healthcare systems has increasingly come to connote integrating STI and HIV prevention as well as detection and management with family planning and antenatal services and care (Budiharsana, 2002; Caldwell & Caldwell, 2002; Chikamata et al., 2002; Foreit et al., 2002; Lush, 2002; Myer et al., 2002). Askew & Maggwa (2002) reported that integration is particularly attractive for sub-Saharan countries. This is because reproductive tract infections, particularly those that are sexually transmitted, continue to be a serious public health problem in sub-Saharan Africa. The World Health Organization (WHO), for example, estimated that 12% of 49 year olds had a curable STI (WHO, 2001). In addition, the presence of some STIs enhances the sexual transmission of HIV/AIDS. STI management is thus effective for reducing HIV transmission. Furthermore, configuring services jointly rather

than separately has financial benefits for health systems (cf. Askew & Maggwa, 2002; Kenya, 2009a; 2009b; Montana et al., 2007).

One of the outcomes of such integration in Kenya, as elsewhere in the world, has been the emerging emphasis on the strategy of dual protection against both unwanted pregnancies and STIs (Riehlman, 1998). Chikamata et al. (2002) noted that for dual protection messages to have the intended and maximum impact, two key hindrances must be overcome, namely, some aspects of traditional family planning messages and the negative bias of providers towards non-medical methods. Adeokun et al. (2002) reported that introducing dual protection services in Ibadan, Nigeria, increased condom use because of the introduction of the female condom and dual method use. Those authors viewed the potential value of the female condom, either alone or in conjunction with other contraceptives, as a facilitator of dual protection services. In a study conducted in South Africa, Myer et al. (2002) found a low rate of dual method use of 16%, which actually occurred when a male's desire to protect himself against HIV or other STIs coincided with his female partner's desire to prevent a pregnancy (cf. Biddlecom et al., 1996). This suggests that spousal approval of a particular contraceptive method might have a strong and positive influence on the adoption of a dual protection method in particular and all contraceptive methods in general. Casterline et al. (2001) added that a husband's approval of a contraceptive method was also strongly associated with contraceptive use among women who wanted to avoid further childbearing; that is, women with an unmet need. In addition, they suggested that a husband's approval may reflect his fertility preference or his adverse feelings about contraception.

However, Caldwell & Caldwell (2002) stressed that efforts to integrate family planning with services that manage STIs and HIV/AIDS may not be feasible or appropriate in sub-Saharan Africa. This is because more than two in three (68%) adults and nearly 90% of children infected with HIV worldwide live in sub-Saharan Africa, and more than three in four (76%) AIDS deaths in 2007 occurred in the same region. The number of new STI infections continues to increase exponentially into the millions and contributes to the rapid spread of HIV/AIDS (cf. WHO, 2001). Caldwell & Caldwell (2002) concluded that such infections will strongly strain health service programs in sub-Saharan Africa, which are already severely challenged and fragile. They also noted that sub-Saharan Africa is the only region in the world where the majority of countries have yet to show major fertility declines and that the total fertility rate (TFR) has not decreased far below six lifetime births per woman. However, the Population Reference Bureau (2011) recently reported that the total fertility rate per woman is 4.7 children for all of Africa and 5.2 in sub-Saharan Africa. The 2008/09 Kenya Demographic and Health Survey recorded a TFR of 4.6 children per woman and 5.3 children per woman in rural areas compared to 2.9 children per woman in urban areas. KNBS & ICF Macro (2010) also reported a current preference for small family sizes among Kenyans. The same survey indicated that education of women in Kenya is strongly associated with low fertility. For example, the TFR decreases dramatically from 6.7 for women with no education to 3.1 for women with at least some secondary education. Over time, fertility has actually increased among women with no

education but has declined among those with even incomplete primary education (Kenya National Bureau of Statistics [KNBS] & ICF Macro, 2010).

Caldwell & Caldwell (2002) also contended that there are several reasons for not integrating HIV/STI and family planning services in sub-Saharan Africa. First, the type of equipment and staff needed for diagnosing cases of gonorrhea and chlamydia are not found in most African family planning clinics. Second, testing for HIV is different from testing for other STIs including HIV/AIDS. This is because AIDS symptoms are not usually visible until they have become symptomatic, and even then, they are not genital symptoms. Third, absorbing family planning into community health services is beyond the means of many African countries. Finally, the central problem is that family planning and AIDS programs serve different constituencies and needs in Africa (Caldwell & Caldwell, 2002: 110). Specifically, the major focus of HIV/AIDS programs in Africa is men and unmarried young people of both sexes. In contrast, family planning programs work mostly through clinics that serve married women, a majority of whom only request hormonal contraceptives.

The cautions of Caldwell & Caldwell (2002) aside, many sub-Saharan African governments have attempted to control HIV/STI infections through existing mainstream health services. These include maternal and child-health and family planning services offered at most primary healthcare outlets in the developing world (Lush, 2002: 71). Moreover, many HIV/AIDS infection prevention methods have focused on managing STIs in addition to providing health education and promoting condom use to couples and sexually active unmarried individuals. The Kenyan government is committed to widely disseminating information concerning various family planning methods and services to married couples. In addition, the government aims to provide and promote easily accessible, affordable, acceptable, available, and effective birth control methods to help limit, postpone, and space childbirths and reduce the incidence of unplanned pregnancies and to assist women in taking control over their bodies and sexuality (Central Bureau of Statistics (CBS) [Kenya] et al., 2004; Kenya, 2000; 2001b; Kenya & Macro International Inc., 1999; KNBS & ICF Macro, 2010; Thumbu, 2011). The specific purpose of the present study was to determine if Luo women in West Yimbo, Kenya, were using fertility methods and other services provided by health institutions in the study region. These women were part of a larger sample participating in the Kenyan-Danish Health Research (KEDHR) Project-Phase 2: Maternal and Child Health in Siaya District in western Kenya: A Community-based, Transdisciplinary Study.

SETTING

This research was conducted in a number of villages in the West Yimbo Division in Bondo District, western Kenya. The research site lies along the shores of expansive Lake Victoria. The 1999 Kenyan census recorded a population of 17,693 in West Yimbo (8,797 males and 8,896 females) in 4,459 households spread over 29.9 km², for a population density of 592 people per square kilometer (Kenya, 2001a). Residents of the region are predominantly Nilotic-speaking Luo. Individuals

from other ethnic groups and from other regions of Kenya and neighboring countries also work in public institutions in the study region. Married women from other ethnic communities in Kenya also lived in the area at the time of the fieldwork. The study region has a comparatively poor health status and there are very few health institutions in the entire division. These health institutions experience several constraints, including shortages of technical staff, chronic shortages of drugs and relevant consumables, non-functional or lacking equipment, poor access and transportation, inadequate community participation, and poor management of existing services as well as overcrowding and an unfriendly attitude of some service providers (Kenya, 1994; 2000; 2009a; 2009b). Several researchers have observed that a significant segment of the population in this region manage their ailments at home through self-medication, after consulting with community health workers, injectionists, traditional healers, and drug retailers (Okumu & Gachuki, 1996; Owino & Korir, 1997; Sindiga, 1995).

STUDY POPULATION AND RESEARCH METHODOLOGY

During the fieldwork, 50 pregnant and non-pregnant women participating in the KEDAHR Project were selected and interviewed.⁽¹⁾ The interviewing process was conducted in the local Dholuo language, although some informants were proficient in Kiswahili and English. Interviews were carried out by three local research assistants affiliated with the KEDAHR, which also provided funds for the fieldwork. The interview guidelines consisted of both closed- and open-ended questions designed to collect descriptive and quantifiable data. Open-ended questions provided us with the self-perceptions of these informants about pregnancy, childbirth, and contraception. Thus, informants were asked about their gravidity and obstetric history, spousal communication about child spacing and contraceptives, their desired number of children, and knowledge and use of birth control methods, as well as the perceived side effects of these methods.

RESEARCH FINDINGS

I. Socio-Demographic Characteristics of the Study Sample

According to the 1999 population census, Bondo District had a total population of 238,780. The informants who provided the data for this study were 15–51 years of age. Specifically, 12% of the informants were aged 15–20, 26% were 21–25, 14% were 26–30, and 48% were aged above 31 (Table 1). All informants were currently married with a majority in monogamous marital relationships, although one 51-year-old informant was a second wife in a levirate marital dyad.

Table 1. Age distribution in the total population of Bondo District

Age group	Total (males and females)
0–4	40,394
5–9	33,336
10–14	36,032
15–19	28,520
20–24	20,117
25–29	13,990
30–34	11,761
35–39	10,140
40–44	8,385
45–49	7,505
50–54	6,443
55–59	4,654
60–64	4,697
65–69	4,105
70–74	3,197
75–79	1,849
80 and over	1,892
Ages not stated	1,763
Totals	238,780

Source: Republic of Kenya (2001a) modified.

II. Gravidity and Obstetrics

We ascertained the gravidity and obstetric histories of the informants. Informants were asked to state when they first engaged in sexual activity, and 60% ($n=30$) reported 14 years of age, 30% ($n=15$) 16 years of age, and 10% ($n=5$) stated 15 years of age. A total of 60% ($n=30$) stated that they first married when they were 15 years old and the remainder married at age 16. The median age was 15. The highest number of children among the study subjects was 12 and the lowest was one. Such a high number of children is not surprising if sexual activity begins at 14 and the median age at first marriage is 15 years old. Informants were then asked if they desired to bear additional children. Most of those who had no desire for additional children stated that having more children would be burdensome. For example, one woman noted the following:

I feel I already have enough after giving birth to 11 children. Where will I put the extra ones? Parcels of land have become smaller and smaller. Therefore, where will more children go? In addition, I do not want to have the burden of bearing and caring for another child.

Those who wanted more children stated that they were still young and reproductively able; therefore, there was no rational for stopping childbirth. Other women longed for extra children to ensure their financial and material assistance during their twilight years. However, several stated that it was beyond their human power to make decisions concerning conception and childbirth, as such decisions

depended solely on the Luo Supreme Being locally known as *nyasaye*.

Informants were next asked whether contraceptives played any role in the number of children they had. In total, 32% (n=16) answered in the affirmative, 60% (n=30) in the negative, and 8% (n=4) were unsure. All informants were also asked if they had ever discussed with their spouses whether to have or not have more children. Only 19% had told their husbands about their desire to not have more children. The remaining informants did not have specific reasons for discussing this topic with their spouses. However, the recurring theme in all responses was that Luo men always desire additional children, as it is a cultural imperative after bride wealth presentation. Wall (1998: 347) reported similar sentiments among Hausan men of northern Nigeria:

The purpose of women is to produce children, which they refer to as the “profit” (*riba*) obtained in return for the exchange of bride wealth in marriage negotiations... The Hausa are pronatalists. Children are seen as a gift from God, the desired outcome of marriage.

III. Contraceptive Knowledge and Use

We found that adequate information about family planning methods exists in the West Yimbo Division. This information is routinely disseminated through radio, newspapers, magazines, churches, youth groups, women’s groups, merry-go-round groups, the chief’s *baraza* (locally convened community meeting), and other public forums. In particular, the information focuses on the role of birth control methods to limit, postpone, and space children, preventing conception, and preventing the acquisition and transmission of STIs including HIV/AIDS. Therefore, many women in our sample had knowledge about various fertility regulatory methods. The informants knew about different natural contraceptive methods, and the majority added that these methods did not cause major secondary complications such as interfering adversely with the future abilities and capabilities of fecund men and women.

Moreover, the women in our sample had some knowledge concerning clinics and sources of fertility regulatory methods (cf. Bongaarts & Johansson, 2000). Many of them stated that the sources of these methods included government hospitals,

Table 2. Family planning methods used by the study subjects

Method	Number	Percentage
Pills	5	10
Foam tablets	2	4
Intrauterine contraceptive device (IUCD)	3	6
Male condom	7	14
Injectables	13	26
Depo Provera injections	20	40
Total	50	100

dispensaries, clinics, and health centers. The private sources of these methods consisted of faith hospitals, clinics, maternity nursing homes, pharmacies, and shops.

Further questions revealed that 60% of the informants were actually using family planning methods, although some admitted that their use of a particular method was not consistent. The specific methods being used at the time of the fieldwork are listed in Table 2.

The most popular methods among our informants were Depo Provera injections (mentioned by 40% of the informants), injectables (26%), male condoms (14%), and pills (10%). None of the informants was aware of the lactational amenorrhea method (LAM), male sterilization (vasectomy), female sterilization (bilateral tubal ligation), female condoms, emergency contraception, and abortion as appropriate family planning methods.

Thirty percent of the women were afraid that their husbands would never entertain the use of contraceptives. In fact, some of them stressed that women must continue to give birth until menopause in their culture. As one informant stated:

In the cultural idioms and traditions of our people, a woman at menarche must give birth repeatedly. This will enable her to release all the eggs from her body. In our community, it is tabooed for a woman at menarche to have fertile eggs in her body. These fertile eggs must be transformed into children for the sake and survival of the Luo people.

Furthermore, informants below 30 years of age were not using contraceptives because of the desire to give birth within culturally legitimate marital alliances. However, several women were fearful of modern contraceptives because of the belief that some contraceptives were harmful to them and their spouses. For example, such informants were apprehensive that the coil could one day disappear inside their bodies and/or injure the penises of their husbands during coitus, causing infertility, sterility, and barrenness. In contrast, the major complaints against foam tablets revolved around forgetfulness, loss of appetite, unpleasant after-taste, and extreme fatigue. Similarly, many of the women stated that men in the Luo community strongly disliked condoms during copulation as they interfered with their sexual pleasure. Condoms also sometimes slipped off during coitus leading to unplanned and unwanted childbirths (MacCormack, 1985; Nangendo, 1997–1998; Washington & Nangendo, 1997). Moreover, some of their own kin and kith as well as those of their spouses warned them against using birth control methods. This caution was based on the cultural belief that all modern contraceptives were a transgression against the Luo Supreme Being (*nyasaye*) as well as the customs and traditions of *ramogi* or *ker*, the eponymous leader and ancestor of the Luo people (Nangendo, 2005). These results showed that all informants were aware of possible side effects of each method and the steps they could take in case any problems occurred. Table 3 provides other possible reasons for why women in Kenya do not use contraceptives.

Informants were questioned further concerning the other functions that birth control methods played in the daily lives. Approximately 66% identified male condoms as playing a crucial role in reducing the risks of acquiring and trans-

Table 3. Reasons for not using contraception (N = 1,085)

Reason	Percentage
1) Fertility-related reasons	
Infrequent sex/no sex	6.7
Menopausal/had hysterectomy	8.5
Subfecund/infecund	6.9
Wants as many children as possible	7.8
2) Opposition to use	
Respondent opposed	7.9
Husband/partner opposed	6.0
Others opposed	0.1
Religious opposition	9.0
3) Lack of knowledge	
Knows no method	2.3
Knows no source	1.9
4) Method-related reasons	
Health concerns	14.9
Fear of side effects	15.8
Lack of access/too far	0.8
Inconvenient to use	0.6
Cost too much	0.4
Interfere with body's normal process	5.9
Other	3.6
Don't know	0.6
Missing	0.3
Total	100.0

Source: Kenya National Bureau of Statistics & ICF Macro (2010) modified.

mitting STIs including HIV/AIDS. Twenty-four percent of informants pointed out that the use of male condoms, abstinence, and mutual monogamy could prevent many individuals from being infected with STIs. Lastly, 10% were of the opinion that contraceptives could be used to assist women in avoiding high-risk pregnancies and covert abortions (cf. Kenya, 2000; Kenya & Macro International Inc., 1999). However, 75% of the informants had never discussed family planning methods with their spouses or saw the need to hold such discussions. Furthermore, most of these women stated that their husbands had never brought up the subject. Such informants stated that being the head of the household and the decision maker, as conceptualized in the Luo patriarchal society, it is the responsibility of the husband to bring up topics concerning sexuality. We also asked the informants whether both family planning and HIV/AIDS messages and services were provided to them during visits to health facilities. All the informants had received both family planning and HIV/AIDS messages and services, and they added that the information was offered to them within the same premises albeit in different offices. Specifically, family planning counseling was conducted in the same room where all other health facility services were provided. However, voluntary counseling and testing for HIV/AIDS was usually performed in a separate room and

offered confidentiality to avoid the stigma attached to HIV/AIDS infections. Because of the general lack of family planning and HIV/AIDS counseling facilities throughout Kenya, the use of shared facilities for these services is a necessity rather than a preference (Heinze, 2007).

DISCUSSION

Many of the informants indicated that both sexual activities and marriages are initiated at an early age among the Luo in West Yimbo Division, Nyanza Province, Kenya. Furthermore, customs and traditions dictate that once married, women who have completed menarche must never divorce or separate from their spouses. Menarchal widows must enter into levirate marital dyads with agnates of their deceased husbands. In such levirates, they are expected to give birth to more children to propagate the lineage of a deceased spouse (Juma, 1996; Oboler, 1986; Potash, 1986a; 1986b). In contrast, the median age of sexual debut reported by women aged 25–49 years in the entire Nyanza Province was 16.5 years. Nyamongo (2000) stated that Borana girls in the Marsabit District, Kenya, are considered ready for marriage as soon as they attain menarche. This stage is socioculturally believed to occur at 12–16 years of age but chronologically this age must be below 18 years. The median age at first marriage for women of the same age cohort is 20.0 years nationally and 18.9 years in Nyanza Province (KNBS & ICF Macro, 2010). Dyson-Hudson et al. (1998) reported that initial cohabitation in south Turkana, Kenya, usually started at 20–22 years and did not vary very much by wife order (cf. Dyson-Hudson & Meekers, 1996). According to Wall (1998), marriage among the Hausa of northern Nigeria frequently occurred before menarche or once the formation of breast buds had begun. In fact, Hausan girls are typically married at 12–14 years of age and at times as early as 9–10 years of age (Longhurst, 1982; Rehan, 1984). The Population Reference Bureau (2011) reported that 34% of women aged 20–24 years in sub-Saharan Africa are married by age 18. Phillips et al. (1997) also noted that various marital and kinship customs erode the reproductive autonomies of individuals in non-Western societies. Specifically, these customs emphasize the obligations of both young men and women to produce a higher number of children for the good of extended families and corporate lineages (Central Bureau of Statistics [Kenya] et al., 2004).

As noted above, knowledge about family planning methods is available in the study region and can be acquired through the mass media, communal groups, and various public gatherings such as the chief's *baraza*. Other sources of such information include health facility committees, village health committees, community health extension workers, and health workers (Kenya, 2009a; 2009b). These sources have contributed to an awareness of contraceptives among Kenyans all over the country, where awareness increased from 81% in 1984 to 95% in 1988 (Kenya, 2000). Similarly, a rise in the contraceptive prevalence rate (CPR) was observed for all methods from 17% in 1984 to 33% in 1988 and 39% in 2009 (Central Bureau of Statistics [Kenya] et al., 2004; Kenya, 2000; Kenya & Macro International Inc., 1999). Elsewhere, the CPR for modern family planning methods was

reported to be 18% in sub-Saharan Africa, 47% in Asia (excluding China), 67% in Latin America and the Caribbean, 73% in North America, 56% in Europe, and 62% in Oceania (Population Reference Bureau, 2011).

Our results showed that some women were using Depo Provera injections, other injectables, male condoms, pills, intrauterine contraceptive devices (IUCDs), and foam tablets at the time of the fieldwork. The sources of contraceptives included government and private hospitals, maternity nursing homes, pharmacies, and shops. Other sources were the Family Planning Health Organization of Kenya, the Family Planning Association of Kenya, community-based distributors, community-based mobile services, and mobile clinics (Kenya, 2009a; 2009b). The 2008/09 KDHS stated that government facilities provide contraceptives to 57% of users, 36% are supplied through private medical sources, 6% through other private sources such as shops, and less than 1% by the community-based distribution system (KNBS & ICF Macro, 2010). Specifically, government sources supply a larger proportion of long-term methods such as female sterilization, implants, and injectables rather than short-term methods such as pills, IUCDs, and male condoms. However, the Kenya National Bureau of Statistics (KNBS) & ICF Macro (2010) reported that injectables, male condoms, and pills are the most common fertility regulation methods used by couples in the entire country. A majority of the women (89%) knew of and used male condoms, injectables, and pills, whereas the least known methods were LAM, male sterilization, and emergency contraception. Hormonal methods including injectables and pills are also preferred in some other non-Western communities, as they are convenient, effective, and private. In countries such as the Gambia and Bangladesh, hormonal methods have encouraged and promoted family planning because such methods can be easily concealed from disapproving spouses, relatives, friends, and neighbors (Ashford, 2003; Biddlecom & Fapohunda, 1998a; 1998b; Caldwell & Caldwell, 2002; Center for Reproductive Health, 2010; Luck et al., 2000; Phillips et al., 1988; Simmons et al., 1988; United Nations, 2011; USAID/Kenya, 2010b).

The use of modern contraceptive methods by married women in Kenya increased from 32% to 39%, whereas natural birth control methods decreased from 8% to 6% during the same period. Specifically, the use of injectables such as depot medroxyprogesterone acetate increased from 7% in 1993 to 15% in 2003. Over the same period, the use of female sterilization (bilateral tubal ligation) decreased from 5.5% to 4.5% and IUCD use declined from 4.2% to 2.5% among currently married women aged 15–49 years (KNBS & ICF Macro, 2010). These trends in modern contraceptive use show a general increase in short-acting methods and a decline in long-acting and permanent methods. However, an unmet need still exists for family planning methods and services, which has been estimated at 32% for all married women in Nyanza Province and 26% for Kenya as a whole (Gitau et al., 2009; Kenya AIDS Indicator Survey, 2007; KNBS & ICF Macro, 2010). This unmet family planning need has largely been attributed to limited male involvement in family planning endeavors, inadequate service provisions, weak health management systems, poor access to family planning commodities, lack of support for family planning security, poverty, socio-cultural beliefs and practices, as well as the lack of empowerment by women (Kenya, 2009a). Accord-

ing to the Kenyan government (Kenya, 2009b), this unmet need has translated into unacceptably high morbidity levels and a maternal mortality ratio of about 414 maternal deaths per 100,000 live births, which have adversely affected poor women and other socially marginalized and vulnerable groups.

Some of our informants stated that birth control methods played a significant role in preventing conception, child spacing, and reducing the risk of acquiring and transmitting STIs including HIV/AIDS. A few added that contraceptives could assist women to avoid high-risk pregnancies requiring covert abortions. Nevertheless, many informants associated some family planning methods with negative side effects. Bongaarts & Johannson (2000) noted that some users of family planning methods reported side effects including dizziness, weakness, nausea, a burning sensation, excessive and irregular vaginal bleeding, increased menstrual blood loss, menstrual pain, and abdominal pain. Male condoms have also been reported to slip off during copulation, resulting in unplanned and unwanted pregnancies. Cleland et al. (2006) also found that users of contraceptives reported side effects of breakthrough bleeding, fears of rare and serious risks, particularly breast cancer, and worries about weight gain. Other factors that weaken the motivation to utilize family planning methods include fears of social ostracism, unacceptability on religious grounds, and spousal conflicts over fertility preferences (Biddlecom & Fapohunda, 1998a; 1998b; Central Bureau of Statistics [Kenya] et al., 2004; Phillips et al., 1997). Furthermore, Casterline et al. (2001) reported that an additional obstacle to contraceptive use includes perceptions that the use of a particular method might provoke divine disapproval including death of a child.

The majority of women in our sample believed that contraceptives did not play any role in the number of children a couple had, as this was under the control of the Luo Supreme Being. There is a need to disseminate more information concerning all relevant functions of birth control methods. In particular, emphasis should be placed on the role of contraceptives in determining the number of children a woman desires to bear. Priority should be placed on increasing the awareness of all married couples and other sexually active individuals regarding their right to decide freely and responsibly about family planning, child spacing, and timing (Kenya, 2007; 2008; 2009a; 2009b). However, none of our informants alluded to female condoms and emergency contraception as family planning methods. This is perhaps because such information was unavailable to them at the time of this study. Similarly, the informants did not talk about abortion as a family planning method. This is possibly because abortion is contrary to the Luo notions of pronatalism. It is also possible that the women did not mention abortion because abortion on demand is still illegal in Kenya (MacCormack, 1985). In fact, the Kenyan government (2000: 22) has specified that abortion will not be used as a method of family planning and every attempt will be made to eliminate the need for abortion through reliable information, counseling, and services. Similarly, the Constitution of Kenya (Kenya, 2010: 25) states that "abortion is not permitted unless, in the opinion of a trained health professional, there is need for emergency treatment, or the life or health of the mother is in danger, or if permitted by any other written law." Nevertheless, Shiffman (2000) argued that safe, legal abortion, among other interventions, may be critical for reducing

maternal mortality, and Bongaarts & Westoff (2000) echoed similar sentiments.

As noted above, some Luo cultural beliefs and injunctions may prevent women in West Yimbo from using contraceptives. For example, many of the informants believed that some contraceptives adversely interfere with the fecundity, fertility, and virility of women by causing harm and injury to the uterus and penis. It is construed that this kind of interference constitutes a cultural gross violation of the traditions of *ramogi* (or *ker*), the eponymous leader of the Luo (Nangendo, 2005; 2006; Ocholla-Ayayo, 1989). In the cultural idioms of the Luo, the tradition of *ramogi* is sacrosanct and should never be contravened. Elderly informants stated that contravening the tradition of *ramogi* is a sin, locally termed *kwero* (Juma, 1996; Nangendo, 2005). Any violations would constitute moral, social, and spiritual transgressions in the community (Mulemi & Nangendo, 2001), and all our informants believed that such transgressions would inevitably lead to supernatural displeasure and wrath. Similar to the Hausa of Nigeria, our informants stated that fertilized eggs remaining in the body of a woman is the moral equivalent of murder (Wall, 1998).

CONCLUSION

This study focused on a cohort of women utilizing health facilities in West Yimbo Division, Nyanza Province, Kenya. The study objective was to determine if women in the study region were using fertility regulatory methods and other services offered by health institutions in the area. The findings indicated that many of the women were not aware of a number of modern birth control methods. The aim of the Kenyan government is to ensure that there is a steady, uninterrupted, and affordable supply of contraceptives to all people who need them (Kenya, 2005a; 2005b; 2009a). This strategy agrees with Ashford's (2003) belief that women should be counseled on all available family planning methods.

Several factors hindered some women from using contraceptives. For example, giving birth and nurturing children are highly valued by women in the study region. Several informants remarked that young women in menarche and reproductive-age women must never use family planning to limit, space, or postpone child birth. It was also suggested that the main goal of currently married and sexually active unmarried women should be to give birth. Women in menarche who had not yet given birth were not using family planning because of the desire to sire and nurture their own children in a marriage. Ashford (2003) stated that such women should be offered impermanent or reversible family planning methods because the functions of contraceptives do not merely involve limiting, spacing, and delaying childbirths. The spouses of the interviewed women similarly objected to the use of birth control methods, arguing that their wives must have high child bearing and fertility preferences after bride wealth presentations. In fact, many informants admitted that they have never seen the necessity of discussing contraceptives or a smaller number of children with their spouses. A few of the informants believed that God, and not family planning, would determine the number of children couples had, whereas others stated that family planning interfered with the fecundity and fertility of all individuals.

The interviewed women also perceived several negative side effects associated with modern contraceptive methods. According to Ashford (2003), women need accurate information on the side effects of all family planning methods so that they can choose methods that suit their individual situations and intentions. Additionally, advocacy and awareness campaigns should be launched to identify and address all possible barriers that hinder the use of family planning methods. Thus, all individuals from different ages, genders, and socioeconomic groups have to be engaged to promote evidence-based family planning. Finally, extensive education and communication programs are needed to address many misconceptions and myths about all family planning methods (Kenya, 2005a).

ACKNOWLEDGEMENTS I thank the Kenya Danish Health Research (KEDHR) project for financial support and the University of Nairobi, through the Institute of Anthropology, Gender, and African Studies (formerly Institute of African Studies), for logistical support. I also thank the following KEDHR field assistants: Elizabeth, Ondiwo, Peter and Timothy. Thanks also to Peter Ouma who was the KEDHR Field Coordinator at the time of the study. My deepest gratitude is extended to the people of West Yimbo Division, Bondo District, Kenya.

NOTES

- (1) The Kenyan-Danish Health Research (KEDHR) study randomly selected a subsample of 300 sentinel households from the entire West Yimbo Division population. The intermediate objective was to include pregnant women of childbearing age (15–45 years) in their second trimester, their unborn infants, and children aged 0–5 years. Continuous surveillance of key mortality and morbidity indicators was conducted for 15 months as well as other health fluctuations in this subsample. One of the key questions addressed was if pregnant women and other people in the study area considered antenatal services to be worthwhile and did they have access to them (KEDHR, n.d.). The informants who provided the data described in this study were purposively selected from this subsample.

REFERENCES

- Adeokun, L., J.E. Mantell, E. Weiss, G.E. Delano, T. Jagha, J. Olatoregun, D. Udo, S. Akinso & E. Weiss 2002. Promoting dual protection in family planning clinics in Ibadan, Nigeria. *International Family Planning Perspectives*, 18(2): 108–110.
- Amin, S., A.M. Basu & R. Stephenson 2000. *Spatial Variation in Contraceptive Use in Bangladesh: Looking beyond the Borders*. Policy Research Division, Working Paper No. 138. Population Council, New York.
- Ashford, L. 2003. *Unmet Need for Family Planning: Recent Trends and Their Implications for Programs*. Population Reference Bureau, Washington, DC.
- Askew, I. & N.B. Maggwa 2002. Integration of STI prevention and management with family planning and antenatal care in sub-Saharan Africa: What more do we need to know? *International Family Planning Perspectives*, 28(2): 77–86.
- Biddlecom, A.E., J.B. Casterline & A.E. Perez 1996. *Men's and Women's Views of Contraception*. Policy Research Division, Working Paper No. 92. Population Council, New York.

- Biddlecom, A.E. & B.M. Fapohunda 1998a. *Covert Contraceptive Use: Prevalence, Motivations and Consequences*. Policy Research Division, Working Paper No. 108. Population Council, New York.
- 1998b. Covert contraceptive use: Prevalence, motivations and consequences. *Studies in family planning*, 29(4): 360–372.
- Bongaarts, J. & J. Bruce 1995. The causes of unmet need for contraception and the social content of services. *Studies in Family Planning*, 26(2): 57–75.
- Bongaarts, J. & E. Johansson 2000. *Future Trends in the Developing World: Prevalence and Method Mix*. Policy Research Division, Working Paper No. 134. Population Council, New York.
- Bongaarts, J. & C.F. Westoff 2000. *The Potential Role of Contraception in Reducing Abortion*. Policy Research Division, Working Paper No. 134. Population Council, New York.
- Budiarsana, M.P. 2002. Integrating reproductive tract infection services into family planning settings in Indonesia. *International Family Planning Perspectives*, 28(2): 108–118.
- Bulato, R.A. & R.D. Lee, eds. 1983. *Determinants of Fertility in Developing Countries: Fertility Regulation and Institutional Influences*, Vol. 2. Academic Press, New York.
- Caldwell, J.C. & P. Caldwell 2002. Is integration the answer for Africa? *International Family Planning Perspectives*, 28(2): 108–110.
- Casterline, J.B. & S.W. Sinding 2000. *Unmet Need for Family Planning in Developing Countries and Implications for Population Policy*. Policy Research Division, Working Paper No. 135. Population Council, New York.
- Casterline, J.B., Z.A. Sothar & M. ul Haque 2001. *Obstacles to Contraceptive Use in Pakistan: A Study in Punjab*. Policy Research Division, Working Paper No. 145. Population Council, New York.
- Center for Reproductive Health 2010. *The Right to Contraceptive Information and Services for Women and Adolescents*. UNFPA, New York.
- Central Bureau of Statistics (CBS) [Kenya], Ministry of Health (MOH) [Kenya] & ORC Macro 2004. *Kenya Demographic and Health Survey 2003*. CBS, MOH and ORC Macro, Calverton, Maryland.
- Chikamata, D.M., O. Chinganya, H. Jones & S. RamaRao 2002. Dual needs: Contraceptive and sexually transmitted infection protection in Lusaka, Zambia. *International Family Planning Perspectives*, 28(2): 96–104.
- Cleland, J., S. Bernstein, A. Ezech, A. Faunders, A. Glaser & J. Innis 2006. Family planning: The unfinished agenda. *Lancet*, 368: 1810–1827.
- Cook, R.J. & M.F. Fathalla 1996. Advancing reproductive rights beyond Cairo and Beijing. *International Family Planning Perspectives*, 22(3): 115–121.
- Dyson-Hudson, R. & D. Meekers 1996. The universality of African marriages reconsidered: Evidence from Turkana males. *Ethnology*, 35(4): 301–302.
- Dyson-Hudson, R., D. Meekers & N. Dyson-Hudson 1998. Children of the dancing ground, children of the house: Costs and benefits of marriage rules (South Turkana, Kenya). *Journal of Anthropological Research*, 54: 19–47.
- Easterlin, R.A. & E.M. Crimmins 1985. *The Fertility Revolution: A Supply Demand Analysis*. University Press of Chicago, Chicago.
- Feyisetan, B. & J.B. Casterline 1999. *Fertility Preferences and Contraceptive Change in Developing Countries*. Policy Research Division, Working Paper No. 130. Population Council, New York.
- Foreit, K.G.F., K. Harden & K. Agarwal 2002. When does it make sense to consider integrating STI and HIV services with family planning services? *International Family Planning Perspectives*, 28(2): 105–107.
- Gitau, M., W. Liambila, B. Kigen & M. Solomon 2009. *Kenya National RH HIV Integration Strategy*. Presentation at the International conference on FP: Research and best practices, November 15–18, 2009. Kampala, Uganda.

- Heinze, von F.V. 2007. *Integration of Family Planning and HIV Counselling and Testing: Results of Research in Kenya*. Diplomarbeit, Hochschule für Angewandte Wissenschaften Hamburg, Fakultät Life Sciences, Studiengang, Gesundheit.
- Issak, B. n.d. *FP/RH in Kenya: Challenges of the Present and into the Future*. Division of Reproductive Health, Ministry of Public Health and Sanitation. Bloomberg School of Public Health, John Hopkins University.
- Juma, S. 1996. *Change and Continuity in the Luo Funeral Rites: A Case Study of Central Division, Migori District*. Unpub. B.A. Dissertation, Institute of African Studies, University of Nairobi.
- KEDAHK n.d. *Kenya-Danish Health Research Project: Phase 2. Draft Report*. KEDAHK, Nairobi.
- Kenya, Republic of 1994. *Kenya Population Census, 1989*, Vol. 1. Central Bureau of Statistics, Office of the Vice President, Ministry of Planning and National Development. Government Printer, Nairobi.
- 2000. *Sessional Paper 1 of 2000 on National Population Policy for Sustainable Development*. National Council for Population and Development and Ministry of Finance and Planning. Government Printer, Nairobi.
- 2001a. *The 1999 Population and Housing Census: Counting Our People for Development*, Vol. 1. Central Bureau of Statistics, Ministry of Finance and Planning. Government Printer, Nairobi.
- 2001b. *Siaya District Development Plan, 1997–2001*. Office of the Vice President and Ministry of Planning and National Development. Government Printer, Nairobi.
- 2005a. *Family Planning Guidelines for Service Providers*. Division of Reproductive Health, Ministry of Health. Regal Press Kenya Limited, Nairobi.
- 2005b. *Reversing the Trends: The Second National Health Sector Strategic Plan of Kenya—NHSSP II 2005–2010*. Government Printer, Nairobi.
- 2007. *Health Policy Initiative*. Ministry of Health, Nairobi.
- 2008. *Kenya Nutrition and HIV/AIDS Strategy 2007 to 2010*. Ministry of Medical Services. Government Printer, Nairobi.
- 2009a. *National Reproductive Health Strategy, 2009–2015*. Ministry of Public Health and Sanitation and Ministry of Medical Services. Government Printer, Nairobi.
- 2009b. *National Reproductive Health and HIV and AIDS Integration Strategy*. Ministry of Public Health and Sanitation and Ministry of Medical Services. Government Printer, Nairobi.
- 2010. *The Constitution of Kenya*. Government Printer, Nairobi.
- Kenya & Macro International Inc. 1999. *Kenya Demographic and Health Survey 1998*. National Council for Population and Development (NCPD), Central Bureau of Statistics (CBS), Office of the Vice President and Ministry of Planning and National Development. Government Printer, Nairobi.
- Kenya AIDS Indicator Survey 2007. *Data Sheet*. Population Reference Bureau, New York.
- Kenya National Bureau of Statistics (KNBS) & ICF Macro 2010. *Kenya Demographic and Health Survey 2008–2009*. KNBS and ICF Macro, Calverton, Maryland.
- Kenya National Bureau of Statistics (KNBS) & Measure DHS, ICF Macro 2010. *2008–2009 Kenya Demographic and Health Survey: Fact Sheet*. KNBS and ICF Macro, Calverton, Maryland.
- Knudsen, L. 2006. *Reproductive Rights in a Global Context*. Vanderbilt University Press, Nashville, Tennessee.
- Longhurst, R. 1982. Resource allocation and the sexual division of labour: A case of a Moslem Hausa village in northern Nigeria. In (L. Beneria, ed.) *Women and Development: The Sexual Division of Labour in Rural Societies*, pp. 95–117. Praeger Publishers, New York.
- Luck, M., E. Jarju, M.D. Nell & M.O. George 2000. Mobilizing demand for contraception in rural Gambia. *Studies in Family Planning*, 31(4): 325–335.

- Lush, L. 2002. Service integration: An overview of policy developments. *International Family Planning Perspectives*, 28(2): 71–76.
- MacCormack, C.P. 1985. Lay concepts affecting utilization of family planning services in Jamaica. *Journal of Tropical Medicine and Hygiene*, 88: 281–285.
- Montana, L., M. Neumann & V. Mishra 2007. *Spatial Modelling of HIV Prevalence in Kenya*. Policy Research Division, DHS working paper No. 27. Population Council, New York.
- Mulemi, B.A. & S.M. Nangendo 2001. Therapeutic strategies and traditional medical knowledge of the people of Bar Chando Sub-location, Bondo District, Kenya. *Curare*, 24: 47–56.
- Myer, L., C. Morroni, C. Mathews & F. Little 2002. Dual method use in South Africa. *International Family Planning Perspectives*, 28(2): 119–121.
- Nangendo, S.M. 1997–1998. The perception about condom use and transmission of the AIDS pandemic in Kenya. *Bulletin of the International Committee on Urgent Anthropological and Ethnological Research*, 39: 123–140.
- 2005. The tradition of *ramogi*: Beliefs and practices of the levirate amongst the Luo in Bondo Division, Bondo District, western Kenya. *Mila (N.S.)*, 6: 23–32.
- 2006. Factors affecting the use of modern prenatal and maternity services in Got Agulu Sub-location, western Kenya. *African Study Monographs*, 27(4): 145–156.
- Nyamongo, I.K. 2000. Factors influencing education and age at first marriage in an arid region: The case of the Borana of Marsabit District, Kenya. *African Study Monographs*, 21(2): 55–65.
- Oboler, R.S. 1986. Nandi widows. In (B. Potash, ed.) *Widows in African Societies: Choices and Constraints*, pp. 66–63. Stanford University Press, Stanford.
- Ocholla-Ayayo, A.B.C. 1989. Death and burial: An anthropological perspective. In (J.B. Ojwang & J.N.K. Mugambi, eds.) *The S. M. Otieno Case: Death and Burial in Modern Kenya*, pp. 30–51. University of Nairobi Press, Nairobi.
- Okumu, D.A. & P. Gachuki 1996. *Country Gender Profile for Kenya*. Swedish International Development Cooperation Agency, Stockholm.
- Owino, W. & J. Korir 1997. *Public Health Sector Efficiency in Kenya: Estimation and Policy Implications*. IPAR Discussion Paper Series No. DP/007/97. Institute of Policy Analysis and Research, Nairobi.
- Phillips, J.F., F.N. Binka, M. Adjuik, A. Nazzar & K. Adazu 1997. *The Determinants of Contraceptive Innovation: A Case Control Study of Family Planning Acceptance in a Traditional African Society*. Policy Research Division, Working Paper No. 130. Population Council, New York.
- Phillips, J.F., R. Simmons, M.A. Koenig & J. Chakraborty 1988. The determinants of reproductive change in a traditional society: Evidence from Matlab, Bangladesh. *Studies in Family Planning*, 19(6): 313–334.
- Population Reference Bureau 2011. *The World's Women and Girls 2011 Data Sheet: Overcoming Barriers to Gender Equality*. Population Reference Bureau, Washington, DC.
- Potash, B. 1986a. Widows in Africa: An introduction. In (B. Potash, ed.) *Widows in African Societies: Choices and Constraints*, pp. 1–4. Stanford University Press, Stanford.
- 1986b. Wives of the grave: Widows in a rural Luo community. In (B. Potash, ed.) *Widows in African Societies: Choices and Constraints*, pp. 84–106. Stanford University Press, Stanford.
- Rehan, N. 1984. Knowledge, attitude and practice of family planning in Hausa women. *Social Science and Medicine*, 18: 839–844.
- Riehman, K.S. 1998. Dual method use among an ethnically diverse group of women at risk of HIV infection. *International Family Planning Perspectives*, 30(5): 212–217.
- Shiffman, J. 2000. Can poor countries surmount high maternal mortality? *Studies in Family Planning*, 31(4): 274–289.

- Simmons, R., L. Banque, M.A. Koenig & J.F. Phillips 1988. Beyond supply: The importance of family planning workers in Bangladesh. *Studies in Family Planning*, 19(1): 29–38.
- Sindiga, I. 1995. Managing illness among the Luo. In (I. Sindiga, C.N. Chacha & M.P. Kanunah, eds.) *Traditional Medicine in Africa*, pp. 64–79. East African Educational Publishers, Nairobi.
- Thumbu, P. W. 2011. *Kenya Country Report on Reproductive Health and Reproductive Rights*. Online. http://www.uneca.org/eca_resources/major_eca_websites/icpd/forth/kenya.htm (Accessed April 14, 2011).
- United Nations, Department of Economic and Social Affairs, Population Division 2011. *World Contraceptive Use 2010* (Pop/DB/CP/Rev2010). WHO, Geneva.
- UNAIDS 2010a. *UNAIDS Outlook Report*. WHO, Geneva.
- 2010b. *UNAIDS Quarterly Update on HIV Epidemiology, First Quarter 2010*. WHO, Geneva.
- UNAIDS & WHO 2006. *Kenya: Country Situation Analysis*. WHO, Geneva.
- 2007. *AIDS Epidemic Update: December 2007*. WHO, Geneva.
- UNGASS 2010a. *Country Progress Report—Kenya*. Geneva: WHO, Geneva.
- 2010b. *United Nations General Assembly Special Session on HIV and AIDS Country Report—Kenya*. WHO, Geneva.
- USAID/Health Policy Initiative, Task Order 1 2010. *The Cost of Family Planning in Kenya*. Futures Group, Washington, DC.
- USAID/Kenya 2010a. *HIV/AIDS Health Profile*. USAID/KENYA, Nairobi.
- 2010b. *Family Health*. Online. <http://kenya.usaid.gov/programs/health/71>. (Accessed June 15, 2011).
- Wall, L.L. 1998. Dead mothers and injured wives: The social context of maternal morbidity and mortality among the Hausa of northern Nigeria. *Studies in Family planning*, 29(4): 341–359.
- Washington, R. & S.M. Nangendo 1997. Knowledge about AIDS and sex practices among young Kenyan adults. *Scandinavian Journal of Development Alternatives*, 16(3 & 4): 130–141.
- WHO 2001. *Global Prevalence and Incidence of Selected Global Sexually Transmitted Infections: Overview and Estimates*. WHO, Geneva.
- Accepted September 13, 2012

Author's Name and Address: Stevie M. NANGENDO, *Institute of Anthropology, Gender and African Studies, University of Nairobi, P.O Box 30197-00100, Nairobi, KENYA.*
 E-mail: nangendo [at] yahoo.com