Pregnancy Intentions and Need for Contraception Among Women in Luanda Province, Angola

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Introduction

Women's ability to control the timing, spacing, and number of their pregnancies has long been recognized as a critical health and human rights issue. Of the 208 million pregnancies that occurred worldwide in 2008, it is estimated that 41% were unintended, many of which lead to adverse health and economic outcomes for women and their children (1). Lack of access to family planning services is often cited as a significant barrier to implementing fertility preferences. Worldwide, an estimated 146 million women have an unmet need for any form of contraception, and an additional 75 million have an unmet need for modern methods (2). Addressing unmet need for contraception is a key step to meeting the Millennium Development Goal of reducing maternal mortality by 75% by 2015, as well as improving sexual and reproductive health services generally. Thus, measures of unmet need provide a driving force in policy and program decisions related to reproductive health (3). It is thus imperative to understand how measures of unmet need may be driven by the social, economic, and structural contexts in which women's fertility intentions are developed and implemented.

The interplay between family, community, and structural influences on women's pregnancy decisions can vary greatly by social context. In much of sub-Saharan Africa, total fertility remains high and social and economic structures often vary substantially over short periods of time, resulting in a shifting balance between these influences. However, the role of family members in shaping women's pregnancy intentions, especially spouses, remains strong. Studies from here and other parts of the developing world have consistently demonstrated that

husbands or spouses strongly influence decision-making process related to fertility (4-6). Furthermore, when husbands are asked about their fertility expectations and intentions, a good deal of discrepancy can be found between spouses (7-9), indicating that reproductive intentions measured in women may fail to capture the important influence of husbands or partners. Measurement of pregnancy intentions and subsequent contraceptive use has also demonstrated the role of men: recent studies have shown that accounting for men's desires can significantly alter estimates of the need for family planning services (10).

Community and social influences on pregnancy intentions are also important to consider in the developing world. Many have argued that, in many parts of sub-Saharan Africa, widespread fertility decline, the diffusion of new norms and ideals related to fertility and gender roles, and availability of contraception can result in rapid and often contradictory changes in the responses that women give when asked about their pregnancy intentions, making it relatively common for studies to find a substantial proportion of stated ambivalence or unwillingness to give a numerical answer with regard to desired family size (11-14). As these studies note, it is likely that changing community circumstances and expectations make it difficult to choose or to commit to a specific number of children; changes in a woman's family structure, income, or household decision-making power can drastically alter her childbearing intentions. For example, in Angola, a country just emerging from a decades-long civil war, women's experiences of community violence, loss of family members, and social status in their communities can strongly determine their stated preferences with regard to family size as well as their current intention to become pregnant, and these preferences can change quickly as a woman's circumstances change (15). Women's intentions can also change very quickly, often with few or no obvious reasons for the change, perhaps reflecting a more general, underlying level of uncertainty (16).

Structural factors such as poverty, gender inequity and gender-based violence can also affect women's decisions about fertility and pregnancy. It has been observed that in many developing countries, widespread poverty, war and migration, gender inequities, and domestic violence can have significant effects on how women think about pregnancy, whether they want children, and what their desired family size is (17-21). A lack of health infrastructure, health education, and family planning services may also promote fear or mistrust of contraceptive technologies, leading women to report relatively large desired family sizes because they see no alternative (22).

Decisions about how to implement such complex and dynamic fertility preferences can be similarly complicated, particularly when access to family planning services is limited. Lack of access is particularly significant in Angola, a country with exceptionally poor reproductive health outcomes. Although no recent nationally representative data exist on maternal mortality or contraceptive use, the maternal mortality ratio (MMR) in 2010 was estimated to be 450 per 100,000 live births (23), the total fertility rate is estimated to be 5.8 (24), and contraceptive prevalence was estimated at 12.9% (2). The Angolan Ministry of Health has recently decided to prioritize reproductive health and family planning, thus drawing attention to the substantial need for relevant contraceptive services. In this low-resource, high-need setting, it is crucial to begin the process of better understanding what Angolan women think about childbearing and contraception, how they make decisions about their fertility, and whether they feel they have access to the reproductive health services they need.

Through a series of in-depth interviews with Angolan women of reproductive age, this study sought to explore their pregnancy intentions, the role of their partners or other community members in these intentions, and how, if at all, these intentions translated into family planning or

contraceptive use. The primary goal of this study was to provide context and meaning to a quantitative survey studying similar topics that was administered to a representative sample of women of reproductive age living in Luanda Province. Both this study and the quantitative survey are serving as baseline sources of data for larger project to expand access to family planning and post-abortion services in Luanda Province, undertaken by the Bixby Center for Population, Health and Sustainability at UC Berkeley in collaboration with the Angolan Ministry of Health and PSI Angola.

Methods

In-depth interviews were conducted with 28 women in the municipalities of Cazenga, Kilamba Kiaxi, and Viana, in Luanda Province, Angola. All recruitment procedures, informed consent, and interviews were conducted by the first two authors. Women were considered eligible if they were between the ages of 18 and 49. Although no additional formal inclusion criteria existed, investigators purposively sampled women to build a diverse study sample across age, marital status, and parity. Women were recruited in churches and government health centers, and interviews were approximately 45 minutes long on average.

Potential participants were approached in health centers while waiting for appointments, or at church groups during activities planned by local community-based educators. For interviews taking place at health centers, community-based educators introduced the researchers to health providers and to potential participants. Potential participants were asked to inform the health provider or educator if they were interested in participation. They were then invited to begin the informed consent process with a researcher. As the research process progressed and the need to sample purposively became greater, potential participants who expressed interest were

only asked to complete the consent process and interview if they represented a combination of age, marital status, and parity that was underrepresented in the existing sample. The informed consent process and subsequent interview took place in private locations and potential participants were assured that they would not miss their scheduled appointment; health providers would interrupt the interview if a participant's appointment time arrived before the interview had been completed. Potential participants were given a copy of the informed consent document written in Portuguese, and the researcher discussed each component of this document verbally with the potential participant. Most importantly, potential participants were assured that the researchers had no affiliation with the health center, no information from the interview would be shared with any health provider, that their participation would in no way affect the services they would subsequently receive from the provider. Potential participants were also informed that they had the right to skip any questions or to stop the interview altogether at any time. Because many of the women we interviewed could not read or did not have a safe place in their homes to keep the informed consent document, verbal informed consent was obtained and women were given a small piece of paper with the researchers' contact information.

The recruitment process at local church groups followed a similar process. Community-based educators introduced potential participants to the researchers, and potential participants were encouraged to inform the educators and researchers if they were interested in being interviewed. All interviews took place after the planned education activities had been completed. The informed consent process was identical to the process used in health centers.

Interviews followed an interview guide. The guide was developed in English, translated into Portuguese, and reviewed by a team of key informants, comprised of local nurses and community-based educators working in family planning. The guide was then pilot tested by the

authors and revised accordingly. Questions in the interview guide were generally open-ended, but they focused on a few key questions and themes related to women's decisions about having children, the role that their partners or other family members played in those decisions, women's knowledge of and access to contraception, and why they did or did not choose to use contraception. All interviews were audio-recorded, and names and other identifying information were not. Interviews took place in the participants' native language, Portuguese, and are being analyzed in Portuguese as well. All study procedures were approved by the Committee for the Protection of Human Subjects at the University of California, Berkeley (Protocol ID 2012-02-3984).

Interviewers debriefed after each interview, and the interview guide was modified and revised iteratively, as needed. Major themes and recurring concepts were also discussed daily by the interviewers, shared with the key informants, and recorded. These themes and concepts serve as the guiding framework by which interviews are being examined and coded. All authors are participating in interview coding and analysis. Interviews were transcribed and hand coded, serving as the basis for the initial results presented here.

Results

Content analysis is ongoing, and an initial set of thematic codes has been developed. The results presented here are thus not exhaustive of the themes, but they represent themes that we believe are particularly important to inform the design of a comprehensive family planning information, education and communication campaign.

Characteristics of study population

The age of women participating in this study ranged from 21 to 42, with a mean age of 31.1. Only three women in our sample had not had any children; the others had between one and six children, with a mean of 2.4. The mean age at first birth was 20.7. Sixteen women were currently pregnant; this high proportion was likely due to the fact that many interviews took place in health clinics, where women were often waiting for antenatal appointments.

Decision to begin childbearing and desired family size

Nearly all participants hesitated or found it difficult to discuss how or why they first decided to have children. In many cases, women's first births were unintended, leaving little room for reflection or consideration. For all women, however, the abstract idea of being a wife and mother had great value; as one 30-year-old mother of one put it,

> *"Every woman's dream is to have children, a woman without children is like a tree that doesn't bear fruit. I decided I wanted to have my own family, my house and my husband...that's why I decided to have children." (Interview 6)*

All women gave a numeric answer when asked about their ideal family size, usually with little probing or follow-up questions. Almost all women said that they would like to have four or more children. It was evident, however, that women often expected this number to change with changing circumstances. One 38-year-old woman, pregnant with her sixth child, noted, "Three was my goal. But God didn't give me only three" (Interview 7). In several cases, women reported choosing to have more children than they'd initially expected because of remarriage; it was seen as important to establish a new family with a new husband.

Multiple participants acknowledged that there are significant financial barriers to having very large families, due to expensive school fees and the costs of feeding and sheltering multiple children. When asked what number of children is "too many," women typically referred to

families of 10 or more children, often relating stories of the financial and logistical difficulties of caring for such a large family; they routinely said that one or two children were "too few." The most common reason women gave for wanting four or more children is that some children turn out "badly," meaning that they become criminals or do not take care of their families, and having many children increases the possibility that a couple will have at least some who are "good." One participant, 33 years old with 1 child, explained, "A person can have a child or two. But maybe one doesn't want to study, he finds himself in a life of drugs or alcohol...that's why for us here in Angola, to have one child doesn't give you value" (Interview 2). Like this participant, other women who had had one or two children reported desperately wanting more, for their benefit as well as the for the health of their families.

Frequently, alongside such personal calculations about the ideal number of children, women also voiced community stereotypes and expectations about large families. Many women offered some version of the stereotype, "We Africans like to have a lot of children" (Interview 4). They often expanded on this sentiment by explaining the value of children: "Here in Angola children are riches" (Interview 2). The seeming contradiction between the wealth and financial difficulties that children can bring was reflected in many of our interviews, with women repeatedly noting the social and financial difficulties that arose when the appropriate balance was not found.

Knowledge and trust of preferred contraceptive methods

Most of the participants indicated that they have access to family planning methods and feel confident that they can use contraception; many reported prior or current use of a hormonal contraceptive method. Injectable contraceptives and daily oral contraceptive pills (OCPs) were

the most commonly used and referenced methods in our sample of women. Some women had heard of the IUD, but only one participant reported using one in the past. Multiple women reported (1) side effects they had experienced while using injectables or OCPs and (2) their friends or family members' experiences using such contraceptive methods. Many reported stories of friends or acquaintances who had health problems after using injectable contraception or OCPs, including weight gain, weight loss, weakness, fatigue, and menstrual irregularity. Many women also believed that use of injectables or OCPs was so potentially harmful to one's health that young, unmarried women should not use them. Several additionally reported that they received this information from their health providers. For example, one 31-year-old mother of four reported that she was denied hormonal contraception at a hospital as a young woman: "In those times it was a little difficult...the hospitals didn't accept giving family planning to women who had never had a child" (Interview 5).

Very few women reported using condoms as a contraceptive method. Interviewers almost always had to ask multiple questions to determine that a woman used condoms to prevent an unwanted pregnancy; several women mentioned using condoms to prevent STIs, but only one declared directly that she used condoms to avoid becoming pregnant. Similarly, many participants said that a woman can avoid pregnancy by "taking care of herself" or "controlling herself." Over time, and with the help of many open-ended questions, it became evident that such "control" was a reference to the calendar method. As with condoms, the calendar method was rarely referenced openly. The calendar method seems to be especially important for young women: most of the women in this study reported relying on this method to avoid an undesired pregnancy early in their reproductive lives, when they were young, unmarried, and/or did not yet have children.

Timing of pregnancies, family planning and hormonal contraceptive use

The majority of women expressed fear or concern that use of family planning methods during adolescence, or before having any children, could affect a woman's fertility and complicate her later efforts to have children. A number of women reported having had difficulty becoming pregnant after using hormonal contraception, resulting in complications in their marriages and significant personal stress and unhappiness. Of 28 participants, zero reported using a hormonal birth control method prior to having children; when asked, retrospectively, if women with a previous unintended pregnancy would have used contraception to prevent the pregnancy, most women said no. That is, the fear of losing one's fertility appears to outweigh the negative consequences of an unintended pregnancy, particularly in the early stages of a woman's marriage or reproductive life.

Most often, women reported using family planning services and hormonal contraception to space pregnancies. Several women took a particular pride in choosing to use hormonal contraception this way because it enabled them to take better care of their children. One 34-year-old woman felt that her own experience using OCPs after the birth of her first child was an opportunity to teach others in her community about contraception: "The neighbors...said that I was caring [for my child] a lot. 'She has a husband but she's not having children very fast.' I told them that I'm not having them very fast because I'm using family planning" (Interview 1).

In addition, some women said they began to use, or planned to use, contraceptive methods more consistently only after they decided that they had had a minimum number of children that could be considered acceptable. For several women, this point was not always fixed or agreed upon by their husbands; regular contraceptive use began (or would begin) once women

felt they were in a strong enough position to negotiate the cessation of childbearing with their husbands. This was often also reflected in the attitudes of health providers; for example, one woman reported being told in the hospital that any woman who had had three or more children was eligible for family planning services (Interview 1). Importantly, most women did not believe that young women should use family planning to prevent a pregnancy; some said that such young women should "take care of themselves" in order to prevent undesired pregnancies during adolescence and early adulthood.

The role of husbands in decision-making around childbearing and contraception

In many cases, women's decisions about childbearing and family planning were not entirely their own. Many discussed motherhood as an essential component of being a good wife or partner, especially in the early stages of a relationship. In a large number of interviews, women reported that their first pregnancy was unplanned or unexpected, but that once it occurred, the couple would decide to marry. Even among women to whom this did not occur, it was apparent that a fast and successful demonstration of a woman's ability to bear children was a significant factor in a man's decision to marry her. Perhaps because of this need, women often noted the importance of giving husbands children, even if they exceed the number a woman originally wanted to have:

> *"The men here are like that. They don't tolerate living with a woman without children. You have to have children. They say that a woman who lives with him without a child they consider her a friend, so in order to have confidence that she is his woman, she has to have a child with him." (Interview 7)*

This principle applied equally to women who divorced or were widowed and entered into new marital relationships: even if a woman had previously had children with someone, she would need to begin the process of family-building anew with her new partner.

Multiple participants shared that a discordance about family size, in particular one in which the man wanted more children than the woman wanted or was able to have, often led to separation or "problems at home." In such cases, either ones the women knew personally or hypothetical scenarios, the man would leave the woman and begin to have children with other women outside of the house. Indeed, this was a powerful, consistent theme across almost all interviews; some women were quick to say that a man who wanted more children was free to leave the house to have more children with another woman. Such alternatives were not open to women who wanted more children than their partners. In some cases, even when women wanted to become pregnant to please their husbands, a delay in conceiving could be dangerous to the relationship. As one woman explained, a delay in returning to fertility after stopping injectable contraception caused significant problems in her marriage:

> *"After the first [child] I did family planning. I did the shot, and it worked well. But then my period was delayed, and my husband wanted a child. My husband wanted to find another woman to give him a child." (Interview 5)*

Several participants further indicated that this outcome could bring financial and emotional difficulties on the family. This provided an important incentive for women to express their fertility desires to their partners, but most acknowledged that their ultimate childbearing and contraceptive behavior would be strongly influenced by what their husbands wanted.

In spite of these apparent inequities, it is important to note that all women who were using contraception were doing so with the knowledge of their husbands or partners; in some cases, their partners encouraged that they go seek such services, and they generally supported the use of contraception. In general, women discouraged the practice of women electing to use family planning services without informing their partners. Almost all participants were firm in their opinion that women and men must have an open dialogue about both desired family size

and the woman's use of family planning services and contraception. Husbands often seemed particularly supportive when they agreed that their wives needed to "take a break" from childbearing, or when they agreed that they were done with childbearing. One woman, currently pregnant with her fifth child, had described a previous disagreement she had had with her husband over her use of hormonal contraception after their first child. Now that she is about to have her fifth, he no longer opposes her contraceptive use:

> *"He says, now that we've already had five children, I can again start using family planning. Since we already have five, now we're not going to say to each other, "Oh, I want to have a child."" (Interview 5)*

In rare cases, husbands also supported their wives' use of family planning if they agreed that the couple's life circumstances were not conducive to having another child:

> *"I was the one who didn't want to do family planning, but he encouraged me, he supported me because of the studies he's doing. I'm also in college, so he talked to me and I agreed." (Interview 16)*

Discussion

A more thorough analysis of interview transcripts will be necessary in order to further discuss some of the key concepts that have arisen thus far, as well as to assess whether additional themes or concepts should be addressed. However, at this preliminary stage, a number of important points bear mentioning.

Our interviews were conducted among a fairly unique population: although contraceptive use is low throughout Angola, some studies have suggested that it is slightly higher in Luanda Province, a finding that is consistent with the significant amount of contraceptive use reported by our study participants. Additionally, many of these interviews took place in health centers, where women were more likely to have heard of family planning services or to believe that such services were accessible to them. However, our preliminary findings indicate that access (i.e.,

being in a health care facility) does not guarantee (1) extensive, or even accurate, knowledge about family planning services and contraception or (2) assured access to a woman's preferred contraceptive method, given the difficulties women have described about their own fears about family planning and contraception, as well as the possibility of disagreement between a man and a woman about contraceptive use and desired family size. These issues will surely need to be addressed as the larger family planning project moves forward and accurate, coherent messaging is developed to promote the full range of family planning options at all health centers.

Although women often began discussions of family size with a fixed number of children that was considered ideal, further discussion often illuminated the dynamic, often unstable nature of these preferences. The typical desired number of children, around four, is significantly lower than Angola's current TFR of 5.8. Of the older women in our study, several had reported having more children than they'd initially desired, but this was not always reported to be a problem; there were often very rational and reasonable reasons why women deliberately chose to have more children than they'd initially expected, such as divorce and remarriage. Thus, although there is likely a significant and meaningful gap between achieved and desired fertility in this population, it is important to note that this gap is not likely to be comprised solely of unwanted fertility. Family planning and reproductive health programs will need to address the very real, substantial number of unintended pregnancies in this population, but they will also need to acknowledge that women's fertility preferences and subsequent behavior can change rapidly and repeatedly over time.

Based on our findings related to fertility intentions and contraceptive use, a picture of the average, urban-dwelling Angolan woman's reproductive life course has begun to emerge: the women in our study typically met their partners in late adolescence, often consciously tried to

delay childbearing for several years using traditional methods, and had their first pregnancy shortly before or after marrying. Additional children were typically born relatively soon thereafter, with modern family planning methods being used intermittently in this time to space births. Only after a minimum number of children had been born did women and their husbands consider using hormonal contraception more consistently, although it appears that the potential for stopping contraception and having another child is often still on the horizon for women who think they've completed their childbearing, either because their husbands change their minds or because they begin a new relationship.

Women's and men's concerns about hormonal contraception, and particularly its perceived ability to damage one's future fertility, reflect these changing fertility desires over the life course. Respondents' general unwillingness to use hormonal contraception early in life, their advice to younger women to rely on traditional methods, and health providers' reluctance to provide hormonal methods to women with few or no children all support the personal, familial, and community benefits of bearing children early in a relationship. Similarly, women, their partners, and their health providers appear to develop a growing comfort with contraceptive use once some children have been born, suggesting that the potential harm to fertility that might arise from using contraception is no longer seen as catastrophic. Finally, as women approach the end of their childbearing years, contraceptive use becomes more consistent, sometimes because of an explicit desire to stop childbearing (a desire sometimes, but not always, shared by their husbands), and often because of a vaguer, more uncertain sense that they would not like to have a child, but that their circumstances might require them to in the future. These divergent needs may reflect a distinct difference between women who want to stop childbearing and those who might instead be postponing it.

Recent emphasis on meeting the family planning needs of women in Angola underscores the need to understand how women think about contraceptive use and how their families and communities may factor into their decisions about planning their families. This study provides an important first step to understanding the complex interplay between familial and societal influence on a woman's perceptions of contraception and family planning services in Luanda Province.

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