ORIGINAL RESEARCH ARTICLE

Marriage, Intimacy and Risk of HIV Infection in South West Uganda

Dorice Agol¹, Dominic Bukenya², Janet Seeley^{2,3*}, Elizabeth Kabunga² and Anne Katahoire⁴

¹School of International Development, University of East Anglia, Norwich, NR4 7HL, UK; ²MRC/UVRI Uganda Research Unit on AIDS, Entebbe, Uganda; ³London School of Hygiene and Tropical Medicine, London, WC1E 7HT, UK; ⁴Child Health and Development Centre, Makerere University College of Health Sciences, Kampala, Uganda

*For Correspondence: Email: janet.seeley@mrcuganda.org; janet.seeley@lshtm.ac.uk; Phone: +256-417-704141

Abstract

Long-term, monogamous, relationships are often portrayed as protective in HIV prevention campaigns. Focusing on marriage in a community in south west Uganda, we examine why and how people enter long term relationships, what their expectations are and what factors sustain those relationships. Qualitative data were collected using in-depth interviews with 50 men and women randomly selected from a General Population Cohort. The results showed that managing expectations to sustain marriage is challenging; however the socio-economic and cultural benefits of marriage: having children, property acquisition as well as securing societal status tend to overshadow the costs associated with risks from infidelity such as sexually transmitted infections (including HIV). Recognising the compromises that couples may make to sustain their marriage is an important step towards acknowledging that 'being faithful' may be about staying together and showing commitment, not sexual exclusivity. (Afr J Reprod Health 2014; 18[4]: 86-94).

Keywords: marriage; long-term relationship; HIV epidemic; Uganda

Résumé

Les relations monogames à long terme, sont souvent dépeintes comme une protection dans les campagnes de prévention du VIH. En mettant l'accent sur le mariage dans une communauté dans le sud ouest de l'Ouganda, nous examinons pourquoi et comment les gens entrent dans des relations à long terme, quelles sont leurs attentes et quels facteurs soutiennent ces relations. Les données qualitatives ont été recueillies au moyen d'entrevues en profondeur avec 50 hommes et femmes choisis au hasard à partir d'une population générale cohorte. Les résultats ont montré que la gestion des attentes pour soutenir le mariage est difficile, mais les avantages socio-économiques et culturels du mariage: avoir des enfants, acquis de la propriété ainsi que l'obtention d'un bon étatcivil dans la société, ont tendance à éclipser les coûts associés aux risques de l'infidélité telles que les infections sexuellement transmissibles (y compris le VIH). La reconnaissance des compromis que les couples peuvent faire pour soutenir leur mariage, est une étape importante vers la reconnaissance du fait que «être fidèle» peut signifier rester ensemble et de faire preuve de l'engagement, pas l'exclusivité sexuelle. (Afr J Reprod Health 2014; 18[4]: 86-94).

Mots clés: mariage; relation à long terme; Épidémie de VIH; Ouganda

Introduction

Halperin and Epstein¹ writing in The Lancet suggested that concurrent sexual partnerships were fuelling the HIV epidemic in Africa. This concern was not new, as Epstein has described elsewhere², but their article served as a reminder that key populations such as sex workers, men who have sex with men and fisherfolk, for example, may not be the only people at higher risk of HIV infection, particularly in countries with high HIV-prevalence. Five years later, in 2009, the Uganda AIDS Commission released a report on the modes

of transmission which showed that there had been a shift in the HIV epidemic in Uganda from younger to older people within the age bracket of 35-39 years for men and 30-34 for women³. The authors of the report note that `the greatest need for HIV prevention exists among people with multiple partners whether in casual or long-term marital or cohabiting relationships' (p.viii).

An awareness of the risk of HIV infection for individuals within established relationships has existed since the 1980s'. Campaigns at that time urged people to 'love faithfully'^{4,5}. In the last decade concerns about partner concurrency have

been a theme of prevention messages warning about the danger of HIV spreading through sexual networks^{6,7}. While approaches to HIV prevention have been assessed in a number of different studies⁸⁻¹¹, less attention has been paid to people's understanding of the key concepts used in these campaigns, such as 'abstinence' and 'faithfulness' 12-14, as well as what people may mean by 'long-term relationship'.

In this paper we focus on the social construction of marriage as a long-term relationship and examine men and women's definitions of these unions and their understanding of the appropriate behaviour of long-term partners in south west Uganda. We also explored the possible linkages to risk of HIV transmission.

Background

Defining marriage

The term 'marriage' has variously been defined. Claude Levi-Strauss¹⁵ described marriage as the exchange of women to form alliances between groups while more recent commentators, such as Duran Bell¹⁶ suggest that marriage can be defined as:

`a relationship between one or more men [...] in severalty to one or more women that provides those men with a demand-right of sexual access within a domestic group and identifies women who bear the obligation of yielding to the demands of those specific men' (p.241).

Beyond definitions on the functions of marriage is a recognition that these long-term relationships are often sustained by desirable qualities such as love and faithfulness¹⁷⁻¹⁹. The popular press in Uganda echoes this theme with recent articles in the Bukedde Newspaper (a local Luganda language newspaper which has a column that provides advice on marriage and relationships) describing marriage as a relationship of a man and woman united forever by love and a shared vision.

Marriage in Central and South West Uganda

Marriage among the Baganda, the main ethnic group in the study area, can be a formal or

informal arrangement established customary, religious or civic rules. In customary marriage, a contract is made between the intending bridegroom and the bride's father (or equivalent). The actual marriage consists of the family giving their daughter to the man and his family and the bridegroom providing certain customary payments in return as bride wealth. Customary marriage ceremonies tend to be mediated by family members and relatives who often help in choosing a partner, organizing the ceremony as well as providing marital guidance. In religious marriages (Christian or Islamic), the ceremonies are performed in a church/mosque while civic services are held in the government registry office. Couples also co-habit without preforming a ceremony, often referring to themselves as husband and wife²⁰. In this setting, marriage is patriarchal and virilocal (the woman moves to the man's home).

Baganda marriages are widely portrayed as a permanent partnership, a narrative which is embedded in processes of socialization, especially when girls are growing up^{21,22}. Good behaviour has been instilled in young girls by their mothers and paternal aunts and, as in the past, women are expected to be the ones to sustain their marriages at any cost. According to Kirega-Gava (2008), friendliness, submission, tolerance and being protective of one's partner are important female attributes that Baganda women should use to keep their husbands. The longevity of a Baganda is enhanced by the successful marriage introduction and inclusion of in-laws (particularly parents) in the couple's lives encouraging their daughters to be faithful and submissive^{22,23}, including accepting that he may take other wives and have other sexual partners.

Study setting

Data for this study were collected over a five month period in 2011 in Kalungu district, south west Uganda. The main ethnic group in the study area is the Baganda with some immigrants originating from Rwanda and Tanzania. The majority of the population is Roman Catholics and the rest are Protestants and Muslims. Luganda is the main language spoken. Livelihoods are based mainly around agriculture with the majority of

people growing crops such as coffee, tobacco, bananas, beans, maize, potatoes and cassava.

Methods

Sampling and data collection

The study was conducted within a General Population Cohort (GPC), of the Medical Research Council/Uganda Virus Research Institute (MRC/UVRI) that comprises the adult population of 25 villages in one sub-county. Data on sex, education, age and household composition have been collected annually since 1989, in addition to HIV serology and behavioural data²⁴.

In August 2011, a random stratified sample of 50 people (24 men and 26 women) who according to the GPC dataset had been in a relationship for more than two years was selected from data collected in 2008/2009. The random sample was generated using a statistical package by an statistician MRC/UVRI from all participants in the GPC dataset. The sample was stratified by religion, age and sex. One individual from a couple was selected. A total sample of 50 people, with approximately equal numbers of men and women, in order to capture a range of different types of relationship experience in order to adequately answer our research questions. Based on previous experience we estimated that we would reach saturation with this sample size: data across the different respondents was compared as the study progressed and similar types information began to emerge.

Through in-depth interviews we asked men and women what they meant when they said that they were in an intimate long-term relationship and what their expectations were of their partner. We explored the implications of conceptualizations for decisions and actions made by men and women as well as for HIV prevention messages and interventions. We did not attempt to gather data from both members of a couple for this study since we were uncertain how the knowledge that their partner was also being interviewed might affect an individual's answers. The interviews were conducted by experienced male and female interviewers and were tape-recorded, transcribed and translated into English.

Ethical clearance was granted by Science and Ethics Committee of the Uganda Virus Research Institute and overall approval by the Uganda National Council for Science and Technology.

Data analysis

Thematic content analysis was conducted on the describing language used in long-term relationships between men and women. The process of thematic analysis involved authors one and two reading carefully through each transcript and identifying themes for coding. These were discussed with the interviewers and the rest of the research team. Through this process themes were identified, then reviewed and defined. Following the coding of the data we systematically analysed textual information with regard to the meanings that men and women had attached to marriage as a long-term relationship, what they expected from their partner and the things that were expected of them. We carefully analysed the language used to describe marriage as a long-term relationship. We used a constant comparison analysis 25,26 to tease out the similarities and differences in what respondents said about their relationships.

Limitations

Social desirability may have biased some of our findings, if respondents wished to portray themselves and their views on their partner in a positive light to the interviewers. A larger sample size may have yielded more examples of different types of relationship experience. However, given the experience of the interviewers (all of whom were trained in in-depth interviewing and had between five [5] and 25 years of research experience) and their awareness of the possibility of bias, they were able to encourage participants to speak frankly. As noted above, we aimed for data saturation with our sampling. Based on our constant comparison of the information collected we are as confident as possible that no significantly different viewpoints were missed.

Results

Socio-economic and marital status

The minimum age for men and women in the

sample was 20 and maximum age was 70 years for both genders. Two people had not been to school. Thirty two had left school either after completing or during their primary education. Only twelve gained secondary education, four obtained Thirty five tertiary/higher education. Christians while the rest (15) were Muslim. Cash generated from the sale of farm produce was the main source of livelihood complemented by small businesses such as selling locally brewed alcohol, food vending, tailoring, carpentry, farm labouring, brick making, electrical wiring and provision of transport using motorbikes taxis.

Forty two men and women said they were married and the rest were either separated or widowed (Table 1) (their long-term relationship had ended in the last 12 months, which is why they had been included in the sample for the study). The average age of the first intimate relationship for men and women was reported to be 18 and 17 years respectively. Time spent together in their relationship ranged from between two (2) and 54 years.

Table1: Marital status of men and women in long-term relationships in rural Uganda (N=50)

Status	Men	Women	Total
Married	34% (17)	50% (25)	84% (42)
Single	6%(3)	0% (0)	6% (3)
Separated	4%(2)	2% (1)	6% (3)
Widowed	4%(2)	0% (0)	4%(2)
Total	48% (24)	52% (26)	100% (50)

Of the married individuals, 22 were in monogamous and 20 in polygamous relationships.

Three quarters of marriages were customary while the remaining relationships were established religious ceremonies through and arrangements. Twenty seven relationships were said to have been initiated by men; twenty through the mediation of family/relatives and friends; two were reported to have been formed due to rape while one was said to have been through spiritual means (the man claimed he had had a call from God to marry a particular woman). We noted that several relationships were established within a few particularly those initiated through weeks. mediation.

The meaning of marriage as a long-term relationship

All but three respondents considered their current relationship to be long-term. Our analyses showed that 'being married' was a principal indicator given by respondents of being in a 'long-term relationship'. Additional factors were the number of years spent together, having children, joint investments and commitment to and tolerance of each other.

Having children was an important aspect of the definition of a long-term relationship even if individuals had been married for just two years. The average number of children per individual respondent was seven with a minimum of one and a maximum of eighteen. Some men and women considered children to be a means of validating a long-term relationship. A 48 year old man said: "if a woman does not produce me a child I cease to consider her my long-term partner". Similarly a 33 year old woman said "It is a long period becauseI became experienced with him and we produced children".

Working towards a common goal through joint investments was perceived by both men and women to be an important aspect of long-term marital commitment. Joint efforts such as cultivating the land and/or running small business enterprises were believed to unite married couples and keep them together. Church marriages were assumed to denote long-term relationships because of the vows that were taken. A 44 year old woman said "We got married with each other in church and in church marriage the law of the church binds you together till death." Some men and women considered that their marriages were sustained over the long-term because of their tolerance and patience with each other. Undesirable behaviour such as promiscuity, being unsupportive, uncaring, unloving, disrespectful, disobedient and arrogant were tolerated.

Reasons for getting married and qualities of attraction

For men, commonly cited reasons for getting married were: a desire for children and the need to satisfy their sexual drive. Women said they got married because of unwanted pregnancy, socio-

cultural norms and expectations (e.g. traditions and peer pressure). Poverty and a need for support, security and stability were mentioned by both men and women. Dropping out of school, due to lack of school fees, was often a trigger for young men and women to get married as their families urged them to settle down. In addition, some men commented that they married with the purpose of establishing a stable lifestyle to avoid `anti-social behaviour' such as excess alcohol consumption.

Women's desire to get support for children that they had had with a partner or with another man encouraged them to press for marriage (this often meant co-habitation, rather than a ceremony). A 39 year old woman who already had three children outside marriage said that when she got married she did not wish for anything, just a partner who could support her children.

Men were attracted by beauty, hard work, and their own sexual desire for a woman. In contrast, women said that they were attracted to a partner who had the potential to offer financial and material support. Good behaviour was mentioned by both men and women: faithfulness, discipline, respect, humility, Godliness (religious), affection, warmth and friendliness. Being faithful was said to be an important quality for both men and women and the dangers of infidelity, as a risk factor for HIV infection, was often mentioned. Consequently, some men and women avoided forming relationships with people who they thought were seen as being "loose" as such individuals were likely to have extra-marital sexual relationships. A 70 year old man who was in search of a new partner after the death of his wife told us that he had said to his friend: "I give to you that assignment of looking for an older woman who will respect me by not going with other men and who will counsel me whenever I misbehave like telling me not to over drink."

Three men admitted having extra-marital sexual relationships. The desire for more children, failure of their partners to show them love and care were perceived as acceptable reasons for this behaviour. A 30 year old man said: "I never wanted to produce all my children from one woman. You can produce all your children from one woman and they all become fools, yet you can

produce a child outside marriage who is a consolation."

Two women said that they were aware of their partners' extra-marital affairs. Nevertheless, infidelity did not necessarily lead to separation or divorce as this was seen by both men and women as breaking marriage vows, whether customary or religious.

Overall, our results show that the desire to marry a partner with good qualities such as being faithful and/or attractive gradually became less significant over time for both men and women. As relationships matured men and women focused on sustaining their relationships because they wanted stability and security, and support and a good livelihood for their families.

Sustaining marriage as long-term relationships; perceptions and expectations

Sexual reproduction, faithfulness, care, support, intimacy and affection were among the expectations both men and women listed as being important in long-term marital relationships. However, the majority of the obligations seemed to fall to women (e.g. sexual provision, producing children, household chores, agricultural labour) compared to their male counterparts. Failure to fulfil such expectations led to misunderstandings and subsequent marital discord and, when sexual satisfaction and children were desired, infidelity.

Love, support and care

A loving, caring and supportive partner appeared to be a common expectation of men and women. To fulfil this expectation, men were expected by women to provide basic needs such as food, clothing, education and medical care. Although more than three quarters of respondents reported that the man was currently providing these needs, three women complained that their partners did not give them any support. In such circumstances, mobility seemed to play an important role whereby the man had gone away in search of money but failed to support his family who he had left at home. In one case the wife said she was looking for a new partner to support her.

Women were expected to perform basic household chores (for example cooking and washing) as well as making the home a welcoming place for their partners and visitors. Men who helped with household chores such as fetching water, splitting firewood and cleaning were generally seen as being caring and supportive to their partners.

Performing joint livelihood activities such as cultivating the land and/or running small businesses was perceived by men and women as showing support for each other. More than half of the respondents reported working towards a common goal to secure a better future for each other and for their children.

Many marriages seemed to benefit from support and care that emanated from extended family members (in-laws), for example by providing cash or property donations. In some households, sustained support from relatives stabilized unhappy marriages. One woman said that she would have abandoned her marriage seven years earlier were it not for her husband's family who supported and cared for her.

Half of the respondents, both men and women, indicated that male intimacy and affection were shown through offering gifts. Gifts ranged from investments (e.g. purchasing land and opening up a new business) to buying clothing and favourite food and drinks. Both men and women expected the woman to provide sex in return. Sex was something that men could demand, not women; it was men who made decisions about when to have sex. However, women could refuse to provide sex. Two women, for example, reported that they stopped having sexual intercourse with their husbands when the man failed to support them.

Reproduction and the value of children

Sex for procreation within a relationship was considered important by both men and women. As noted above, having children signified fertility, stability, commitment, security, respect, love, affection, intimacy and support. The number of children produced was positively correlated with the length of a relationship; having more children showed that the relationship was `long-term', irrespective of the overall duration.

For men, producing many children was seen as an important sign of masculinity. Consequently, when a woman did not conceive, a man felt justified in seeking a second wife. Many men expected their partners to keep on producing children as a demonstration of love and affection as well as their own virility. When it came to decisions about when to have children some women said that they secretly applied birth control measures without consulting their partner to control the number of children. Condoms as a method of contraception was rare as most women stated that their partners did not approve of them.

Children were viewed as the basis of security, stability and hope especially for those who were already receiving some support from their older children and grandchildren. The patrilineal descent system of the Baganda, where children belong to the father's clan, resulted in some women remaining in marriages they may have otherwise left (when, for example, a husband took a second wife or failed to provide support), to ensure the successful inheritance of property by their who were in difficult children. Women relationships said that they could not just walk out of their marriages, for this would create instability and insecurity for their children.

While having children was valued, some men complained that their partners no longer cared for them once they had children. Two men reported marrying a second wife because their partners transferred all their love to the children. Similarly, some women reported being neglected by their spouse after they had produced children together.

Discussion

Participants in our study exhibited a wide array of opinions about the nature of long term relationships and their expectations of their partners. Those who had stayed with their partner for many years (more than ten years) were often motivated by the desire to maintain stability and security for their family. This security may be achieved at the cost of fidelity; while loyalty to a spouse may be expected, faithfulness (monogamy) was not. Indeed, many women were reconciled to their husbands seeking other women in order to satisfy their sexual desires.

The acceptance of unfaithfulness by men provides a channel for HIV infection to enter a long-term relationship, a finding not only

supported by Wabwire-Mangen and colleagues report³ but also by other research^{1,27-36}. Marriage is often entangled with socio- economic factors and cultural norms which would formerly have been protective, by ensuring a woman's future, but in recent years pose a threat because of HIV. However, it should be noted that a study by Anglewicz and colleagues³⁷ showed that many rural Malawians overestimated their likelihood of being infected by HIV because of their concerns about marital infidelity. A problem for HIV prevention messages is that the level of acceptance of unfaithfulness varies between couples and what is appropriate (and accepted) in a certain marriage (and to some individuals) may not be the same for others or at a different time.

A desire for children means that unprotected sex in a marriage is inevitable ^{17,38,39} and requesting the use of a condom may lead to suspicions of infidelity. Current preventive strategies need to embrace this tension, and provide support for couple testing and, should children be desired, safe pregnancy and child birth for couples where one or both partners are HIV-positive.

Understanding what couples mean by 'faithfulness' is important. Faithfulness may imply staying together, supporting each other and being tolerant of a partner's undesirable behaviours. Infidelity may be ignored or discounted in this context because of the other benefits of marriage or simply of cultural norms that men need to satisfy their sexual urge. Faithfulness may also imply a degree of trust that precludes the use of condoms^{33,35,39-41}. Men tend to have more power to oppose condom use because of their desire for their wife to demonstrate their trust in them^{39,40}. Williamson and colleagues³⁹ found that women's insistence on the use condoms in order to prevent HIV infection created distrust among some couples. Similarly, Karamagi and colleagues 40 found that women in eastern Uganda could not request that their partner use a condom because of the fear of intimate partner violence.

Many African marriages are either formally or informally polygamous¹. A man may take additional wives, and be faithful to them. Indeed while engaging with a polygamous relationship can be risky, men and women in our study

community saw polygamy as a way to control promiscuity. This, again, suggests caution over assuming particular relationships are or are not protective.

Conclusion

The process of fulfilling marital obligations and managing expectations in order to sustain marriage is complex and requires compromise, endurance, tolerance and patience. Recognising the differences in long-term relationships and the compromises that couples may make to sustain their marriage is an important step towards acknowledging that 'being faithful' may be about staying together and showing commitment, not sexual exclusivity.

Acknowledgements

We are grateful for funding to the UK Medical Research Council (MRC) and the UK Department for International Development (DFID) under the MRC/DFID Concordat agreement. We thank the study participants who gave us their time and shared their information. We are indebted to Grace Tumwekwase, Fatuma Ssembajja, Matilda Ndagire Tarsh and Richard Ndungutse for taking part in collecting the data.

Contribution of authors

JS and AK conceived the study. DB and EK managed the study and were involved in collecting the data. DA, JS, DB and EK analysed the data. DA wrote the first draft of the paper and all authors commented and approved the final version.

References

- Halperin DT, Epstein H. Concurrent sexual partnerships help to explain Africa's high HIV prevalence: implications for prevention. *The Lancet* 2004; 364(9428): 4-6.
- Epstein H. The invisible cure: why we are losing the fight against AIDS in Africa. Basingstoke, UK: Macmillan; 2008.
- Wabwire-Mangen F, Odit M, Kirungi W, D.K K, Wanyama JO. Uganda - HIV prevention response and modes of transmission analysis. Kampala: UNAIDS and Uganda National AIDS Commission, 2009.

 Thornton RJ. Unimagined community: sex, networks, and AIDS in Uganda and South Africa. Berkeley. CA.: University of California Press; 2008.

- Epstein H. Uganda's zero grazing campaign. Spotlight on Prevention n.d.; 1: http://www.aidstar-one.com/sites/ default/files/additional_resources/026_00_AIDStar_S potlightR6.pdf.
- Green EC, Kajubi P, Ruark A, Kamya S, D'Errico N, Hearst N. The need to reemphasize behavior change for HIV prevention in Uganda: a qualitative study. Studies in Family Planning 2013; 44(1): 25-43.
- The Centre for Communication Programmes https://www. jhuccp.org/resource_center/media/get-sexualnetwork-campaign-materials (accessed 8th March 2014
- Allen T, Heald S. HIV/AIDS Policy in Africa: What has worked in Uganda and what has failed in Botswana? *Journal of International Development* 2004; 16(8): 1141-54.
- Bessinger R, Katende C, Gupta N. Multi-media campaign exposure effects on knowledge and use of condoms for STI and HIV/AIDS prevention in Uganda. Evaluation and Program Planning 2004; 27(4): 397-407.
- De Walque D. How does the impact of an HIV/AIDS information campaign vary with educational attainment? Evidence from rural Uganda. *Journal of Development Economics* 2007; 84(2): 686-714.
- 11. Murphy EM, Greene ME, Mihailovic A, Olupot-Olupot P. Was the "ABC" approach (abstinence, being faithful, using condoms) responsible for Uganda's decline in HIV? PLoS Medicine 2006; 3(9): e379.
- 12. Lillie T, Pulerwitz J, Curbow B. Kenyan in-school youths' level of understanding of abstinence, being faithful, and consistent condom use terms: Implications for HIV-prevention programs. *Journal of Health Communication* 2009; 14(3): 276-92.
- Winskell K, Beres LK, Hill E, Mbakwem BC, Obyerodhyambo O. Making sense of abstinence: social representations in young Africans' HIV-related narratives from six countries. *Culture*, *Health and Sexuality* 2011; 13(8): 945-59.
- 14. Goodson P, Suther S, Pruitt B, Wilson K. Defining Abstinence: Views of Directors, Instructors, and Participants in Abstinence-Only-Until-Marriage Programs in Texas. *Journal of School Health* 2003; 73(3): 91-6.
- Lévi-Strauss C. The elementary structures of kinship. Boston, MA, USA: Beacon Press; 1969.
- 16. Bell D. Defining marriage and legitimacy. *Current Anthropology* 1997; 38(2): 237-53.
- 17. Rhodes T, Cusick L. Love and intimacy in relationship risk management: HIV positive people and their sexual partners. *Sociology of Health and Illness* 2000; 22(1): 1-26
- 18. Swensen CH, Eskew RW, Kohlhepp KA. Five factors in long-term marriages. *Journal of Family and Economic Issues* 1984; 7(2): 94-106.
- 19. Undie C-C, Crichton J, Eliya Zulu E. Metaphors we love by: Conceptualizations of sex among young people in

- Malawi. African Journal of Reproductive Health 2005; 11(3): 221.
- Mukiza-Gapere J, Ntozi J. Impact of HIV on marriage patterns, customs and practices in Uganda. *Health Transition Review, Supplement* 1995; 5: 201-8.
- Kirega-Gava VP. Ekitabo ky'omukwano n'okwagala. Kampala, Uganda 2008.
- 22. Mpalanyi EKS. Ndikumma. Kampala, Uganda; 1999.
- 23. Parikh SA. The Political Economy of Marriage and HIV: The ABC Approach, "Safe" Infidelity, and Managing Moral Risk in Uganda. American Journal of Public Health 2007; 97(7): 1198-208.
- Asiki G, Murphy G, Nakiyingi-Miiro J, et al. The general cohort in rural south-western Uganda: A platform for communicable and non-communicable diseases studies *International Journal of Epidemiology* 2013; 87: 511-5.
- Taylor S, Bogdan R. Introduction to research methods. New York: Wiley; 1984.
- Bryman A. Social research methods. Oxford: Oxford University Press; 2012.
- Adih WK, Alexander CS. Determinants of condom use to prevent HIV infection among youth in Ghana. *Journal* of Adolescent Health 1999; 24(1): 63-72.
- Barnighausen T, Hosegood V, Timaeus IM, Newell ML.
 The socioeconomic determinants of HIV incidence: evidence from a longitudinal, population-based study in rural South Africa. AIDS 2007; 21 Suppl 7: S29-38.
- Biraro S, Shafer LA, Kleinschmidt I, et al. Is sexual risk taking behaviour changing in rural south-west Uganda? Behaviour trends in a rural population cohort 1993–2006. Sexually Transmitted Infections 2009; 85(Supplement 1): i3-i11.
- 30. Boily M-C, Alary M, Baggaley R. Neglected Issues and Hypotheses Regarding the Impact of Sexual Concurrency on HIV and Sexually Transmitted Infections. AIDS and Behavior 2012; 16(2): 304-11.
- 31. Boerma JT, Gregson S, Nyamukapa C, Urassa M. Understanding the uneven spread of HIV within Africa: comparative study of biologic, behavioral, and contextual factors in rural populations in Tanzania and Zimbabwe. Sexually Transmitted Diseases 2003; 30(10): 779-87.
- 32. Gregson S, Zhuwau T, Anderson RM, Chandiwana SK. Is there evidence for behaviour change in response to AIDS in rural Zimbabwe? *Social Science and Medicine* 1998; 46(3): 321-30.
- 33. Mnyika KS, Klepp KI, Kvale G, Ole-King'ori N. Risk factors for HIV-1 infection among women in the Arusha region of Tanzania. *Journal of Acquired Immune Deficiency Syndromes* 1996; 11(5): 484-91.
- Nabaitu J, Bachengana C, Seeley J. Marital instability in a rural population in south-west Uganda: implications for the spread of HIV-1 infection. *Africa* 1994; 64(2): 243-51.
- 35. Nobelius A-M, Kalina B, Pool R, Whitworth J, Chesters J, Power R. Sexual partner types and related sexual health risk among out-of-school adolescents in rural south-west Uganda. AIDS Care 2011; 23(2): 252-9.
- 36. Reniers G, Tfaily R. Polygyny, Partnership Concurrency,

and HIV Transmission in Sub-Saharan Africa. *Demography* 2012; 49(3): 1075-101.

- 37. Anglewicz PA, Bignami-Van Assche S, Clark S, Mkandawire J. HIV risk among currently married couples in rural Malawi: what do spouses know about each other? *AIDS and Behavior* 2010; 14(1): 103-12.
- Baumeister RF, Bratslavsky E. Passion, Intimacy, and Time: Passionate Love as a Function of Change in Intimacy. *Personality and Social Psychology Review* 1999; 3(1): 49-67.
- 39. Williamson NE, Liku J, McLoughlin K, Nyamongo IK,

- Nakayima F. A Qualitative Study of Condom Use among Married Couples in Kampala, Uganda. *Reproductive Health Matters* 2006; 14(28): 89-98.
- Karamagi C, Tumwine J, Tylleskar T, Heggenhougen K.
 Intimate partner violence against women in eastern Uganda: implications for HIV prevention. BMC Public Health 2006; 6(1): 284.
- 41. Mnyika KS, Klepp KI, Kvale G, Nilssen S, Kissila PE, Ole-King'ori N. Prevalence of HIV-1 infection in urban, semi-urban and rural areas in Arusha region, Tanzania. *AIDS* 1994; 8(10): 1477-81.