ORIGINAL RESEARCH ARTICLE

Enough Children: Reproduction, Risk and "Unmet Need" among People Receiving Antiretroviral Treatment in Western Uganda

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Abstract

In this paper, we use survey (n=87) and interview (n=30) data to investigate orientations towards future childbearing among people receiving antiretroviral treatment and their family members in western Uganda. We investigate how reproductive options are perceived, by those receiving treatment and those closest to them, and consider what these perceptions suggest about the existence of an "unmet need" for birth control for women with HIV. While most people say they do not wish to have more children while on treatment, this intention coexists with contradictory desires for the benefits and happiness that more children might bring. We argue that the factors influencing birth desires and outcomes are so complex and contradictory that it is virtually impossible to predict demand or uptake of birth control as more and more people with AIDS in Africa gain the ability to access antiretroviral treatments (*Afr J Reprod Health 2012; 16[1]:133-144*).

Résumé

Assez d'enfants: Reproduction, risque et besoin « non satisfait » chez les gens qui suivent un traitement antirétroviral en Ouganda de l'Ouest: Dans cet article, nous nous servons des données d'enquête (n=87) et d'interview pour étudier des orientations futures envers la maternité chez les gens qui suivent un traitement antirétroviral et chez les membres de leurs membres de leurs familles en Ouganda de l'ouest. Nous étudions comment les gens qui suivent le traitement et leurs plus proches aperçoivent les options reproductives et nous considérons ce que suggèrent ces perceptions par rapport à l'existence d'un « besoin non satisfait » pour la limitation des naissances chez les femmes séropositives. Alors que la plupart des femmes disent qu'elles ne veulent pas avoir d'autres enfants pendant le traitement, cette intention coexiste avec les désirs contradictoires pour les bénéfices et la joie que peut apporter d'autres enfants. Nous soutenons que les facteurs qui influent sur les désirs pour la maternité et les conséquences sont si complexes et contradictoires qu'il est pratiquement impossible de prédire ou d'accepter la limitation des naissances au fur et à mesure que les gens séropositifs en Afrique deviennent capables d'avoir accès aux traitements antirétroviraux (Afr J Reprod Health 2012; 16[1]:133-144).

Keywords: HAART, AIDS, fertility, contraception, Uganda, unmet need

Introduction

What does AIDS mean for childbearing and fertility in Africa? Until recently, there was a relatively straightforward answer to that question. As men and women in their reproductive years sickened and died, fewer children would be born.

For individuals, this might mean fewer births over the course of a lifetime, while on a population level this could mean the slowing of African population growth. However, with the spread of antiretroviral treatments, that answer is no longer straightforward. Only 43% of adults in need of highly active antiretroviral treatment (HAART) in sub-Saharan Africa are currently receiving it, so the impact of treatments on population trends in fertility is probably very small.¹ However, for individuals, being treated for AIDS can mean the resumption of a life interrupted by illness, and the possibility of bringing more children into the world.

Births are powerfully influenced by social context and connections. Both the costs and the pleasures of having a child are spread across families, albeit unevenly, so that decisions about childbearing are rarely purely individualistic, in their antecedents or in their effects. In this paper, we investigate how the reproductive options for people on treatment are perceived, by those receiving treatment and those closest to them, and consider what these perceptions suggest about the existence of an "unmet need" for birth control for women with HIV.

Review of literature

African women with HIV have lower birth rates than their peers without the virus.²⁻⁵ As the disease progresses, birth rates fall even further, so that viral load is strongly correlated with reductions in births and pregnancies.⁶⁻⁷ However, the spread of antiretroviral treatment, which lowers viral load and in most users, may bring about a return to functional health, is altering the link between seropositivity and fewer births.

While it seems intuitively obvious that being treated for AIDS and recovering health would lead to more reproductive activity, studies in wealthy countries have yielded contradictory results. 8-10 In Africa, where both HIV prevalence and birth rates are much higher, the picture is even less clear. In a synthesis of existing work on the impact of HAART on proximate determinants of fertility, drawing on the Bongaarts framework, Kaida et al. concluded tentatively that widespread HAART "may have the potential to reverse some of the trend towards decreased fertility of HIV-infected women". 11

In the absence of longitudinal data about fertility behaviour, researchers have concentrated on discerning the impact of HAART on fertility intentions, most recently in a special issue of *AIDS* and *Behaviour*. As Yeatman demonstrates, the

experience of receiving a positive diagnosis for HIV leads to decreased desire for more children, particularly among men. 12 Taulo et al. show that the gap in fertility desires between women with HIV and women without grows over time, presumably as the disease progresses and the childbearing retreats.¹³ possibility of safe Qualitative studies have provided nuance to these broad trends, indicating that even when stated desire for more children may decrease, individuals may still yearn for (more) children, in the context of their own "life projects" of marriage and family life. 14-15 Two phenomena recur in these studies. First, across the subcontinent participants in research studies say that they believe social norms in their community work against childbearing by people with HIV, labeling such parents as irresponsible creators of orphans. 16-21 normative climate may create disincentives for people with HIV to contemplate having more children, at least publicly.

The second phenomenon is the disjuncture between stated fertility desires and actual outcomes. Longitudinal studies that tracked participants over time found that among HIV-positive women, stated desires to have no more children did not predict actual pregnancies and births. Mohohlo et al. found that only 19% of births to a cohort of women on treatment for AIDS were categorized as "planned births", while Homsy et al. reported that less than 7% of the women in their longitudinal study expressed a desire to have another child, while 17% became pregnant. 22-23

Thus, most births to women with HIV are classified by researchers as "unintended pregnancies" or evidence of an unmet need for contraception, an oversimplified gloss on a complex interaction of influences for and against bearing children. For parents themselves, however, the births may not be as "unwanted" as the answers given to survey researchers suggest.

The relationship between HIV and fertility reduction has been extensively studied, but the relationship between HAART and fertility is less clear. Ethically, it would be impossible to create a control group of sick but untreated women, and longitudinal studies require an investment of time and data collection that is beyond the means of

most research organizations. However, three studies from rural Uganda suggest that HAART changes fertility desires and outcomes. The strongest study, by Homsy et al., followed a group of women who initiated HAART for the next two to three years and found that the number of pregnancies per 100 woman-years increased from 3.46 in the first quarter after starting HAART to 9.5 in the eighth quarter. Stated desires to have more children also increased during the follow-up, but not to the extent that pregnancies did.²⁴

On the other hand, in a retrospective study by Maier et al. women on HAART were more likely than their HIV-positive counterparts who were not receiving treatment s to report that they wanted more children, although they did not report actually having more children than those not on treatment. Maier et al. postulated a lag between a revived desire for children and the actual achievement of births.²⁵ Andia et al. assessed the use of contraceptives, which may be considered a proxy for fertility desires, by women on treatment as compared to those who were HIV positive but not receiving treatment, and found that women on treatment were more than twice as likely as those not on treatment to report using contraception (OR=2.51; 95% CI=1.03).²⁶ The desire for births varied according to age, marital status and number of surviving children, with women who were younger, married and who had few or no living children being more likely to express the desire to have more, factors which are familiar from almost all studies of fertility desires, whether HIV is involved or not.

In the disjunctures between reported fertility desires and actual births, researchers have seen signs of a large "unmet need" for family planning services²⁷⁻³¹ which provides the rationale for arguing that family planning services should be expanded in general, and targeted in particular at women living with HIV. At a programmatic level, major players in reproductive health have already taken steps to integrate family planning and HIV services into one programme, as the United States for International Agency Development (USAID)has done in Nigeria, Kenya and Zimbabwe.³²

The expansion of contraceptive options is absolutely and innately worthwhile as a matter of

reproductive rights, but the concept of "unmet need" among women with HIV is not as straightforward as might be assumed, based on studies which simply ask women (and men) whether they want more children or not. This is particularly true when treatment for HIV is added as a complicating factor, taking away some of the dangers and uncertainties of having children while severely ill with AIDS, but adding its own uncertainties. In this paper, we demonstrate that normative beliefs around childbearing by people with HIV, individual expressions of desire for more children (or not), and views on specific instances of childbearing by specific people with HIV are not necessarily concordant.

This evidence suggests that future fertility patterns or demand for birth control among people on treatment cannot be predicted by asking those people whether they want to stop or delay childbearing. Indeed, given all the factors that play into individuals' orientations towards pregnancy while on treatment, demand for birth control may not be predictable at all.

Methods

This study is based on interviews and surveys with treatment partners (TPs) of people who were receiving antiretroviral treatment through a community-based distribution programme Kabarole, western Uganda. The patients had all begun treatment between February and November 2006. The survey component was carried out with all co-resident treatment partners of people who were receiving antiretrovirals through community-based programme - that is, not the patients themselves, but a spouse, parent, child, or sibling, who lived together with the patient and who was directly affected by changes in household production and consumption resulting from AIDS in the family. In total, 87 coresident TPs were surveyed. Ethical clearance for this study was received from the University of Alberta and Makerere University in Uganda.

The interviewees were chosen by the first author from a list of all coresident TPs whose patients were under 45 years old (for women) or 50 years old (for men) – in other words, within the normative age bounds for reproduction. TPs were

then stratified by sex and parity, into four groups: low-parity (fewer than two children), low-parity women, medium/high-parity (two or more children) men and medium/high-parity women. The final sample was created by taking equal numbers from each group, resulting in an overrepresentation of men and of patients with low parity (given that most of the existing research focuses on women, the inclusion of both men and women is an asset to this study).

The interviews were conducted in 2009 in TPs' homes by two experienced female interviewers in either the Rutooro or the Rukiga language, depending on the TP's preference, and taped, translated and transcribed in Uganda. Interview transcripts were analyzed in Canada by the first author, using N*Vivo software. Thirty such interviews were completed. In the text, TPs are referred to by their patient's HAART ID number, which was assigned when they entered the study.

Among the TPs, 46% were either the spouse or the parent of their client. The accounts of TPs whose patients were their spouses are of particular importance for this paper. For these TPs, their spouses' reproductive careers were also their own. An unknown number of these TPs were also HIV-positive themselves, many of them also on treatment. In the interviews, they speak candidly about AIDS as a "family illness", and about their own concerns as people living with AIDS, as well as discussing their spouses' experiences.

Setting

The part of Uganda in which Kabarole District is located – near the border, west of Lake Victoria – was the first region of the country to be hit by the AIDS epidemic, beginning probably in the late 1970s. The first prevalence study in Kabarole, carried out between 1991 and 1993, found prevalence at antenatal clinics in the district ranged from a high of 28% in urban clinics, to a low of 10% in rural ones. 33-34 In 1995, a random sample of 1,036 Kabarole households found that 34% had a family member sick, dying or deceased from AIDS. 35

Since peaking in the early 1990s, reported prevalence has decreased in Kabarole to 11.6% for

the district as a whole, but still higher than the estimated overall prevalence for Uganda of 6%. Some of this decline in prevalence is undoubtedly due to switching from clinic-based sampling to population-based sampling, but local accounts of the epidemic also say that the level of AIDS has slowly declined. Individual family histories also bear out the historical depth of AIDS in Kabarole, as in the case of one elderly man interviewed in 2008, who had seen his son, his grandson, his grand-daughter-in-law and his great-grandson all contract HIV, and die, with the exception of the grandson; or another man who was rumoured to have had three wives die from AIDS, the first one nearly 25 years ago.

Results and Discussion

The value of reproduction

Participants were unanimous that children were one of the great joys, and also one of the great trials, of life. As might be expected in a subsistence agriculture society, the first reason most people gave for why they wanted children was the assistance children could provide, either with farm labour or, in rare instances, with cash employment. However, of particular importance to this paper, the need for childbearing for social cohesion between husband and wife, between inlaws, and between generations was also emphasized. A marriage or a family could not exist in the absence of children:

I: As a parent, are there good things about having children?

R: Yes, because if you are married and you cannot have children, people will not see use in you and will not respect you. But when you have a child people will refer to you as someone's mother, and even when you've died leaving children, your name will never cease as they'll always refer to the children as son or daughter of the late so and so, but if you die without children, people totally forget about you [laughs].

I: Are there other good things about having children?

R: That is the most important, the others follow. (HAART 124)

When you bear children, you are regarded as a complete woman and wife [laughs], and people give you respect, referring to you as the mother of so and so. You can never get respect when you are married and you don't have children, people will start saying you came [to the husband's home] just to eat and fill up the toilets [laughs]. And this can even make your husband divorce you. ... Children bring joy, unite the husband and wife because they look at that child as shared blood and once children are grown they can help with the housework and as a mother you are happy when children are able to cook and serve you food. It's good to have children. (HAART 108)

We began as two people, but when we got children we became very happy, our family now included children. Even if we go on a journey [possible metaphor for death?] we have children and we know the family is in good hands. ... There's joy and happiness in the family. (HAART 96)

The establishment and re-establishment of marital and familial bonds continued despite sickness and, later, treatment paths were convoluted, and the onset of AIDS and, later, treatment overlapped with the beginnings of new marriages and the ends of old ones, as demonstrated by responses to survey questions about marriage and childbearing.

All patients were or had been married; but only 33% had stayed married to the same person since they began treatment. Forty percent had experienced the death of at least one spouse, and 15% had been widowed twice or more, according to their treatment partners. Thirteen per cent were reported to have married a new partner during the course of treatment – in other words, after they were undeniably aware they were HIV-positive. An unknown number also entered into marriages when they suspected, but had not clinically confirmed, that they had HIV. Thus, the need for the familial cohesion and marital bonding brought about by bearing children persisted, co-existing with apprehensions about the dangers of bearing children while sick or in treatment.

Only four out of 87 patients (or 5%) were reported to have fathered or given birth to children during the period when they were sick with AIDS-related conditions, but before they started

treatment. In the period since starting treatment, however, 19 patients, comprising 22% of the entire patient population, had reportedly had at least one child. This mini-baby-boom during treatment contrasts with respondents' answers when asked whether their patient wished to have more children: only 6% said their patient did. This contrast supports the conclusions other research on HIV, treatment and fertility desires, in which reported desire for more children lags behind the number of children actually born. However, as we argue below, this discrepancy should not be interpreted as evidence of an unmet need for family planning.

Pregnancy and danger

Despite the importance and enjoyment of children, survey and interview respondents articulated a broad normative sense that in general people with AIDS ought not to have children, and even those on treatment should refrain from childbearing. In interview, the primary reason given for stopping childbearing was that the combination of pregnancy and HAART brought severe risk to women. Concerns about the possibility of a sick child being born, or about the possibility of the child being orphaned if the parents died from their sickness were subordinate to concerns about pregnancy itself, perhaps because the spectre of parental death had been staved off by treatment. This danger was described variously as being "weak" or "losing blood", in response to being asked "What would you say to a woman on treatment who was thinking about having a baby":

I would advise [other women on treatment] not to have more children, because if you stop giving birth you remain healthy and strong, yet giving birth weakens you. For example, there were two other women also on drugs who died while giving birth, and another gave birth but is weak. (HAART 096)

I: You as her mother, would you like to see your client have more children?

R: No, I don't want ... When you're sick and you become pregnant, that's when you start weakening. I am praying to God, at least I may be able to look after these ones, not to have another problem. What you were eating,

you may not eat it when you conceive. For example, you may refuse milk or beans, lose appetite. Instead of eating and gaining [weight], you will become weak. (HAART 08) I: What would be your advice about having more children while on treatment or whole one is HIV positive?

R: I would advise her not to give birth because you lose a lot of blood and become weak and can even have an HIV positive child. I would advise her to consult the doctors. (HAART 53)

"consult Those who did the doctors." overwhelmingly report that they were told not to get pregnant while on treatment. In the survey, 68% said that they had received information about having children while on treatment from either radio programs or clinic staff. In terms of the content of the advice, 92% said that they were told explicitly not to conceive while on treatment, and only 8% said they were told that it could be possible to have a healthy pregnancy while being treated. According to interview participants, this advice was conveyed in the same idiom of blood loss and cumulating weakness.

We talked to [the health volunteer] but he said it's not right to conceive. You may get more problems. You may reach the time for delivery and you become weak or die. (HAART 53).

We have four [children as a couple] and altogether we have six children (including stepchildren). [The clinic staff] advised us that if we continue giving birth we will become weak, so we decided to stop with those four children (HAART 96)

I: Have you and your husband talked about having more children while on treatment with the health worker?

R: Yes, they told us that it's not good as the woman loses too much blood. (HAART 117)

One woman describes the health worker's cautions about not getting pregnant again as an enlightenment which explained the depletion and difficulties of her last pregnancy while HIV-positive:

I: If it were not for this HIV/AIDS, do you think you and your husband would have had more children?

R: I think we would have had more because if we had not tested and gotten this advice, we would have unknowingly continued having children but after getting advice I even noticed I was too weak when I delivered this last child, and yet we didn't know the reason, and that's why we even spent a lot of money [on therapies to regain her strength] — we were doing things in the darkness but after getting the light we decided not to have more children and now we are hardworking and healthy. We have enough family — let us work hard to care for it. (HAART 96)

This description of pregnancy as a time of heightened vulnerability resonates with the work of Rachel Chapman (2002) and Denise Allen Roth in Mozambique and respectively. 37-38 Both describe pregnancy and birth as a time during which women are particularly at risk not only to the complications of pregnancy, but also to other forms of ill-being. The idea of cumulating weakness and loss of blood is similarly reminiscent of Caroline Bledsoe's work in the Gambia, in which women described their reproductive resources as a finite quantity of energy that is depleted with each birth. If a woman is unable to replenish this energy, she will become weaker and weaker with each birth. For those on treatment in Kabarole, pregnancy is similarly understood as a risky, potentially depleting time.

Having "enough" children

Nonetheless, participants said that under some circumstances, the risks of pregnancy were worth undertaking, most notably if a couple had not yet had "enough" children. Once "enough" children had been born, the risks of pregnancy grew out of proportion to the benefit of any further births, but having an inadequate number of children was also undesirable. Between two and four children were considered "enough".

If one is on treatment and feeling strong, they can have one or two children, but I would advise one who's weak to not get pregnant because their heath can deteriorate and they die. If one already has two or three children, they can stop. That's enough. (HAART 141).

They [women on treatment] can still have children, though not very many, because the more you produce the more blood one loses and the weaker they become. What I say is they can have a few children like two or three. (HAART 13).

Those who don't have any children can have one or two and stop, because if they continue giving birth they get weak and even die in the process. (HAART)

One particular context for having children while on treatment deserves note. If a woman on treatment married a person who had no children, giving that person a child could be necessary to the success of the marriage.

It's not good to live without children. People will think you are barren and food for nothing [i.e. that you give nothing in return for the food you consume]. The man can even divorce you and marry other women to bear him children. (HAART 53)

Another respondent said that the client, her daughter, wanted to have more children as part of her quest to get married again after the death of her former spouse, despite the mother's disapproval:

I: Do you think she will think about marrying again and producing other children, now that she is taking drugs and her life has improved and she is on treatment?

R: She has been talking about going for marriage ever since she started taking the drugs, and she even has a plan of producing children, but me, I am not in favour of her plan ... I told her to stop with her two children [from her former husband] without thinking about producing more. (HAART 28)

For those who, like the mother above, believed that pregnancy on treatment was dangerous, new marriages presented a dilemma. One participant asked the interviewer for advice on how to balance the desires of her new husband for a child with the risks of childbearing. The interviewer responds by validating the idea of having "enough" children before swearing off pregnancies on treatment:

I: Thank you very much [for the interview]. Is there anything else you wish to say?

R: You may have a spouse with no children and he requests you to have children for him,

though he is aware you are sick and seeking treatment. I told my spouse, "You know I am sick, I don't want to produce [children]", but he said he will take care of me. Is it possible or --?

I: ... Does your spouse have any children? *R:* No.

I: You see ... if someone has no child and may want one or two, then you may decide [to get pregnant]. If you see there's no alternative, then visit the health centre for advice. (HAART 28)

Other women did not defer to their spouse's views on childbearing, but said they were willing to risk pregnancy in order to fulfill their own desires for a particular family configuration, particularly in terms of gender balance. One woman, who said she had been told not to have more children by her health worker, still wanted a daughter to replace the one she had lost:

R: Now I only have three boys, I feel I want to have a girl, at least one [laughs].

I: Now that you're both on treatment, would you like to have more children?

R: ... If my girl had not died I wouldn't get more children, but now I want to have one more and I pray to God to give me a baby girl.

I: What about [your husband], would he like more children?

R: Yes, he also wants me to have a baby girl, thought I think it's not a concern to him because he already has other girls [with former wives].

(HAART 108)

This participant is noteworthy in that she refers explicitly to having children in order to replace others who have died. In her case, she wants to "replace" a particular child, a daughter, rather than produce a number of new children corresponding to children who did not survive.

This "replacement effect" is often postulated in the literature, but did not appear in these interviews, even though 22% of patients had experienced at least one child death. The only participant who said that more children were needed because so many had died was a grandmother, no longer susceptible to pregnancy herself, but wishing that her son's generation

would bear more. She is aware of the purported risks of pregnancy, even though she herself will not bear those risks. The grandmother had lost five of her nine children to AIDS, according to her report; her son and daughter-in-law had lost three out of three.

- *I:* How many more children would you like your son to have?
- R: We the Bakiga [ethnolinguistic minority group], we want many. Five or six, even more.
- I: How would that make you feel if he was able to have many children?
- R: I would feel very happy [laughs]. They would replace my children who died. Nowadays because of this disease, people no longer give birth to many children. The more [children] you produce, the weaker you become. (HAART 88)

AIDS and family configuration

Did this complex mixture of fears and desires surrounding pregnancy while on treatment translate into actual births, or births foregone? The participants were quite clear that having AIDS had changed their family configuration from what it might otherwise have been:

- I: If you compare yourself to your friends, do you have many children or few?
- R: I have few children.
- I: Is that how you planned it, or is it due to AIDS?
- R: It's because of AIDS. (HAART 165)
- R: I want many children but they [health workers] told us when you're sick there's no need for having children though I wanted them. After that teaching we decided to stop there.
- ...I: Would your spouse like to have more children?
- R: She may wish to have one more children, but when she thinks about it she says that we will not manage them or take care of them we stopped and I also agree because it's her choice.
- I: ... Now if you and your spouse were not sick, how many more children would you have?

- I: Two [more] would be enough. (HAART 141)
- I: Do you think if [your husband] were not sick with HIV you would have more children?
- R: Maybe if the sickness had not come we would have had more children, but why should we have more? Maybe by bad luck we would have those that are HIV positive. We decided to stop.
- I: How many more children do you think you would have had?
- R: At least two more. We no longer want to have more children. Let us take care of the children we already have. (HAART 53)

Despite these assertions that childbearing had been curtailed by first AIDS and then HAART, and that no more children were wanted, participants expressed ambivalence when asked how they would feel if they discovered that they or their client had become unexpectedly pregnant. One participant who stated firmly that she and her husband did not wish to have more children, and that she herself had suffered ill effects from her last pregnancy, responded positively to questions about a hypothetical new pregnancy:

- I: How would you feel if you learned you were pregnant?
- R: I would feel happy and ask God to give me the strength to safely deliver the baby and the ability to care for it. ... I would wish to have a boy, because in case I am weak, the boys can work as hard as their father, but for the girls, the time will come when they go and have their own families. (HAART 96)

The same man who said that people on treatment should have only "two or three" children also said he was hoping his wife would have at least one more child, putting his own family of five children well above "two or three" (HAART 117).

- *I:* Now that your wife is on treatment, do you plan to have more children?
- R: We plan to have at least one more and we may end there.
- *I:* When would you like to have that child?
- R: At least next year. ... We hope [his wife] will be stronger then.

In order to delay until his wife was strong enough for pregnancy, he said they were using contraceptive pills. Another respondent (HAART 141) said that he and his wife had decided to stop childbearing after hearing from clinic staff that people on treatment should not have children. This respondent also expressed a strong desire for at least two more children in the next four years, so that "when I am not around, people will recognize my place, that this is [my] home". When the interviewer asked how he would feel if he discovered that day that his wife was pregnant, despite their intention to stop, he laughed and said he would be "very happy".

Women as well as men expressed this disjuncture between the belief that as someone on HAART they should not have more children, and the belief that another pregnancy would be a happy occasion, benefiting the family as a whole. One woman with six living children (HAART 96) also said she and her husband had ceased childbearing after consulting with health workers, said that an "accidental" pregnancy could be a good thing. If she discovered she were accidentally pregnant R:I would feel happy, and ask God to give me the strength to safely deliver the baby and the ability to care for it. ... I would wish to have a boy because in case I am weak the boys can work as hard as their father ... the boys could stay and help me.

I: What would your relatives and friends think if they heard the news?

R: [Laughs] They would be happy, especially the in-laws, they will have more people in their clan. (HAART 96).

"Accidental" children

As noted earlier, according to the survey, 22% of patients had had children while on treatment. When asked about the planned or unplanned status of the pregnancy in interviews, all said that the pregnancy was an undesired accident:

R: We [respondent and his wife] were having sex and the condom slipped off. Afterwards I found it on her body. She is now pregnant, she is weak, she has fever.

I: ... Apart from this [current] pregnancy, would she [his wife] like to have more children?

R: I don't know, myself I don't wish to have more, and when she delivers I will tell the doctors to stop her from childbearing completely.

I: So you had not planned for that pregnancy?

R: It just happened. We had not planned to have another child because we're sick and the last one is still very young. (HAART 118)

I: Now I see you are pregnant again, did you want it?

R: We did not want it. It just came.

I: ... What plans do you have to stop it from happening again, like you have just told me this pregnancy came and wasn't intended?

R: We are planning that we don't reproduce again, we are planning, but you know, I don't like family planning pills or even the injections.

I: Now what have you prepared, because if you are not going to use them you are going to give birth again?
R: I don't know. Maybe I will start to use them. (HAART 14)

Whether these "accidental pregnancies" are the result of contraceptive failure, a deferral of the decision to use or not use family planning, or the reluctance of participants to tell researchers that they were deliberately going ahead with childbearing in defiance of all the "official" advice they had received is not clear. In addition, a pregnancy may be unintended, but still welcomed. Statements by participants as to whether a pregnancy was or was not planned should be read as statements of how respondents felt they should speak about that pregnancy in a particular context, not as objective descriptions of whether they had intended to have another child.

Limitations of the study

This study is limited in three ways. First, it is confined to one time, place and context: a rural community in western Uganda, in which the epidemic has deep roots going back to the late 1970s, and is currently generalized throughout the population. Our results may not resonate with communities in which AIDS is historically novel, in which it is restricted to particular sub-groups of

the population, or in which treatment is inaccessible. Second, our sample size is small, as this was a labour-intensive qualitative study, and thus we cannot claim to have a random or truly representative sample. As noted in the methodology section, we did attempt to stratify our sample relative to the population from which it was drawn, including over-sampling along some theoretically relevant parameters.

Third, the participants in this study were interviewed in their capacity as partners for people on treatment, not in their capacity as people on treatment themselves. Thus, participants spoke of their perceptions of what other people ought or ought not to do about having children while on treatment. Our use of third party reports may be viewed as a limitation, but we believe it may also be viewed as the strength of this study. Our participants were not placed in a position of potential conflict of interest as a result of being beneficiaries of the same programme which was eliciting their opinions. Thus, we think a case can be made that our participants were perhaps more likely to give responses which reflected their actual feelings about childbearing, rather than giving responses reflecting what they believed the sponsors of the treatment programme most wanted to hear. We cannot establish the existence or the strength of such a desirability bias in this study, but we think it is possible that people who do not have a direct personal investment in a treatment programme may be more reliable sources of information than those who do, especially when the issue under scrutiny is as symbolically and normatively loaded as childbearing.

Conclusion

This paper offers food for thought, rather than explicit prescriptions for policymakers. We urge policymakers to take estimates of "unmet need" and projections of demand for family planning services with several grains of salt, mindful that the complexities of childbearing are irreducible to yes-or-no survey responses or one-off questioning. The best rationale for expanding family planning services in communities where treatment is being rolled out is the oldest rationale: the ability to control one's fertility is an absolute prerequisite

for health and self-determination, especially amongst women. The fact that "unmet need" cannot be pinned down does not alter the moral imperative at the policy level that every woman should be able to use the safest, most reliable methods available to plan her pregnancies.

While most people say they do not wish to have more children while on treatment, this intention coexists with contradictory desires for the benefits and happiness that more children might bring. It is impossible to say which of these incongruent interests will manifest itself in actual pregnancies, or in avoidance of pregnancy. The complexities outlined here call into question the entire notion of a clear and firm intention to stop childbearing and therefore, the idea that "unmet need" for contraception can be posited and quantified. We hope this paper has gone some distance towards clarifying the murkiness (if murkiness can be clarified) of childbearing attitudes, desires and outcomes in the presence of an AIDS pandemic being slowly transformed by treatment.

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