Access to contraceptives in Uganda: Approachability, acceptability, and users' abilities

Linnea D. Colliander Celik 22 August 2016 Word count: 11,609

Vrije Universiteit Amsterdam Health Sciences (MSc), Specialisation International Public Health Final Report for Internship International Public Health, 27 ECTS

Student number: 2511413 Course code: AM_471106

Placement: Health Action International

University supervisor: Dr Carolien J. Aantjes,

Address: De Boelelaan 1105, 1081 HV Amsterdam, Netherlands

Placement supervisors: Dr Tim Reed, and Renée Vasbinder **Address:** Overtoom 60 (2), 1054 HK Amsterdam, Netherlands

Contents

List of figures	III
List of tables	III
List of Abbreviations	III
Abstract	IV
1. Introduction	1
Reproductive health in Uganda	3
Inequalities	3
Scope of this study	4
2. Theoretical and conceptual framework	5
Operationalisation	6
Adapted framework	7
Research question and sub-research questions	8
3. Methods	9
Sampling and sample	9
Interview design and procedures	9
Data analysis	10
4. Results	11
4.1. Approachability of contraceptive providers	11
4.2 Acceptability of contraceptive use	15
4.3 Users' abilities to perceive unmet contraceptive needs, and seek contraceptives	18
5. Discussion and conclusion	24
Conclusion	27
6. References	28
Appendix I: Request for participation	a
Appendix II: Participant information sheet	c
Appendix III: Interview guide	e
Appendix IV: Interview schedule	f

List of figures

Figure 1. Levesque et al.'s model of access	5
Figure 2. Adapted model of access to contraceptives	
List of tables	
Table 1. Available contraceptives per public health facility	12
Table 2. Respondents' opinions about Ugandan users' expectations of contraceptive use	21

List of Abbreviations

CSOs Civil-society organisations

HIV/AIDS Human immunodeficiency virus and Acquired immunodeficiency syndrome

HAI Health Action International

IUDs Intra-uterine devices

INGOs International non-governmental organisations

MMRs Maternal mortality rates
MMR Maternal mortality ratio

NGOs Non-governmental organisations

SRHR Sexual and reproductive health and rights

VoIP Voice over IP telephony

Abstract

Unmet contraceptive needs, has historically had a negative affect on women's reproductive health. Sub-Saharan Africa has one of the highest unmet contraceptive needs in the world, and Uganda has one of the region's youngest populations. In the country, there are several barriers to access to contraceptives, which negatively affects users' reproductive health and rights. This study sought to identify what the possibilities were for Ugandan users to access contraceptives, specifically in respect to possibilities to perceive unmet contraceptive needs, and possibilities to seek contraceptives. The results are expected to provide valuable information for further indepth research on barriers to access to contraceptives, as well as inform Ugandan policy makers and intervention planners. Twelve semi-structured phone interviews were conducted with key informants working with reproductive health in Uganda, to learn about their personal and professional experiences concerning access to contraceptives in the country. Collected data was coded using MAXODA software, based on and adapted version of Levesque, Harris, and Russel's framework for access to health services (2013). The coded data was analysed to identify barriers and facilitators to access to contraceptives. Different barriers to access were identified in all four selected dimensions of access: limited approachability of contraceptive providers, low user perception of unmet contraceptive needs, limited acceptability of contraceptive use, and low user ability to seek contraceptives. Differences in user abilities were found to occur based on: living in urban or rural areas, education, gender, ethnicity, religious affiliation, and income. Additionally, limited availability of contraceptives, was a dimension of access which fell outside the scope of the adapted framework, which was discovered to be important in answering the main research question.

1. Introduction

Globally, unmet contraceptive needs is one of the greatest long-standing threats to women's health (Biddlecom, Singh, Bankole, & Darabi, 2007; Darabi et al., 2008; Singh & Darroch, 2012). Unmet contraceptive needs are measured by the number of women who do not want to become pregnant, and are not using any contraceptive methods to avoid pregnancy (Hussain, 2013).

Women's right to reproductive autonomy, grants women the right to decide if, when, how, and with whom to get pregnant, and is explicitly mentioned in several documents: the Beijing platform; CEDAW (article 16); the CEDAW General Recommendation 24; and the African charter on Human and People's Rights (ACHPR) on the Rights of Women in Africa (Office of the United Nations High Commissioner for Human Rights, 2009; 2011).

Women have many different reasons for avoiding pregnancy, and between 2010 and 2014, 25% of all pregnancies ended in abortion, out of which, approximately half were thought to be unsafe (Sedgh et al., 2016). Unsafe abortions are defined by the World Health Organisation as "a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking minimal medical standards, or both" (World Health Organization, n.d.). An estimated 13% of global maternal deaths, and 33% in developing countries, are a result of unsafe abortion (Alkema, Sanqian, & Alison, 2015; The World Health Organisation et al., 2012).

Furthermore, pregnancy is associated with many health risks. In 2015, 13.4% of the total disability-adjusted life years (DALYS) lost to women ages 15-49 were caused by pregnancy-related issues (Institute for Health Metrics and Evaluation, 2015). In 2015, nineteen sub-Saharan African countries, accounted for the world's highest maternal mortality rates (MMRs), which ranged from 500 to 1360 maternal deaths per 100 000 live births (Alkema et al., 2015). The region also had the world's highest maternal mortality ratio (MMR): 546 maternal deaths per 100 000 live births, almost twice as much as the global estimate (261) (Alkema et al., 2015).

Nevertheless, a great proportion of maternal and child deaths are preventable (Singh & Darroch, 2012; UN Commission on Life-Saving Commodities for Women and Children, 2012). Health risks associated with pregnancy can be mitigated by limiting the frequency of pregnancies, and increasing the interval between pregnancies, also known as spacing pregnancies, often using contraceptives. Contraceptives are methods to prevent pregnancy, sometimes known as modern contraceptives, which have been found efficient for preventing pregnancy through empirical, scientific, clinical, and evidence-informed research (Vlassoff, Sundaram, Bankole, Remez, & Mugisha, 2009). In this study, the term "modern contraceptives" is used interchangeably with "contraceptives".

Common barriers to full access and utilisation of underutilised contraceptives includes: insufficient supply and deficient quality; deficient regulatory practices; and knowledge gaps in both end users and service providers. Knowledge gaps include a lack of awareness of the contraceptives' existence, why, how, where and when to use them, and is further aggravated by a lack of knowledge of patient's rights, lack of resources to purchase contraceptives, unfounded or exaggerated fears of side-effects, and other sociocultural barriers (UN Commission on Life-Saving Commodities for Women and Children, 2012).

As patients tend to not request contraceptives which they do not know of, providers are less likely to prescribe these contraceptives, perpetuating low awareness and demand. Low demand for contraceptives, also creates low incentives for supply, research, development, and promotion of contraceptives. This further lowers the likelihood for innovation to adjust or adapt contraceptives to local contexts, perpetuating contraceptive illiteracy in users and service providers (UN Commission on Life-Saving Commodities for Women and Children, 2012). Improving contraceptive literacy has been suggested as a way to increase acceptability and demand for contraceptives, which is relevant for populations with high unmet contraceptive needs (UN Commission on Life-Saving Commodities for Women and Children, 2012).

It has been estimated that if global unmet contraceptive needs were adequately met, 53 million unintended pregnancies, 90,000 maternal deaths, and "590,000 new-born deaths" could be avoided (Singh & Darroch, 2012). In other words, meeting all unmet need could reduce regional maternal mortality by 29%, and regional infant mortality by 22% (Singh & Darroch, 2012). Spacing child births further apart could also decrease below-five mortality, by at least 13% with two years' spacing, and 25% with three years' spacing (Singh & Darroch, 2012).

Unmet contraceptive needs may have particularly adverse health outcomes for adolescents. For adolescents, health risks associated with pregnancy are higher than for adults, and high adolescent fertility rates may further exacerbate high maternal mortality ratios (Vlassoff et al., 2009; World Health Organisation, 2014). Sub-Saharan Africa had the highest regional average adolescent fertility rate in 2014, at 103 live births per 1,000 adolescent girls aged 14-18, compared to a global rate of 64.65, with the lowest rates at 18.04, in Europe and Central Asia ("World Data Bank: World Development Indicators," n.d.). Presently, adverse health outcomes related to "pregnancy and childbirth are a leading cause of death in females ages 15 - 19 in developing countries" (World Health Organisation, 2014), and children born to adolescent mothers face poorer health outcomes than those born to adult women (Vlassoff et al., 2009; World Health Organisation, 2014).

Unmet contraceptive needs may also have negative outcomes unrelated to health. For instance, pregnant adolescents may lose their place in school, either temporarily or permanently (World Health Organisation, 2014). Similarly, adult and adolescent women out of school generally take more responsibility for childcare, and are less able than men to join the formal workforce (Uganda Bureau of Statistics, 2012; "World Data Bank: World Development Indicators," n.d.). This may limit women's chances of acquiring high-skilled and well-paid jobs, putting them in an economically disadvantaged position compared to their male and childless female peers (Welling et al., 2001, as quoted in Johnson et al., 2006).

With the world's highest fertility rates, adolescent fertility rates, population growth rates, and crude birth rates, sub-Saharan Africa has the youngest and world's fastest growing population, and high levels of unmet contraceptive needs are expected to continue rising (Biddlecom et al., 2007; Central Intelligence Agency, n.d.; Singh & Darroch, 2012). In 2014, the sub-Saharan African age dependency ratio was 86.79%, compared to an average world ratio of 53.85%, with remaining regions ranging between 55.37% (South Asia), to 41.43% (East Asia & Pacific) ("World Data Bank: World Development Indicators," n.d.). Compared to a global median age of 29.9 years, at the African population had the youngest median age in the world (19) in 2015, led by Mali (15.1), Niger (15.2), and Uganda (15.6) (Central Intelligence Agency, 2013). Approximately 23% of sub-Saharan Africans were below age 25 in 2015, compared to 16.5% of the global population (United Nations Department of Economic and Social Affairs Population Division, 2015).

Reproductive health in Uganda

As one of the youngest populations in sub-Saharan Africa, Uganda has been selected as the focus of this study. With an MMR sinking from 687 in 1990 to 343 in 2015, Uganda has outperformed other sub-Saharan African countries (Alkema et al., 2015). This has been attributed to extensive health systems strengthening interventions dating back to the early 1990s, which have also been credited with halting and mitigating the HIV/AIDS epidemic (Low-beer & Stoneburner, 2004).

However, there remains room for improvement. In 2015, Uganda had the eleventh highest crude number of maternal deaths in the world, and in 2013, the second greatest leading cause of death for Ugandan women ages 15-49 were pregnancy-related issues (12.25%), following HIV (Alkema et al., 2015; Institute for Health Metrics and Evaluation, 2015). HIV/AIDS is still a leading cause of death in Uganda, and for women with HIV, although anti-retroviral therapy (ART) can help avoid vertical transmission of HIV, modern contraceptives may prevent the situation completely (Todd et al., 2011). In 2013, 38.28% of deaths ages 15-49 were HIV/AIDS-related; 42.42% for women, and 34.65% for men (Institute for Health Metrics and Evaluation, 2015).

With a sizable adolescent population, and high adolescent fertility rates, unmet needs for reproductive health services are expected to increase. Young people and children constitute a large proportion of the Ugandan population, as approximately one in four Ugandans were below 25 years in 2015, and median age was 15.6 in 2014 (United Nations Department of Economic and Social Affairs Population Division, 2015). In 2015 Uganda had the world's fifth highest population growth rate (3.24%), the world's third highest crude birth rate (43.79 births/1,000 population), and a total dependency ratio of 104% (Central Intelligence Agency, n.d.). Despite a gradual decrease over the past fifty-five years, Ugandan adolescent fertility rates have consistently been among the highest in the world. With 114.85 births per 1,000 women aged 15-19 in 2014, Ugandan adolescent fertility rates continued to exceed that of the sub-Saharan African region (103), which was also the world's highest regional adolescent fertility rate ("World Data Bank: World Development Indicators," n.d.).

Inequalities

In this study inequalities based on gender roles and socioeconomic status were assumed to be globally prevalent, and thought to influence contraceptive use. Women's professional prospects are often restricted to unpaid household labour, and women are therefore at an economic disadvantage compared to their spouses. Since men often provide the main household income, they are more likely to control money that could be spent on contraceptives. Women who do participate in the formal economy, are on an average paid less than their male counterparts for the same amount of work (Uganda Bureau of Statistics, 2012; "World Data Bank: World Development Indicators," n.d.). Considering that contraceptives are often out-of-pocket-payments (Uganda Bureau of Statistics, 2012; "World Data Bank: World Development Indicators," n.d.), women's limited economic independence restricts their reproductive autonomy, especially when there are disparate fertility desires in a couple.

According to the Ugandan Bureau of Statistics (UBOS), there are differences between Ugandan females' and Ugandan males' fertility desires; in 2007 Ugandan women's desired family size was 5.0 children, whereas it was 5.8 children for men. For women, a third of births between 2000 to 2006 were wanted later, and 13% were not wanted at all (Moore, Jagwe-Wadda, & Bankole, 2011; Uganda Bureau of Statistics, 2012). Despite this difference between women's wanted and actual fertility rate, in 2007, four out of ten of married Ugandan women were not using contraceptives, even though they did not want become pregnant (Moore et al., 2011; Uganda Bureau of Statistics, 2012)

Scope of this study

This section has provided a brief overview of the state of reproductive and sexual health, on a global, regional, and domestic level. High unmet contraceptive needs cause adverse health outcomes for women, and increasing access to contraceptives improves women's reproductive health, rights, and autonomy. The Ugandan government has committed to their citizens' right to reproductive health and autonomy in 2015 (Murthy & Ntabadde Makumbi, 2015). Identifying Ugandan users' possibilities and barriers to access contraceptives, is a first step towards improving access to contraceptives, and securing Ugandans reproductive health and human rights.

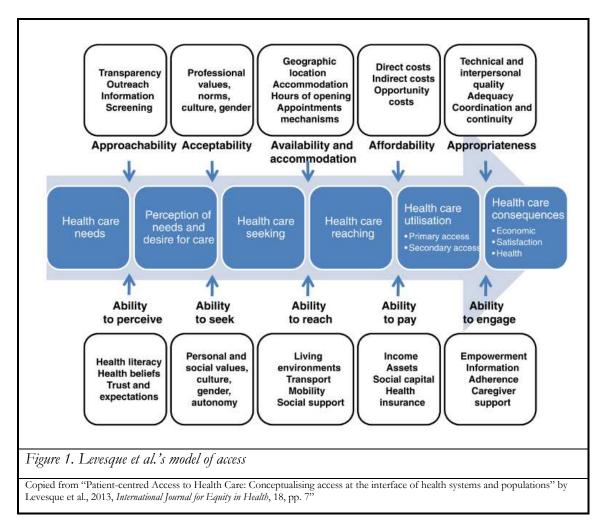
The main hypothesis of this study is that in Uganda, there are several barriers to access to contraceptives. This study focuses on the first steps of accessing an episode of care, preceding users seeking healthcare. Barriers to access to contraceptives, have been identified through interviews with twelve key informants.

The multi-dimensional adapted framework is expected to give a comprehensive understanding of barriers and facilitators which arise in the interactions between users and providers, based in their context. The findings are expected to provide valuable information for further in-depth research on barriers to access to contraceptives, as well as partially inform Ugandan policy makers and intervention planners. To this purpose, the study seeks to answer the following research question:

Which possibilities are there for Ugandan users to seek contraceptives and perceive unmet contraceptive needs?

2. Theoretical and conceptual framework

Access to health care and services has been a frequently used concept in health systems research, with multiple definitions and sub-concepts. Common sub-concepts have included affordability (e.g. direct and indirect price), geographical access (e.g. distance), availability, appropriateness, quality, acceptability, timeliness, etc. (Evans, Hsu, & Boerma, 2013; Levesque, Harris, & Russell, 2013; Tanahashi, 1978). For instance, Evans et al. (2013) have defined access as an aggregate concept consisting of geographical access, affordability, and acceptability, but did not take availability, quality, or timeliness into account. This use of the word "access" for the sub-concept "geographical access", may be limiting.



In 2013, Levesque, Harris and Russel sought to harmonise and differentiate between multiple definitions for access and its sub-concepts. (Levesque et al., 2013) Based on an episode of care, they presented a model encompassing both the demand and the supply side of access to health care, by taking into account the health system, users, and context (see Figure 1. Levesque et al.'s model of access). According to Levesque et al., "access" is "the opportunity to have health care needs fulfilled" (2013), and is a result of the interaction between health care providers and their users. Interaction between the two levels determines and generates the possibilities for users to access health services. Access is therefore defined as possibilities for users to access health services. These include:

"the possibility to identify healthcare needs, to seek healthcare services, to reach the healthcare resources, to obtain or use health care services, and to actually be offered services appropriate to the needs for care" (Levesque et al., 2013).

The framework is patient-oriented, and is based on the steps necessary to take for patients to utilise health care successfully. Although users' abilities are addressed in the framework, providers are ultimately responsible to adequately "respond to the population's characteristics" (Levesque et al., 2013). The framework aims to accurately capture interactions between individuals' agency and structural constraints during an episode of care. To users, the stages of an episode of care are: 1) health care needs; 2) perception of needs and desire for care; 3) health care seeking; 4) health care reaching; 5) health care utilisation (including primary access and secondary access); and 6) health care consequences (economic, satisfaction, and health).

Barriers and facilitators arise between each stage of an episode of care, where interactions between providers and users occur. These interactions are influenced by five "dimensions of accessibility" and five corresponding "abilities of users". The former are characteristics of providers, the latter correspond to characteristics of the population, or users. The five dimensions of accessibility are: 1) Approachability; 2) Acceptability; 3) Availability and accommodation; 4) Affordability; 5) Appropriateness. Corresponding abilities of populations are: 1) Ability to perceive; 2) Ability to seek; 3) Ability to reach; 4) Ability to pay; and 5) Ability to engage.

Barriers and facilitators to access can be financial, organisational, linguistic, cultural etc., and may occur in any step of an episode of care. The cumulative sum of all barriers to access throughout an episode of care, is called "resistance" (Levesque et al., 2013). Where "facilitators" facilitate access, "barriers" instead create resistance to access. Access and resistance are determined by dimensions of accessibility, and users' abilities. Thus, access is the result of a complex function, which is determined by characteristics of users, the health system, and the cultural and social context in which they interact (Levesque et al., 2013).

Operationalisation

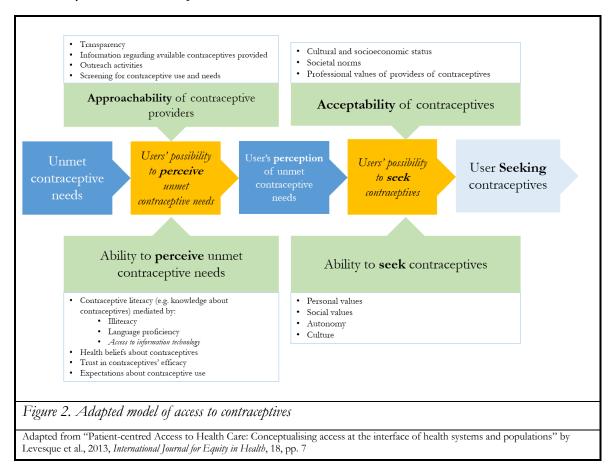
Utilisation of health services can be seen as "realised access" (Levesque et al., 2013) or as a realised result supply and demand. Therefore, utilisation can be used as a proxy for measuring access. By interviewing key opinion leaders on contraceptive use in Uganda, this study has assessed the interaction between dimensions of accessibility, and ability of users.

However, due to the limited scope of this study, emphasis was placed on the first two dimensions of access and abilities of users, as those are best captured using qualitative data. The remaining dimensions of access and abilities of users from the original framework were only addressed when relevant to the selected concepts. The selected concepts included the "possibility to identify healthcare needs", and the "possibility to seek healthcare services" (Levesque et al., 2013).

In the original framework, the selected possibilities encompass the first three steps of an episode of care: "health care needs", "perception of needs and desire for care", and "health care seeking." In this study, these steps were adapted to be "unmet contraceptive needs", "users' perception of unmet contraceptive needs", and "user seeking contraceptives".

Figure two shows the two selected possibilities to access which have been renamed to "users' possibility to identify unmet contraceptive needs", and "users' possibility to seek contraceptives". The possibility to identify unmet contraceptive needs, is determined by the "approachability of

contraceptive providers", and the "ability to perceive unmet contraceptive needs". The "possibility to seek contraceptives", is determined by the "acceptability of contraceptives", and the "ability to seek contraceptives".



Adapted framework

To make it possible for users to identify unmet contraceptive needs, two aspects must be considered. First, users themselves must be able to perceive unmet contraceptive needs. This ability depends on users' previous knowledge about contraceptives, health beliefs about contraceptives, trust in contraceptive efficacy, and expectations about contraceptive use. This ability is mediated by user characteristics such as illiteracy, language proficiency, and access to sources of information about contraceptives. Second, contraceptive providers, also referred to hereafter as "providers", must be approachable. Approachability is influenced by transparency, information, outreach activities, and screening for contraceptive use and needs. Information from providers should adequately, accurately, and comprehensively inform users of where, how, and which services can be obtained, and possible side-effects (Levesque et al., 2013).

Similarly, users' possibility to seek contraceptives, is determined by acceptability of contraceptives, and user's ability to seek contraceptives. Acceptability of contraceptives, is shaped by the context, and it social, cultural, and professional norms and values. Acceptability also varies between different cultural, religious, and socioeconomic groups in society. Ability to seek contraceptives, is determined by users' characteristics, such as socioeconomic status, cultural setting, personal convictions, and general autonomy. The adapted framework is schematically depicted in Figure 2.

Research question and sub-research questions

The main research question of this study was:

Which possibilities are there for Ugandan users to seek contraceptives and perceive unmet contraceptive needs?

In order to answer this question, the following sub-research questions were formulated:

- 1. How approachable are contraceptive providers to Ugandan users?
- 2. How able are Ugandan users to perceive unmet contraceptive needs?
- 3. How acceptable are contraceptives in Uganda?
- 4. How able are Ugandan users to seek contraceptives?

3. Methods

As this exploratory study researches context-specific experiences, qualitative data was collected. In order to identify possibilities to access contraceptives, a series of semi-structured interviews were conducted with key informants using the Voice over IP telephony (VoIP) software "Skype". The researcher transcribed, analysed, and coded interviews digitally, in a qualitative data analysis software.

Sampling and sample

Respondents were sampled using a convenience-sampling method, and informants had been selected based on their professional affiliation with the organisation and professional network Health Action International (HAI). Selected informants were professionals working with sexual and reproductive health in Uganda within policy making, development programming, health service provision, advocacy etc., in civil-society organisations (CSOs), such as non-governmental organisations (NGOs), and international NGOs (INGOs). The sampling method put the researcher in contact with persons who were able to give a rich and accurate overview of sexual and reproductive health issues in Uganda.

Informants were contacted via email, with a letter inviting them to participate in the study (Appendix I: Request for participation), as well as an abbreviated interview schedule (Appendix II: Participant information sheet). Out of the twenty-six informants, twelve were willing and available for an interview. Although gender distribution in the initial list of informants consisted of a close to equal number of persons of each gender, with eleven males (42%), and fourteen females (58%), out of the twelve actual respondents, four were male (33%), whilst eight were female (66%).

Interview design and procedures

Prior to data collection, the interview guide and schedule were tested in pilot interviews with key informants who did not belong to the sample, to ensure its validity (Gray, 2014; Todd et al., 2011). Interviews were conducted using VoIP, which allowed for calls to be made online, to landlines, and to mobile phones. The interviewer made sure to receive the call in a private space, and respondents were kindly requested to ensure privacy on their end of the call as well. Before the interview, respondents were asked for permission to record the interview, which was done using two electronic devices simultaneously.

The interview started with asking the respondent to introduce themselves. The interview schedule covered three topics: health service providers, expectations and beliefs of laymen, and social and cultural values and morals (

Appendix IV: Interview schedule). During the interview, the interviewer took handwritten notes.

Towards the end of the interview, respondents were asked if they had any concluding or additional closing remarks, to which follow-up questions were posed when necessary. The average duration of each interview was 49 minutes, and the median interview was 50 minutes long, with the shortest being discontinued after 24 minutes due to connectivity problems, whereas the longest lasted for 77 minutes.

Data analysis

Upon completing the first interview, transcription was initiated and carried out simultaneously alongside data collection. The transcriptions, written, reviewed and coded using the qualitative data analysis software MAXQDA.

4. Results

The study provided rich data about how the interactions between providers, users, and the context, shaped users' possibilities to perceive unmet contraceptive needs, and seek contraceptives. Sub-research questions 1 and 3 dealt with Ugandan providers and the Ugandan context, and have been answered in section 4.1 and 4.2. As sub-research questions 2 and 4 dealt with users' abilities, there was significant overlap, and therefore section 4.3 answers both.

4.1. Approachability of contraceptive providers

This section answers sub-research question 1, by explaining how approachable the respondents perceived contraceptive providers to be to Ugandan users. To this end, providers' outreach and screening activities, and how they were received, was explored. As eight respondents explicitly indicated that health-workers were users' main source of information, their approachability was given particular focus. Although not initially included in the adapted framework, availability of contraceptives was mentioned frequently enough in reference to contraceptive providers' approachability, to be acknowledged in this section as well.

Outreach activities

Outreach activities referred to any activity aiming to reach and provide health services to people who would not otherwise have access. Respondents knew of a total of fourteen CSOs, and one public-private-partnership, conducting outreach activities. Respondents brought up two complementary types of outreach, which either provided underserved populations with contraceptives, or with information and knowledge. Together, these programmes catered to both the supply and demand for contraceptives, and several programmes provided both kinds of outreach. On-site, such programmes provided both contraceptives, and competent staff to counsel and administer contraceptives.

Other interventions provided information and education, to increase target populations' awareness and knowledge about available contraceptives. This type of outreach proved to be more commonly known among the professionals as "sensitisation", a word five respondents used. However, despite further probing, respondents did not present a formal definition, and the word was interchangeably used with terms like "training", "education", and "raising awareness". For the sake of fidelity, the word was therefore also used by the researcher during interviews and within this report.

Availability

Contraceptive availability in the public health system was reported by nine respondents to be limited, irregular, and unequally distributed throughout the country. Five respondents indicated that the private sector had fewer stock-outs and expiries, as contraceptive counselling opportunities were plenty, and availability of contraceptives was high. However, respondents indicated that of-out-of-pocket-payments also made the private sector inaccessible to a large part of the population.

All twelve respondents primarily spoke about the public health system when asked about Ugandan users access to contraceptives. Eight respondents categorised the public health-system into five levels, each required to have a predetermined number of health-workers per facility, with certain qualifications, which then determines which contraceptives a facility may administer(Uganda Ministry of Health & USAID, 2012)(Uganda Ministry of Health & USAID, 2012)(Uganda Ministry of Health & USAID, 2012)(Uganda Ministry of Health & USAID, 2012). Respondents estimations of availability of methods at different facility levels has been listed in table 1:

Table 1. Available contraceptives p	per public health facility
Facility level (as defined by respondents):	Available contraceptives:
Village health centre	Oral contraceptives; injections; condoms; moon-beads.
Health centre two	Oral contraceptives; injections; condoms; moon-beads.
Health centre three	Oral contraceptives; injections; condoms; moon-beads; and "maybe implants"
Hospital	Oral contraceptives; injections; condoms; moon-beads; implants; IUDs; permanent contraceptives.
District hospital	Oral contraceptives; injections; condoms; moon-beads; implants; IUDs; permanent contraceptives.

That being said, one respondent pointed out that despite enhancements to health-workers' competences, the national medical stores, which supplied public health-facilities, did not always provide the ordered contraceptives:

"...when we worked with the health centre four health-workers, they tried to adjust their procurement plan to include all the family-planning methods (...) but, you find that even when they adjusted the plan and started ordering for all the methods they needed, they kept on receiving the same."

Ten respondents explained that additional contraceptives were sometimes available at lower-level public facilities, as a result of CSO outreach programmes. However, one respondent considered this procurement source for contraceptives unsustainable. Strict project deadlines to both public and private outreach programmes, created inconsistencies in contraceptive supply and counselling opportunities. For instance, she elaborated, outreach programmes providing IUDs, also had to plan for follow-up interventions, for users to have their IUDs safely removed. Similarly, two respondents explained that abrupt programme discontinuation had been found to decrease demand and trust in contraceptives:

"Recently, the USAIDS-funded project, by Mary Stopes, closed abruptly, I think last year, or the other year, and then rumours started moving around 'it is because contraceptives cause cancer, that the project was closed'."

Reactions to outreach

As reproduction was considered to be women's responsibility, men were reported to be less knowledgeable about contraceptives. Six respondents described men to be more difficult than women to involve in general and contraceptive sensitisation programmes. Two respondents had seen men react negatively to campaigns targeting them directly, and one specified:

"If government is trying to say, you know 'you should have few children, have few children that you can manage' they feel like you are pushing that down their throat and 'you are influencing my wife so she harasses me now that we should start contraception, and yet for me that is not what I want.' They feel that they are being pushed, that the advocacy is pushing them... Especially the message that target them, that come directly on radio, and you have not had time to analyse it and accept... and understand, that actually, it is good for you. I think this 'good for you' message has not been done well. They need to know that it is in their interest, it's not a government agenda. And they don't even think it is a government agenda, they think it is imported, it belongs abroad, this is not our agenda, it is being... [that] government is being used to control population."

Nevertheless, five respondents thought that men could be positive towards contraceptive use, if it was made clear to them that the choice was theirs and their partner's to make, based on their unique circumstances. Some providers had already recognised this, and had attempted to include men in the target group. Four respondents had encountered campaigns targeting, encouraging, and inviting married couples to seek contraceptives together. However, some users had misinterpreted these campaigns, and some women mistakenly thought that they were not allowed to seek contraceptives without their husbands. Similarly, two respondents working with young people explained that youth often thought that contraceptive use was only allowed for married people.

Screening

Screening for unmet contraceptive needs, is typically done in order to identify potential health problems and risks in populations, through various forms of data collection. Due to this study's focus on interactions between providers and users, respondents were asked about which information about contraceptives that health-workers would typically share with users, and when. Nine respondents assessed that workers in primary health care infrequently screened for unmet contraceptive needs or contraceptive use in their patients, where most episodes of contraceptive counselling and prescription were thought to be client-initiated.

Although it was thought to only be accessible through the private sector, and thus inaccessible to many users due to its unaffordability, abortion care was reported to be one exception. He indicated that screening for contraceptive use was frequent during comprehensive abortion care:

"They recommend the use of contraceptives, mainly for women who have had multiple abortions... A young girl, they tell them 'maybe, to avoid this in the future, you should start a contraceptive plan, for you to use.' They give that advise."

Screening for contraceptive use had also been successfully integrated into other outreach programmes. Four respondents proposed HIV/AIDS programmes as suitable for integrating with contraceptive screening and provision outreach, whilst three suggested immunisation programmes. Mainstreaming access to contraceptives outreach into other fields of medicine, such as HIV/AIDS, malaria care, and immunisation programmes, appeared to be a successful strategy for CSOs to access alternative resources and funding. One respondent explained it thus:

"But also, for us, in advocacy, then we target the leader at a subnational level, and the district level. We target them so that they can allocate money, or they can mainstream family-planning in other programmes. Like I said... Because HIV/AIDs has money, so if you - immunisation has money - if you can put messages of family-planning in those programmes, so that you can, you demystify some myths and misconceptions."

Related fields of medicine, such as maternal and child health care, were also brought up as suitable for integrating screening for contraceptive use. One respondent had encountered contraceptive outreach programme which had been integrated into an HIV/AIDS intervention, which in turn itself was integrated into public antenatal health care services:

"Everybody who has, who comes for antenatal care, is tested for HIV. Oh, yeah, it's mandatory here. Yeah, and the moment you are found positive, then you go into counselling, and if you already have a number of children, then you are encouraged - you are not coerced - you are encouraged to enrol on a method."

Health-workers' approachability

Although respondents thought that users considered health-workers the most reliable source for information about contraceptives, respondents themselves had some reservations. Health-workers' knowledge deficiencies, personal beliefs and values, poor communication skills, and understaffed facilities', were factors thought to result in inadequate contraceptive counselling for users.

Knowledge deficiencies in health-workers were reported to be common by nine respondents, particularly in public health-facilities level three and below. Training opportunities for health-workers were reported to be scarce, and was thought to be outpaced by contraceptives' technological advancements. Understaffing due to a low supply of health-workers, was thought to force providers to hire underqualified staff, and according to eight respondents, there were rarely enough qualified health-workers per facility. This was thought to lead to overworked staff with limited time and patience for counselling, who provided users with inadequate information:

"But also, health-workers; they don't, they have no time. They are overworked, they are busy, they don't have the time to sit with the patient and explain and contraception is an area which is traditionally... I don't know what to say, patients... It's not like you have malaria; it has sexual connotation. So patients may not be forthcoming, they are not empowered to say what they want to say. If they want contraception they may go in circles and speak too many stories, and they are shy, they don't want anyone to hear, especially the women. So in the end, they come, and they don't say what they came to say and the health-worker has no time..."

Ten respondents thought that health-workers were more likely to counsel their patients about contraceptives which were available at their facility. Short-term methods such as oral contraceptives, condoms, injections, and sometimes also traditional methods, where thought to be the most frequently recommended by health-workers. Long-term methods, on the other hand, such as IUDs, implants, or permanent procedures, were thought to be less frequently recommended, as they were less available.

Negative interactions during contraceptive counselling were thought by respondents to be the result of health-workers' poor knowledge, poor counselling skills, or biases. Furthermore, "overwhelmed" health-workers, were thought to be less patient with users. Ten respondents indicated that due to cultural, or religious reasons, health-workers could be biased against contraceptive use entirely, or specifically for users who were young, unmarried, or both:

"Maybe if someone has come for modern family-planning method, I might be of a religion that doesn't support that. So, I am not going to treat this client, I have my own biases and I am not willing to serve this client (...) or I can actually incline them to take a natural family-planning method. Yet I came for modern family-planning method."

Five respondents thought that contraceptive providers were less approachable to young people, with fewer counselling opportunities, negative attitudes, less messaging, and less information directed towards young people. This was exacerbated when, according to five respondents, public health-facilities failed to offer privacy and confidentiality during counselling. Especially in small communities, users were thought to be afraid of being recognised while seeking contraceptives, and there was a high likelihood that the health-worker would be previously acquainted with the user. When probed further, it was explained that in lower level health facilities, there were set times, days, or even a corner of an open room, dedicated to contraceptive counselling, which were easily recognisable to other users.

4.2 Acceptability of contraceptive use

This section answers sub-research question 3, by describing acceptability of contraceptive use in Uganda. Several aspects influencing acceptability of contraceptives were identified, including age, gender, marital status, religion, income, and education. Contraceptive use was considered by five respondents to be a private matter, reserved for conversations between close friends. Talking about contraceptives outside such settings might feel like "undressing in public", as it was so strongly connoted to sex for pleasure rather than reproduction:

"If you are saying that you are looking for contraceptives, it is like saying 'I am going to have sex, but I don't want to get pregnant.' And that is not something you want to stand up and say in public."

Sex as a private matter, was related to public disapproval of "promiscuous" behaviour, as almost half of the respondents, five, referred to "promiscuity" as highly socially undesirable. "Promiscuity" conveyed that the person whom it referred to, was having multiple partners, sex for pleasure rather than reproduction, or both. For instance, suspicions of infidelity, were synonymous to the suspect being promiscuous. Although no respondents made the association explicit, examples used to describe promiscuity only mentioned women or young people, rather than men or elderly people.

Young people

Ten respondents explained that it was generally considered less socially acceptable for young people to learn about and use contraceptives, than it was for adults. That being said, among young people and among urban people, two respondents thought that norms about contraceptive use, were more lenient than among adults or rural people:

"It is morally and socially accepted... Like, maybe today for condom use, is morally and socially accepted amongst the young folks. But then, to the older people, the young people, they think it is immoral of the young people to use contraceptives, because why should... In many case, why should they be engaging in promiscuous activities?"

Reported reasons for discouraging contraceptive use in youth included preventing them from an early onset of sexual activity, having multiple sex partners, and from having extramarital sex. Three respondents reported a societal preference for teaching only abstinence to young people, rather than about contraceptive use. Seven respondents explained that access to contraceptives was thought to encourage young people to be sexually active:

"It's a sensitive topic, and in most cases they misinterpret the information, of course we may, we may just talk about it and... You don't want to encourage them to go ahead and really, exercise, let's say, have sexual intercourse and all that. Because, the approach is tricky, when you're promoting using family-planning, they think you are also encouraging them to go out and have boyfriend and girlfriend. So it is a very sensitive topic."

The socially acceptable age limit for contraceptive use or sex, was said to be determined by several factors, including age, school enrolment, and marital status. One respondent said that fifteen was the cut-off age for access to contraceptives recommended by her CSO. Nonetheless, she had heard of cases of earlier sexual debut, as early as age twelve. Attending secondary or tertiary education, was pronounced by one respondent to be a marker of youth. Young adults still studying and living at home, were therefore considered to be too young to use contraceptives. He conjectured that people were considered adult, when they got married, and

that in cultures practicing teenage marriage, marital sex would not be frowned upon, even if the person in question were below age fifteen.

Gender roles

Although social norms were gendered, for both men and women, six respondents agreed that fertility signalled status and health in Uganda:

"As you know, in Africa, fertility is a measure of someone's health and well-being and ability to be a woman or a wife, or even, on the other end, a man."

Men were reported to be reluctant to support partners' contraceptive use, and generally felt entitled to their wives' sexual and reproductive capabilities, failing to understand why they would be denied either:

"In most cases, the person who takes the decision, it's the man. When the man says 'you are not using this family-planning method, or get involved in family-planning,' that is it, and I am not even supposed to, they are not even supposed to discuss it. (...) 'I paid my cows, to get you from your home, and to, I brought you in my home, you came here to give birth. So, what the hell are you talking about? I have said, you are not going to use this,' and, you find that it is just a small house, but they are still giving birth and they already have eight children."

Four respondents explained that husbands to infertile or sexually unavailable women could seek out other women for sex or childbearing. Three respondents found it common of men to think that women who were using contraceptives, were guilty of adultery. Two respondents had encountered that men who had discovered their female partner's use of contraceptives, would physically abuse her.

For women, duties towards a husband included faithfulness, sexual availability, and ability to bear children. Due to male opposition, six respondents thought that discretion was important for women when selecting contraceptive method, which is also why they reported that most popular contraceptives were female-controlled and easy to conceal from male partners, such as contraceptive injections. One respondent suggested that traditional contraceptive methods would be used concurrently, to conceal contraceptive injection use from husbands:

"(...) as long as she is still breastfeeding, that still helps her, because they take breastfeeding to be a natural method. So, they keep breastfeeding, and they're still on the injection, the man does not... as long as the man has the sex they don't care."

Societal norms and values

Children as current assets and future security, and an acute awareness of a high child mortality, was thought to be an important factor for nationally cross-cutting high fertility desires. Seven respondents thought that users considered having a large family prestigious, not least due to the perceived practical benefits; older children could help out with household chores, and as users aged, there would also be more descendants to care for them.

This perception of children as blessings was reported to be present in most Ugandan cultural and religious groups:

"And then, culturally... For some ethnic groups in Uganda, people believe the many children you have, the more, the more blessing you feel round the family. So, using

contraception, and then, controlling that, will be a way of, of putting a stop to counting your blessings. So, they say, children, children are, should be... Actually, in Uganda, we have a saying, I will first say it in Luganda, then translate it for you: (...) Every child, comes with their own blessings. Yes. So that means that the many children you get, the more blessings, you get. Yeah. So that is an, an ethnic point of view. It is like, that's for the Buganda, and then I think it cuts across the urban communities' ethnic groups in Uganda."

This preference for large families extended to the political realm as well. Two respondents ventured that politicians and community leaders, including religious leaders, often short-sightedly refused to support increased access to contraceptives, to expand their number of followers. Two other respondents had noticed that many politicians were unaware of Uganda's political commitments to improve access to contraceptives. The large and growing proportion of young people in the population, and its consequences on the national economy, when properly explained, was considered to be the most convincing argument to mobilise support from political leaders for improving contraceptives access. Six respondents reported having successfully used this argument with politicians to support interventions for improved access to contraceptives.

Religious leaders were mentioned by nine respondents as leading "de-campaigners" of contraceptives. Catholics and Muslims were the religious groups thought by respondents to be least inclined to encourage contraceptive use. Religious leaders' unfavourable attitudes towards contraceptive use was directed to adolescents and married couples alike. Seven respondents mentioned that religious leaders considered contraceptive use to be an insubordination to divine predetermination. Religious leaders had been observed to consider contraceptive use "an immorality", "a sin", "murder", and "killing the gift of life". Three respondents had successfully countered such negative attitudes with theological arguments:

"We are talking about, and actually, we are using even the, their approach, the faith-based approach, using the scriptures. Because when for example, for Christians, procreation does not mean having more, but added quality, what are produced. And then, for example, when Mohammed, the Allah, told them to have children and women they can love and treat equally, actually he was telling them not to have many because it was difficult to treat people equally. But now all those had been misinterpreted. So we use scriptures, but also we use technical approaches, but allow them to put it into their perspective."

4.3 Users' abilities to perceive unmet contraceptive needs, and seek contraceptives

This section answers sub-research question 2 and 4, by describing Ugandan users' abilities to perceive unmet contraceptive needs, and to seek contraceptives. Users' abilities were found to be shaped by their access to information about contraceptives, their awareness and knowledge about different types of contraceptives, and their expectations and beliefs about contraceptive use.

Information about contraceptives

Before seeking contraceptives, users first had to perceive that they had unmet contraceptive needs, which could be met by contraceptive use. Knowledge and awareness about contraceptives was thought to shape users' abilities to perceive unmet contraceptive needs. Access to sources of information about contraceptives, was thought to influence users' abilities to perceive unmet contraceptive needs positively. Respondents indicated that the most popular sources of information about contraceptives, in descending order, were health-workers, peers, and media channels.

Eight respondents claimed that Ugandan users preferred obtaining information about contraceptives from counselling with health-workers. However, as indicated earlier, health-workers did not always provide users with adequate information, or have sufficient time for contraceptive counselling. Both women and men who had limited access to contraceptive counselling therefore relied on their peers for information about contraceptives instead. However, as family-planning was considered a mostly female responsibility, this information exchange was perceived by respondents as being more frequent between women. Although eight respondents recognised the efficiency of spreading information through peer networks, they also acknowledged its pitfalls, doubting whether the information which could be obtained from peers would be

accurate or complete. To combat this, some outreach programmes had sensitised lower-level health-workers, volunteers, and community members.

Media channels were another common source of information about contraceptives, including, in descending order: radio, TV, printed media, and internet resources. Country-wide, including rural areas, the radio was thought by eight respondents to be the most accessible media channel, and most households were reported to possess one. That being said, one respondent indicated that in single-radio households, privacy might not always be possible, which might decrease listenership to messages and programmes with information about contraceptives. Television was mentioned by four respondents as the second most accessible media channel, although fewer households were thought to have one, especially in poorer or rural areas.

Five respondents considered printed promotional materials to be readily available and frequently used in urban areas, but far less so in rural areas. Since these were often produced and distributed by providers, three respondents suggested that they were more often used for branding and promotion of individual contraceptives, rather than for providing comprehensive information on all available contraceptives.

Internet penetration rates were low in Uganda, and in 2014, 16.8% of the Ugandan population had access to the internet (Central Intelligence Agency, n.d.). Therefore, internet was considered the least accessible media, but the fastest growing in popularity for accessing information about contraceptives. One respondent knew of Ugandan internet resources for information about contraceptives, and another suggested English and Swahili internet resources. Nonetheless, four respondents believed that adolescents who *had* internet access, preferred using that to access information about contraceptives, and one clarified:

"Right now, these current years, the reason I say culture is a bit fading out, children prefer going on internet to google what they need to know about. They no longer go to aunties to ask the nitty-gritty. Yes. So they don't rely on their elders for counselling. Instead they use a lot of, they search a lot, they use fellow, let's say, their peers, they also use internet. They don't rely on their elders as much as back then, yes."

Low access to media was either thought to be due to low income, far distance to nearest media access point, illiteracy, inadequate language proficiency, or overall low levels of education. With a nationally wide range of spoken languages, proficiency and literacy in the official languages English and Swahili, were lower in poorer and more rural areas. Five respondents suggested that sensitisation translated into local languages and dialects, facilitated access to information for underserved target populations.

When probed for whether people of any age consulted their parents about contraceptive use, most respondents were quick to exclude that possibility. Firstly, five respondents explained that it was commonly believed that instructing young people on correct contraceptive use, might increase their likelihood to be sexually active, or "promiscuous". As being labelled promiscuous was highly socially undesirable, parents did not want to encourage such behaviour. Secondly, the subject was generally considered too private and sexually connoted, to discuss with family members:

"There's still a lot of friction between mother-to-child information when it comes to family-planning use. Because, morally, I'm not even supposed to tell my child of a certain age group, let's say from ten to fifteen, on what contraceptive you use. It's like I'm trying to tell you 'Ok, you can go, and have this sex, but you know you can prevent it through this and this.' You know, it feels weird? Naturally, and morally, in our culture."

However, two respondents mentioned a traditional, cultural practice, where children or adolescents at the onset of puberty were sent to their auntie (Ssenga in Luganda) or uncle, to "prepare them for marriage". This was practiced, among others, by the Buganda people. It was perceived as easier to be candid with uncles or aunties than with parents. Topics covered by the aunties or uncles might include how to pleasure sex partners, puberty-related changes in the body, and personal hygiene, but not family-planning. However, respondents indicated that reliance on kin educators had decreased over time, and that those nowadays only remained the main source of information for adolescents who did not have access to any other sources of information about contraceptives.

Awareness and prevalence of different types of contraceptives

The most used and most well-known contraceptive, was reported by all twelve respondents to be injections. Injections were considered easily accessible, easy to administer, and easy to conceal from partners. The oral contraceptive was thought by ten respondents to be well-known, accessible, and second only in popularity to injections, because of the difficulty for women to conceal its use from their male partners:

"But also there are many men who are opposed. So if your husband does not want you to be on contraception, it also means that you can't come with him to the health centre. I found a woman who told me that she got pregnant, because the place where she was keeping the contraception, somewhere outside the house, that the rain came, and washed it away. So she couldn't find her contraceptives. And I'm wondering what quality is when

it is out there and can be washed by the rain, and she is trusting that to be her safe place."

Long-term methods such as IUDs and contraceptive implants were mentioned by twelve and eight respondents, respectively. These were thought to be well-known and fairly popular, as they were women-controlled and often easy to conceal from male partners. That being said, as men's awareness about the implant grew, so did its popularity among women decrease:

"Some husbands don't want their wife to take contraceptives, so they go for methods that are not easily detectable, like injectables. And also, at one time they were using implants because you can hide them. But recently men have discovered implants and they keep checking. So it's quite, it really depends on the environment."

Five respondents stated that the male condom was well-known, out of which four claimed it was not necessarily popular to use as a contraceptive. On the other hand, the female condom was only mentioned by one respondent, and was described as neither popular nor well-known. Four respondents stated that among young unmarried people, particularly well-educated and urban youth, there was a strong preference for oral emergency contraceptives. Barriers to access to other contraceptives appeared to be the main reason for this preference.

Contraceptive literacy, expectations, and health beliefs

Respondents were asked to share their professional experiences with users' expectations of contraceptive use, which have been summarised in Table 2. Some common user expectations could be confirmed by scientific evidence, whereas others could not. Out of those which could be confirmed, these were, in descending order based on frequency of mentions by respondents: changes in menstrual bleeding, changes in weight, changes in mood, lowered female libido due to vaginal dryness, nausea, and intensified menstrual pains. Other expectations related to certain contraceptives, included fears of a condom remaining inside the vagina after sex, as well as IUDs negatively affecting the sexual pleasure of men.

Yet other expectations were mostly fallacious: two respondents had encountered users who believed that contraceptives caused birth defects in future children, and one had encountered users who thought contraceptives could cause blindness. One respondents indicated that users typically had difficulties being source critical of information about contraceptives:

"I think... At community level, that depends really on individual: if I am asking the friend I trust so much, then I will somehow think that their information is reliable. People even go to the traditional birth attendants and get information, and they take it as gospel truth. Even though that one is not reliable at all. But they also have; in certain constituencies, what the catholic church has said, is what people will do. You know, depending on how they think about it. But if you are talking, like, in Kampala city people will believe what the minister of health has said. But there is also a lot of radio information. For some people, some radio information is by non-experts, but people will still say 'they had it on the radio' and people will believe it. I think that... People trust any information depending on who you are and what you believe."

Although poor patient adherence - or irregular or incorrect use of contraceptives was known to cause contraceptive failure, no respondents considered fears of contraceptive failure to be wide-spread in Uganda. Risks for contraceptive failure were not perceived to be serious or frequent, and no respondents mentioned fears of contraceptive failure as a deterrent for contraceptive

uptake. Almost half of the respondents, five, asserted that such fears were rare in Ugandan users, and one admitted that:

Table 2. Respondents' opinions about Ugandan users' expectations of contraceptive use				
Number of respondent mentions:	Expectation:	Veracity:	Potential origin of expectation:	References:
5	Changes in weight	True		(WHO, 2012; IPPF, 2013)
4	Changes in menstrual bleeding patterns, and volume	True		(WHO), 2012)
2	Changes in mood	True		(WHO, 2012)
3	Lowered female libido	True		(WHO, 2012)
1	Nausea	True		(WHO, 2012)
1	Increased menstrual pains	True		(WHO, 2012)
1	Condom remaining in vagina	True	Experienced by 14% of women surveyed	(Norris & Ford, 1993)
1	IUD: negatively affecting sexual pleasure of men	True	13.5% of women report that their IUD strings bothers their male partner during penis-in-vagina intercourse	(Wiebe, 2015)
9	Increased or absolute risk of cancer	False		(WHO, 2012)
9	Irreversible sterility	False		(WHO, 2012)
2	Birth defects in future children	False		(WHO, 2012)
2	IUD or implant "disappearing" in the body	False	Three months after insertion, 39% of implants had migrated a maximum of 2 cm under the sub-cutaneous layer, and 55% following a year after insertion IUD expelled from uterus into vagina occurs for 2-10 out of 100 users IUD perforating uterine wall occurs for 1 out of 1000 users	(Grimes, 2007; Ismail, Mansour, & Singh, 2006)
1	Vasectomy causing erectile dysfunctions	False		(WHO, 2012)
1	Becoming blind	False	After using oral contraceptives, 0.017% of users experience worsened vision	(Westhoff et al., 2007)

"It used to be that people thought that just taking a pill cannot stop pregnancy. But I think now, people know. There has been enough evidence to show that when you are on family-planning, you will not conceive."

In contrast, the fear that contraceptives cause sterility was most frequently mentioned by respondents. Irreversible loss of fertility appeared to be a deterrent rather than an incentive for permanent contraception methods, which were fairly well-known, but not very popular. One respondent suggested that the popularity of injections may have given rise to this misconception, since injections usually have a delay of return to fertility after discontinuation (IPPF, 2013). Similarly, nine respondents had frequently encountered users who believed that cancer development was certain or highly likely for those using hormonal contraceptives.

Most health beliefs for which there was less medical evidence, could be traced back to side-effects both related and unrelated to contraceptive use. One respondent testified having met a de-campaigner of contraceptives, who was blaming symptoms of menopause on her use of contraceptives:

"I met a woman who was de-campaigning - family-planning and contraception - and I asked her 'why are you against it?' and she said 'you know I've been taking... I took contraception, that's why I put on weight, that is why I have a headache all the time, that is why I feel dizzy.' Then I asked her, I said, 'how old are you?' She said 'I am 48,' and I was thinking, 'is this menopause?' And 'have they listened to her, and given her a solution to this problem?' And she was de-campaigning family-planning to other women."

There was also an aversion from foreign objects to the body, such as implants and IUDs, for fear that they would "disappear in the body". One respondent suggested that this might be based on cases where "some implants are poorly inserted, into the muscle instead of the subcutaneous layer". For the IUD, this could refer to perforation of the uterine wall, or expulsion from the uterus into the vagina, which, although a possibility, was highly unlikely. Furthermore, for both IUDs and implants, respondents reported that users were often concerned about the safety of long-term methods to users' health:

Respondent: "So they don't feel like it is really safe, even like, IUD, or implant. It is

something, a foreign thing in your body, you know? And most them don't

feel really safe."

Interviewer: "So, you're saying that people are not really sure how effective it is in

preventing pregnancy?"

Respondent: "No, actually, people are sure that they can, that they might not get

pregnant when they use those things, but they are not sure, whether it will

not, not going to affect other, bring other health problems."

For this reason, traditional or "natural" family-planning methods, such as abstinence, natural rhythm method, and withdrawal method, were thought to be more acceptable, less invasive, and safer to users' health, than contraceptives, if not as effective at preventing pregnancy.

Users' expectations prior to seeking contraceptives, were not only thought to affect their willingness to seek contraceptives, but also their experience. One respondents suggested that fears of side-effects might even have psychosomatic effects on users:

"Some of these side-effects are psychological. Sometimes, if you feel you are getting a stomach ache, eventually, it develops. So some of them already go there with that mind-set, that they are going to get that challenge. So when they feel anything, then it is attributed to that."

5. Discussion and conclusion

Rich data was generated in the interviews, of which this section presents the most relevant findings. A large proportion of the Ugandan population has unmet contraceptive needs, and in this study, barriers to meeting those needs have been identified in all four selected dimensions of access. These findings provide valuable information for further in-depth research on barriers to access to contraceptives, as well as informs Ugandan policy makers and intervention planners. Contraceptive illiteracy and unacceptability of contraceptives were found to be barriers to perceive contraceptive needs and seek contraceptives. Findings suggest that facilitating contraceptive literacy and acceptability of contraceptives, could improve Ugandan users' possibilities to perceive contraceptive needs, and seek contraceptives. However, approaches and aims for such interventions should be adapted to the intended target group, whether it is healthworkers, young people, women, or men.

Opposition to improve access to contraceptives, existed throughout Ugandan society, and was perpetuated by a nationally prevalent disdain for promiscuity, which was mentioned by nine respondents. Promiscuity was considered a highly socially undesirable trait, and being labelled promiscuous could have greater consequences for persons who were young, female, or both. Discussing contraceptive use in the Ugandan context, was taboo, private, and inevitably linked to sex. Although it is norm in Ugandan society and cultures to silence conversations about sex and contraceptive use, the costs, in resources, adverse health outcomes, and human lives, may be too high to justify the norm.

Facilitating reliable sources of information about contraceptives

Contraceptives were found to be generally underutilised in Uganda, amongst high contraceptive needs. There was a desire to avoid contraceptive use, rather than a desire to become pregnant, as Ugandan women perceived risks and personal cost of using contraceptives, to be more severe than risks and personal cost of unintended pregnancy. This supports previous research in both Uganda and in the developing world, the latter where almost one in five surveyed women stated concerns for side-effects as their primary reason for not using contraceptives (Sedgh et al., 2016; Uganda Bureau of Statistics, 2012).

Peers were found to be a very common source and efficient dissemination tool for information about contraceptives, as it was also the only option available to many users. Information obtained from peers was thought by respondents to be more likely to be incomplete and medically inaccurate. By sharing positive and negative experiences, contraceptive users shaped and primed their peers' expectations on contraceptive use, acting as either a barrier or a facilitator to users' willingness to seek contraceptives. Many of the expectations Ugandan users were reported to have on contraceptive use, were thought to be exaggerated or fallacious, and refuting common misconceptions can be expected to improve users' willingness to seek contraceptives.

Furthermore, clustering of users who are, and who are not contraceptive literate, might very well occur. The knowledge a user's peers possess, will probably not surpass those of the user, as a person with poor access to information about contraceptives, is likely to have peers with similar possibilities themself. A potential exception could be aunties or uncles, who with age may have had more time to obtain more information about contraceptives than younger users. Even so, familial ties may very well indicate other shared characteristics of a young person and their relative, such as gender, ethnicity, religion, socioeconomic status, education status, etc. Thus, even this source of information is not very probable to enhance young users' access to information about contraceptives.

As previous research has shown, youth would rather turn to a more reliable source of information about contraceptives than peers, such as school or health-workers (Rivkin-Fish, 2005). Respondents believed that the few adolescents who *had* access to the internet, preferred using that as their main source of information about contraceptives, supporting the findings of previous research (Ybarra, Kiwanuka, Emenyonu, & Bangsberg, 2006).

Therefore, there is a need to improve, update, and maintain contraceptive literacy and contraceptive-counselling skills in health-workers, who are considered by users to be the most reliable source of information about contraceptives. As reported in this study, Ugandan users were thought to have difficulties with being source critical of information. Being source critical relies on having previous knowledge, which Ugandan users do not have. Therefore, it is even more important that very reliable sources of information about contraceptives be made accessible. Particularly so in rural areas, where access to information about contraceptives is less accessible for users, and presumably also for health-workers. Filling these existing knowledge gaps in health-workers, will ensure that users who seek information from health-workers, obtain more accurate and comprehensive information about contraceptives. Improving the quality of available information about contraceptives, will help dispel common health-myths, and increase user's willingness and ability to seek contraceptives.

However, improving health-workers' competence can only do so much, when it comes to influencing users' possibilities to seek contraceptives. As discovered in this study, the problems do not only lie with the users. There is also a need to strengthen the public health system to facilitate users' possibilities to seek contraceptives. Firstly, with a higher availability of a wider range of contraceptives. Secondly, by hiring a more, as well as more competent staff, for each health facility. Thirdly, by adapting facilities to allow for more privacy for counselling during any episode of care.

Providers' low approachability, and the limited availability of contraceptives, led to a slimmer choice of contraceptive methods, and conceivably also to poorer contraceptive appropriateness as a consequence. Considering that many users obtain information about contraceptives from peers, poor appropriateness and unmanaged side-effects, may negatively affect users' perceptions of contraceptives. Peers' negative experiences of contraceptives, may generate a low demand from users, in turn generating a low supply for contraceptives, in a vicious circle. One respondent indicated that improving and diversifying supply should precede improving contraceptive literacy. He explained that if users sought contraceptives and were turned away, they would be discouraged from seeking them again. Therefore, limiting discontinuation was more sustainable and constructive than maximising contraceptive uptake.

Male involvement

Male knowledge gaps about contraceptives pose a barrier to users' possibilities to perceive, and seek to meet unmet contraceptives needs. More specifically, male opposition to contraceptive use, forces women to seek contraceptives covertly. Just as in previous studies conducted in Uganda and other developing countries, this study found that Ugandan women often exclude men from their decision to seek contraceptives, and prefer women-controlled, concealable contraceptives such as injections (Moore et al., 2011; Todd et al., 2011).

This and previous studies, have has found that Ugandan men take less responsibility for contraceptive use, and have lower contraceptive literacy, than Ugandan women, yet hold more authority and autonomy (Kaida et al., 2005, as quoted in Moore et al., 2011; Moore et al., 2011). Men have been reported to rarely be able to see how contraceptive use could benefit themselves,

and were afraid that contraceptive use would make women sexually and reproductively unavailable to them.

Much like in previous studies, respondents claimed that men often made false assumptions when asked about why they thought women would desire to seek contraceptives. For instance, a study on abortion attitudes in Uganda, found that while men thought that reasons for getting an abortion included women's infidelity or lack of interest in their partner, women instead gave reasons like their previous child still being young, that they themself were still in school, or that they had a conflict-filled relationship with their husband (Moore et al., 2011). Involving men more in the process of childbearing and subsequent childcare, may incite men to learn more about contraceptives and reproductive health, be positively inclined towards contraceptive use, and perhaps also help men empathise more with female partners' fertility desires.

Improving young people's access to contraceptives

Contraceptive uptake and prevalence rate among Ugandan youth was found to be lower than among adults, with a high unmet contraceptive need as a result. As young people account for a majority of the population, and as children age into puberty, the onset of sexual activity burdens already large unmet contraceptive needs. For this reason, respondents saw it as very important to improve young Ugandans' access to contraceptives.

The greatest barrier to improving young Ugandan's access to contraceptives, was the prevalent notion amongst political and religious leaders that there was of a causal relationship between contraceptive use and early sexual debut. However, as previous research has shown, access to information about contraceptives and education, does not have a noticeable positive effect on the onset of becoming sexually active, but a negative effect on teenage pregnancy rates, and a slight delay in sexual debut (Finer & Philbin, 2013; Kirby, Laris, & Rolleri, 2007; Ponzetti, 2015). Respondents emphasised this, asserting that more sex education was needed, not to encourage young people to have sex, but rather to inform them and prepare them for negotiating for protected sex with their future sexual partners.

Limitations of study and suggestions for further research

The original framework by Levesque et al. (2013) attempted to comprehensively conceptualise "access". To this end, it was satisfactory, as all responses fit within the boundaries of the framework. However, in the adapted framework there were limitations, as there were frequent overlaps between actors, contexts, and stages of an episodes of health care. For instance, although the framework differentiated between health-workers' professional values, and social and cultural values, in reality, these two often overlapped; health-workers were a product of their social and cultural settings. The linear and unidirectional original and adapted model, left little room for exploring interactions between different factors, or stages of a health-seeking episode. As such, the framework developed by Levesque and colleagues did not sufficiently take into account how interrelated barriers and facilitators to access are and thus needs to be improved in further research.

The small, homogenous sample accurately covered the perspective of key opinion leaders with field experience, and provided a rich description of the state of contemporary Ugandan reproductive health. Nevertheless, the sample was small and did not incorporate important voices, such as those of users themselves. Further research should complement the findings of this study by collecting users' perspectives. Conceivably, either with a representative sample of the Ugandan population, or of the identified marginalised groups, such as youth, women, and female adolescents.

In qualitative research, telephone interviews are often used to save time and resources, making it cost-effective. Responses are generally shorter and less elaborate, and respondents tend to seek more affirmation from the interviewer. However, continuous feedback and reconnection allows for researcher and respondent to reach greater clarity, and the possibility to take unobtrusive notes during the interview. Previous studies suggest that VoIP, is just as appropriate as face-to-face interactions for semi-structured interviews, particularly with professionals and experts (Cachia & Millward, 2011; Novick, 2008; Opdenakker, 2006). However, future research attempting to replicate this study with users, as suggested, are advised to adopt a data collection method facilitating face-to-face interaction between researchers and respondents. As research with users would attempt to elicit sensitive data about personal experiences, VoIP might not ensure the most elaborate answers. Shifting focus onto the participant, it will be fair to assume that there may be more reluctance to be candid or provide socially undesirable responses in VoIP or phone interviews, which users may not be able to attend in the first place, anyway.

Conclusion

Different barriers to access were identified in all four selected dimensions of access: limited approachability of contraceptive providers, low user perception of unmet contraceptive needs, limited acceptability of contraceptive use, and low user ability to seek contraceptives.

Potential facilitators were also identified. Improving Ugandan users' and health-worker's access to reliable information about contraceptives, with targeted messages to women, men, youth, and health workers, could improve users' abilities to perceive, and willingness to meet unmet contraceptive needs. Improving and diversifying availability to contraceptives, could further encourage users to seek contraceptives, as well as continued contraceptive use.

Additionally, during the interviews, limited availability of contraceptives emerged as it overlapped with other stages of health than those selected for the adapted framework. Differences in user ability were found to be determined by factors such as living in rural or urban areas, individual and household income, profession, education, religion, ethnicity, and gender.

6. References

- Alkema, L., Sanqian, Z., & Alison, G. (2015). Trends in maternal mortality: 1990 to 2015: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva, Switzerland. Retrieved from https://www.unfpa.org/sites/default/files/pub-pdf/Trends_in_Maternal_Mortality_1990-2015_eng.pdf
- Biddlecom, A., Singh, S., Bankole, A., & Darabi, L. (2007). Protecting the Next Generation in Sub-Saharan Africa: Learning from adolescents to prevent HIV and unintended pregnancy. New York.
- Cachia, M., & Millward, L. (2011). The telephone medium and semi-structured interviews: a complementary fit. *Qualitative Research in Organizations and Management: An International Journal*, 6(3), 265–277. http://doi.org/10.1108/17465641111188420
- Central Intelligence Agency. (n.d.). Uganda. Retrieved March 16, 2016, from https://www.cia.gov/library/publications/the-world-factbook/geos/ug.html
- Central Intelligence Agency. (2013). Field Listing: Median Age. http://doi.org/10.1017/CBO9781107415324.004
- Darabi, L., Bankole, A., Serumaga, K., Neema, S., Kibombo, R., Humera, A., & Banoba, P. (2008). Protecting the Next Generation in Uganda: New Evidence on Adolescent Sexual and Reproductive Health Needs. New York.
- Evans, D. B. (World H. O., Hsu, J., & Boerma, T. (2013). Universal health coverage and universal access. *Bulletin of the World Health Organization*, *91*, 546–546a. http://doi.org/10.2471/BLT.13.125450
- Finer, L. B., & Philbin, J. M. (2013). Sexual Initiation, Contraceptive Use, and Pregnancy Among Young Adolescents. *Pediatrics*, 131(5), 886–891. http://doi.org/10.1542/peds.2012-3495
- Gray, D. E. (2014). *Doing Research in the Real World.* (J. Seaman, Ed.) (Second edi). London, UK: SAGE Publications Ltd.
- Grimes, D. A. (2007). Intrauterine Devices (IUDs). In R. A. Hatcher et al (Ed.), *Contraceptive Technology* (19th ed., pp. 117–143). New York: Ardent Media.
- Hussain, R. (2013). Unintended pregnancy and abortion in Uganda. *In Brief*, (2), 1–8. Retrieved from https://www.guttmacher.org/pubs/IB-Unintended-Pregnancy-Uganda.html>
- Institute for Health Metrics and Evaluation. (2015). Global Burden of Disease Visualisation Hub. Retrieved from http://vizhub.healthdata.org/gbd-compare/
- IPPF. (2013). IPPF Medical Bulletin: IMAP Brief Statement Comparing Injectable Contraceptives: depot medroxyprogesterone acetate (DMPA) versus norethisterone enanthate (NET-EN).
- Ismail, H., Mansour, D., & Singh, M. (2006). Migration of Implanon. The Journal of Family Planning and Reproductive Health Care / Faculty of Family Planning & Reproductive Health Care, Royal College of Obstetricians & Gynaecologists, 32(3), 157–159. http://doi.org/10.1783/147118906777888413

- Johnson, A. M., Mercer, C. H., & Cassell, J. A. (2006). Social determinants, sexual behaviour, and sexual health. In M. Marmot & R. G. Wilkinson (Eds.), *Social Determinants of Health* (2nd ed.). Oxford.
- Kirby, D. B., Laris, B. A., & Rolleri, L. A. (2007). Sex and HIV Education Programs: Their Impact on Sexual Behaviors of Young People Throughout the World. *Journal of Adolescent Health*, 40(3), 206–217. http://doi.org/10.1016/j.jadohealth.2006.11.143
- Levesque, J.-F., Harris, M. F., & Russell, G. (2013). Patient-centred Access to Health Care: Conceptualising access at the interface of health systems and populations. *International Journal for Equity in Health*, 12(18). http://doi.org/10.1186/1475-9276-12-18
- Low-beer, D., & Stoneburner, R. L. (2004). Behaviour and communication change in reducing HIV: Is Uganda unique? *African Journal of AIDS Research (AJAR)*, vol 1(2), 1–14. http://doi.org/10.2989/16085906.2003.9626555
- Moore, A. M. (Guttmacher I., Jagwe-Wadda, G. (Makere Un., & Bankole, A. (The G. I. (2011). Men's Attitudes About Abortion in Uganda. *Journal of Biosocial Science*, 43(01), 31–45. http://doi.org/10.1017/S0021932010000507
- Murthy, J., & Ntabadde Makumbi, C. (2015). Uganda, 16 June 2015: Government launches national strategy to end child marriage and teenage pregnancy. Retrieved from http://www.unicef.org/esaro/5440_uga2015_end-child-marriage.html
- Norris, A. E., & Ford, K. (1993). Urban, Low-income, African-American and Hispanic Youth's Negative Experiences with Condoms: Implications dor Nursing Intervention. *Nurse Practitioners*, 18(5), 40–48. Retrieved from http://ovidsp.tx.ovid.com/sp-3.21.0a/ovidweb.cgi?WebLinkFrameset=1&S=GDLNFPGDHGDDJENGNCIKOCIBJNDNAA00&returnUrl=ovidweb.cgi?Main+Search+Page=1&S=GDLNFPGDHGDDJENGNCIKOCIBJNDNAA00&directlink=http://ovidsp.tx.ovid.com/ovftpdfs/FPDDNCIBOCNGHG00/fs047/ovft/liv
- Novick, G. (2008). Is there a bias against telephone interviews in qualitative research? Research in Nursing and Health, 31(4), 391–398. http://doi.org/10.1002/nur.20259
- Office of the United Nations High Commissioner for Human Rights. (2009). *Uganda and the United Nations Human Rights Mechanisms*. Kampala, Uganda. Retrieved from http://www.ohchr.org/Documents/Countries/PublicationUgandaUNHRMechanisms.pdf [accessed 11 April 2016]
- Office of the United Nations High Commissioner for Human Rights. (2011). *Contraception and Family Planning.*
- Opdenakker, R. (2006). Advantages and Disadvantages of Four Interview Techniques in Qualitative Research. Forum: Qualitative Social Research, 7(4), 1–10. Retrieved from http://qrj.sagepub.com
- Ponzetti, J. J. (2015). Evidence-based Approaches to Sexuality Education: A Global Perspective. Routledge.
- Rivkin-Fish, M. (2005). Sex in Development: Science, Sexuality, and Morality in Global Perspective. Duke University Press Books. Retrieved from https://www.bol.com/nl/p/sex-in-development/9200000033277724/

- Sedgh, G., Bearak, J., Singh, S., Bankole, A., Popinchalk, A., Ganatra, B., ... Temmerman, M. (2016). Abortion incidence between 1990 and 2014: global, regional, and subregional levels and trends. *The Lancet*, 625–632. http://doi.org/10.1016/S0140-6736(16)30380-4
- Singh, S., & Darroch, J. E. (2012). Adding It Up: Costs and Benefits of Contraceptive Services—Estimates for 2012. New York. Retrieved from https://www.guttmacher.org/pubs/FB-contraceptive-services-SSA.html
- Tanahashi, T. (1978). Health service coverage and its evaluation. *Bulletin of the World Health Organization*, 56(2), 295–303.
- The World Health Organisation (WHO). (2012). A Guide to Family Planning: For community health workers and their clients. Retrieved from http://apps.who.int/iris/bitstream/10665/44882/1/9789241503754_eng.pdf
- The World Health Organisation, The Guttmacher Institute, The International Center for Research on Women, FHI 360, The Population Council, & Centro Rosarino de Estudios Perinatales. (2012). Preventing Early Pregnancy and Poor Reproductive Outcomes Among Adolescents in Developing Countries: A call to action. Geneva. Retrieved from http://www.who.int/maternal_child_adolescent/en/
- Todd, C. S., Stibich, M. A., Laher, F., Malta, M. S., Bastos, F. I., Imbuki, K., ... Gray, G. E. (2011). Influence of culture on contraceptive utilization among HIV-positive women in Brazil, Kenya, and South Africa. *AIDS and Behavior*, *15*(2), 454–468. http://doi.org/10.1007/s10461-010-9848-z
- Uganda Bureau of Statistics. (2012). *Demographic and Health Survey 2011*. Kampala, Uganda. Retrieved from https://dhsprogram.com/pubs/pdf/FR264/FR264.pdf
- Uganda Ministry of Health, & USAID. (2012). *Uganda Health System Assessment 2011*. Kampala, Uganda: Health Systems 20/20, Abt Associates Inc.
- UN Commission on Life-Saving Commodities for Women and Children. (2012). New York.
- United Nations Department of Economic and Social Affairs Population Division. (2015). World Population Prospects: The 2015 Revision. New York. Retrieved from http://esa.un.org/unpd/wpp/publications/files/key_findings_wpp_2015.pdf
- Vlassoff, M., Sundaram, A., Bankole, A., Remez, L., & Mugisha, F. (2009). Benefits of Meeting the Contraceptive Needs of Ugandan Women. In Brief. New York.
- Westhoff, C. L., Heartwell, S., Edwards, S., Zieman, M., Stuart, G., Cwiak, C., ... Kalmuss, D. (2007). Oral contraceptive discontinuation: do side effects matter? *American Journal of Obstetrics and Gynecology*, 196(4). http://doi.org/10.1016/j.ajog.2006.12.015
- Wiebe, E. R. (2015). A comparison of male partners' reactions to different intrauterine device strings. *International Journal of Gynecology and Obstetrics*, 128(3), 267. http://doi.org/10.1016/j.ijgo.2014.09.020
- World Data Bank: World Development Indicators. (n.d.). Retrieved March 16, 2016, from http://databank.worldbank.org/data/reports.aspx?source=2&country=UGA&series=&period=# [acessed 16 March 2016]

- World Health Organisation. (2014). Adolescent Pregnancy.
- World Health Organization. (n.d.). Sexual and Reproductive Health: Preventing Unsafe Abortion. Retrieved April 10, 2016, from http://www.who.int/reproductivehealth/topics/unsafe_abortion/hrpwork/en/#
- Ybarra, M. L., Kiwanuka, J., Emenyonu, N., & Bangsberg, D. R. (2006). Internet use among Ugandan adolescents: Implications for HIV intervention. *PLoS Medicine*, *3*(11), 2104–2112. http://doi.org/10.1371/journal.pmed.0030433

Appendix I: Request for participation



Overtoom 60/II 1054 HK Amsterdam The Netherlands Tel: +31 20 412 4523 www.haiweb.org

Request for Participation

Dear Mr/Ms/Dr ____,

I am writing to invite you to participate in the mapping project described below. Your details have been identified through Dr Tim Reed and Mr. Denis Kibira. We would like to ask you, or someone from your organisation, to participate in a Key Informant Interview to discuss access to family planning commodities and contraceptives in Uganda. The interview will take approximately one hour of your time. It will be a semi-structured interview guided by a set of questions which will be conducted over the phone or Skype.

In 2015, Health Action International (HAI) joined the Health Systems Advocacy for Africa Partnership (HSA4A Partnership), comprising AMREF Health Africa (AMREF), the African Centre for Global Health and Social Transformation (ACHEST), Wemos, and the Dutch Ministry for Foreign Trade and Development Cooperation (the Ministry). The partnership aims to contribute to achieving Sexual and Reproductive Health and Rights (SRHR) in Sub-Saharan Africa (specifically in Kenya, Uganda and Zambia). Creating space for a strong civil society to engage effectively with governments, the private sector and other stakeholders accountable for health systems, will facilitate delivery of equitable, accessible and high-quality SRHR services.

Although significant improvements have been made, maternal and infant mortality remains high in Uganda. Risks related to pregnancies and childbirth can be made safer by spacing pregnancies and births further apart. Nevertheless, in 2011, one in every three married Ugandan women wished to delay or prevent pregnancy, but were not using any form of contraception. While there are numerous reasons for the lack of contraception use, this study seeks to investigate the initial barriers to seeking family planning services by examining both the health care system, the Ugandan people, and how they interact.

Participation in this study is completely voluntary. You are not under any obligation to participate. If you agree to participate, you can withdraw from the study at any time without adverse consequences. Prior to the interview, you will be provided with an interview schedule containing the topics to be discussed. Following the interview, you will be sent a summarised copy of your answers for verification. Information gathered about you will be held in strict confidence. This confidence will only be broken in instances of legal requirements, such as court subpoenas, freedom of information requests, or mandated reporting by some professionals. The name of the respondent will be removed upon data entry. All data will be stored in locked cabinets or password

protected computers as appropriate, and will only be made available to the main researcher. You will not be identified in any presentation or publication. Once the study is completed, the data collected from you will be destroyed.

The main researcher of this project is Linnea Colliander Celik (Master in International Public Health, VU Free University Amsterdam) under the supervision of Dr Tim Reed (Executive Director, HAI), Mr Denis Kibira (Ag. Executive Director, HEPS Uganda), and Dr Carolien Aantjes (VU Free University Amsterdam). The findings of the research project will be presented to the board of examiners at the VU University in Amsterdam, in the form of a report and a presentation. You can choose to receive a copy of the report when the project is completed. Should you wish to receive a copy, please inform the interviewer during your interview.

If you wish to participate in the project, please inform the main researcher, providing your contact details (phone number or skype name), and the dates for which you are available. Contact details to the main researcher are provided at the end of this letter. Please do not hesitate to contact us if you have any further questions. We thank you for your time and your consideration to participate in this research project.

Yours sincerely,

Linnea Celik Student researcher, Health Action International Linnea@haiweb.org +31645990075

Appendix II: Participant information sheet



Overtoom 60/II 1054 HK Amsterdam The Netherlands Tel: +31 20 412 4523 www.haiweb.org

Information to respondents

My name is Linnea Celik, I am an intern at Health Action International (HAI) and a master student at VU Free University Amsterdam. On behalf of Dr Tim Reed (Executive Director, HAI) and Denis Kibira (Ag. Executive Director, HEPS Uganda), I am interviewing a wide range of professionals with experience in family-planning health services. During the interview I would like to learn about your personal and professional experiences of how Ugandans access family planning commodities, also known as contraceptives.

This project will focus on the steps preceding health seeking, in order to identify how possible it is for Ugandans to access contraceptives. Based on the information learnt from the interviews, I will identify and describe barriers to access to contraceptives. The results are expected to provide valuable information for HAI and its partners, who are working towards increasing access to sexual and reproductive commodities in Uganda.

Questions which may be asked during the interview, are listed below. Please contact me if you have any further questions. Thank you for your time and consideration.

Linnea Celik

Student researcher, Health Action International Linnea@haiweb.org +31645990075

Health service providers

- 1. What do you think health-workers tell their patients about contraceptives?
- 2. When do health-workers inform people about contraceptives?
- 3. Are there any contraceptives that health-workers are more or less likely to talk about?
- 4. What kind of outreach activities are there to reach people who would not otherwise access contraceptives?

Expectations and beliefs

- 5. Which contraceptives are well known among Ugandans?
- 6. How actively do people themselves look for information about contraceptives?
- 7. Where do people look for information about contraceptives?
- 8. How much do people care about where the information about contraceptives is coming from?
- 9. What expectations on contraceptive use do Ugandans have?
- 10. How reliable do people perceive contraceptives to be when it comes to...
 - a. ...preventing pregnancy?
 - b. ...overall quality and safety?
 - c. How much do people trust that contraceptives will not make them sterile?
- 11. What are some common misconceptions about contraceptives?

Social values and morals

- 12. How morally and socially acceptable are contraceptives in Ugandan society?
- 13. How does the moral and social acceptability of using contraceptives vary between different cultural, social, economic, religious, or ethnic groups?
- 14. Who, besides the provider of contraceptives, is consulted when deciding on family-planning methods?
- 15. How does a person's independence in family-planning decisions vary between different (cultural, social, economic, religious, or ethnic) groups in society?

Appendix III: Interview guide

Prior to interview

Check speakers and microphone.

Check power levels on the laptop and the secondary recording device.

Print interview schedule for manual notetaking.

During interview

Inform the respondent that if the call disconnects, the researcher will call the respondent back on the phone number which they have provided. Should it be impossible to establish a new connection, the researcher will text or email you to inform you that the interview must be postponed or cancelled.

Inform the respondent of the purpose of the study, using the following script:

"During this interview, I would like to learn about your personal and professional experiences of how Ugandans access family-planning commodities, or contraceptives. Based on the information learnt from the interviews, I will identify and describe barriers to access to reproductive health commodities."

Ask if the respondent has any further questions.

Ask the respondent for permission to record the interview.

Ask the respondent to introduce themself.

Ask as many as questions as possible from the interview schedule.

Note that the sequencing of questions is recommended, but not mandatory.

Before ending the interview, **ask** the respondent if there is anything which has not yet been addressed in the interview. Ask follow-up or probing questions as appropriate.

After Interview

Ask if the respondent wants to partake in the final report.

Ask if the respondent can recommend a colleague or other professional or personal contact for an interview.

Inform the respondent of the following steps, including verification of transcription, and planned date of release of the final report.

Thank the respondent for their time.

Appendix IV: Interview schedule

Health service providers

- 1. What do you think health-workers tell their patients about contraceptives?
 - a. How does this vary between different health care providers and workers? *Primary care centres, hospitals, general practitioners, obstetricians, etc.*
 - b. How is this information made available? In which medium is this information given? Verbally? Written? Is information available online, in brochures, or on posters?
- 2. When do health-workers inform people with information about contraceptives? I.e. do they only provide information when people request it themselves? During regular check-ups? During consultations about other reproductive or maternal health issues?
- 3. Are there any contraceptives that health-workers are more or less likely to talk about? Due to little knowledge, low availability, high costs, unwanted side-effects, social stigma, etc.
 - a. How does this vary between different health care workers and health care providers? Nurses, doctors, surgeons, general practitioners etc. Primary care centres, hospitals, general practitioners, obstetricians, etc.
 - b. Do they inform patients about the entire range of available contraceptives?
- 4. What kind of outreach activities are there to reach people who would not otherwise access contraceptives? For instance: too expensive or geographically inaccessible. Serving rural populations using mobile contraceptive providers / health centres, for example.
 - a. Could you give me some examples?
- 5. What are health-workers' attitudes towards contraceptives? *E.g. positive or negative.*
 - a. How does this behaviour vary between different levels of health care workers? *E.g. community health-workers, nurses, doctors, etc.*
 - b. How does this behaviour vary between different levels of service providers? E.g. primary care centres, hospitals, private practitioners, etc.

Expectations and beliefs

6.	Which contraceptives are well known among Ugandans? Does this differ between groups such as young people, old people, rural people, urban population, gender, education, culture, religion, language etc.
7.	How actively do people themselves look for information about contraceptives? E.g. according to need, for preventative care, in emergencies, upon contraceptive failure or failure to use contraceptives, etc.
8.	Where do people look for information about contraceptives? Online, on TV, in brochures, on posters, at the doctor's, etc.
9.	How much do people care about where the information about contraceptives is coming from? E.g., medical professional, ministry of health, religious leader, relatives, etc. a. Which one is considered to be the most reliable source of information? b. How concerned are they with information being evidence-based?
10.	What expectations on contraceptive use do Ugandans have? Are these concerns/perceptions/expectations warranted/justified/substantiated? a. What are the most commonly perceived and well-known benefits and risks of using contraceptives? What is the perceived severity and susceptibility of these risks and benefits?
11.	How reliable do people perceive contraceptives to be when it comes to
	apreventing pregnancy?
	boverall quality and safety?
	c. How much do people trust that contraceptives will not make them sterile?
12.	What are some common misconceptions about contraceptives?

Social values and morals

- 13. How morally and socially acceptable are contraceptives in Ugandan society?
- 14. How does the moral and social acceptability of using contraceptives vary between different cultural, social, economic, religious, or ethnic groups? Which ones? Could you give me some examples? If not: why not? Why do you think that is?
 - a. How does the moral and social acceptability of using contraceptives vary depending on **who** the user is? Is it more socially acceptable if the user is older, or if the user is young, is married, or isn't married, already has children, or do not have children, are poor or still studying, or other reasons etc.
- 15. Who, besides the provider of contraceptives, is consulted when deciding on family-planning methods? E.g., close friends, older female relatives, husbands, mother-in-law, regular physicians, religious leaders, etc...
 - a. Whose opinions are considered to be the most important to people themselves?
- 16. How does a person's independence in family planning decisions vary between different (cultural, social, economic, religious, or ethnic) groups in society? Could you please give me some examples?