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Socio-cultural and economic antecedents of adolescent sexual decision-making and HIV-risk in rural Uganda

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With more than half of new infections occurring among youth, HIV/AIDS remains a major contributor to morbidity and mortality in Uganda. Semi-structured interviews were performed with 48 adolescents and 15 adult key informants in a rural Ugandan community to identify influences on adolescent sexual decision-making. Inductive data analytic methods revealed five thematic influences: (1) social pressure, (2) decline of the *Senga* (a familial figure who traditionally taught female adolescents about how to run a household), (3) cultural barriers to condom use, (4) knowledge of HIV transmission and modes of prevention, and (5) a moral injunction against sex before marriage. Influences were classified as HIV/AIDS risk and protective factors and organized to form an explanatory framework of adolescent sexual risk-taking. Risk factors pull youth toward risky behavior, while protective factors push them away. Predominance of risk over protective influences explains persistent sexual risk-taking by Ugandan youth. HIV prevention programs designed for Ugandan adolescents should take competing factors and sociocultural and economic influences into account.

Keywords: HIV prevention; adolescents; Uganda; sexual risk-taking

Introduction

The Government of Uganda has led an intensive effort to decrease the spread of human immunodeficiency virus (HIV) (World Health Organization, 2000). Nonetheless, HIV remains a major contributor to morbidity and mortality, with estimates of over 1 million individuals infected (UNAIDS, 2010). While young people (ages 10–24) constitute 33% of Uganda's population, they bear the burden of nearly 50% of its HIV/AIDS cases (Bakeera-Kitaka, Angevine, Dillingham, & Kekitiinwa, 2009). Recent data suggest that high-risk behavior has increased in the last decade among youth in rural southwest Uganda (Biraro et al., 2009), including: early onset of sexual activity (14.8% initiating sex before age 15); early pregnancies (25% of 15–19 year olds have given birth to a child) (UDHS, 2006); low rates of condom use at last sex (<30%); and over 50% of adolescent boys reporting casual partners (Opio et al., 2008; UNAIDS, 2009; UNGASS, 2010).

There is much more to be understood about contextual influences on sexual choices among adolescents (Birungi, Mugisha, Obare, & Nyombi, 2009). Accordingly, we examine adolescents' and adult key informants' accounts of adolescent sexual decision-making and HIV-associated risk behaviors in a rural Ugandan community. The resulting explanatory framework provides concrete direction for the design of adolescent HIV risk-reduction programs in resource-limited settings.

Background

Adolescents have been identified as a special needs group for sexual health due to developmentally normative impulsive decision-making, which can lead to risky sexual behavior; and a lack of access to information and services (Marston & King, 2006; McMauley & Salter, 1995) During adolescence, one's sexuality becomes more salient and sexual curiosity increases significantly (Buzwell & Rosenthal, 1996; Baumgartner, Valkenburg, & Peter, 2010). This developmental process is highly influenced by social context and cultural norms (Fantasia, 2011; Michels, Kropp, Eyre, & Halpern-Felsher, 2005). Research in the USA has focused on adolescents' misperception or underestimation of risks associated with sexual activity (Johnson, McCaul, & Klein, 2002; Kershaw,

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Ethier, Niccolai, Lewis, & Ickovics, 2003; Roberts, & Kennedy, 2006; von Sadovszky, Keller, & McKinney, 2002).

In sub-Saharan Africa, opposing forces impact adolescent sexual decision-making. These are superimposed on a landscape of inaccessibility to sexual health information or tools (Peltzer, 2010; Neema, Musisi, & Kibombo, 2004). Social pressure to experiment with sex conflicts with religious and societal expectations of chastity. Egocentrism leading to risk-taking and experimentation runs counter to families' goals of preserving their children's virginity prior to marriage (Chacko, Kipp, Laing, & Kabagambe, 2007; Zwane, Mngadi, & Nxumalo, 2004). Social pressure from family as well as peers, outright coercion, and exchange of sex for gifts of luxury items or money have all been cited in this context (Bakeera-Kitaka, Nabukeera-Barungi, Nöstlinger, Addy, & Colebunders, 2008; Bull, Nabembezi, Birungi, Kiwanuka, & Ybarra, 2010; Hulton, Cullen, & Khalokho, 2000; Nobelius et al., 2011)

A uniquely Ugandan figure, the *Senga* (Father's sister), has a role in Western Ugandan culture as a communicator of information about sex and marriage to her nieces (Standing & Kisekka, 1989). Parents do not have a defined role as sex educators. Over time, social and economic shifts have eroded the institution of the *Senga* as the primary communicator of sexual knowledge (Muyinda, Nakuya, Pool, & Whitworth, 2003). This has left a gap in the process of acquiring knowledge about sex for young girls, and in role models who support adolescents in avoiding risky sexual behavior (Muyinda et al., 2003; Muyinda, Nakuya, Whitworth, & Pool, 2004; Nobelius et al., 2011).

The aim of our study was to explore sexual decision-making in the Ugandan context as the role of the *Senga* has eroded and new forms of sexual communication and information have emerged.

Methods

This qualitative study was completed as part of a larger R01-funded study.[1] The goal of the qualitative research was to identify factors influencing sexual decision-making among youth in rural southwest Uganda. Analysis of data was inductive; interviews provided detailed information and insights into socio-cultural and economic influences on adolescent decision-making.

Data were collected between April and October 2008 in Mbarara, Uganda. Mbarara is a commercial center numbering roughly 100,000 people (Uganda Bureau of Statistics, 2012).

Sampling and recruitment

Study participants were 48 secondary school students and 15 adult key informants in Mbarara. Key informants were members of professions which brought them into contact with youth. They were identified through snowball sampling, meaning each informant was asked to nominate another potential key informant at the close of the interview process (Patton, 1990; Salganik & Heckathorn, 2004).

Adolescent participants were randomly selected from lists of students attending two secondary schools. Four grade levels (equivalent to US grades 8–11), with equal numbers of boys and girls, were represented in the sampling process. Fifty-three adolescents were contacted by research staff and invited to participate. Those who agreed provided written assent; their parents or guardians provided written informed permission. If an individual could not be located after repeated attempts or actively declined, then the next randomly selected adolescent was contacted. Of the 53 sampled adolescents, 48 (91%) participated, and 5 (9%) declined. Twenty-two adults were asked to participate in the key informant interviews. Seventeen (77%) consented, with 15 (68%) ultimately participating. All study procedures and assent/permission forms received approval from The Committee on Human Studies at Harvard Medical School, Western IRB, Mbarara University of Science and Technology (MUST) Institutional Ethical Review Committee, and the Uganda National Council of Science and Technology.

Data collection and analysis

Interview data were collected by Ugandan and US project research staff trained in qualitative research methodology. Interviews were semi-structured, allowing for specific content areas to be covered, while enabling interviewers to explore unanticipated themes that emerged. To make discussion of a sensitive topic more comfortable, questions to youth about sex were posed in general terms, asking respondents to describe "what people their age do" or "something they've heard" rather than to report directly on their personal experience or behavior. Wherever possible, interviewees were encouraged to respond to questions using examples, or "stories."

Interviews were carried out in private locations in each interviewee's language of choice (English or Runyankole), lasted an hour, and were digitally recorded with participant permission. The interviewer immediately produced a detailed transcript of interview questions asked and interviewees' verbatim responses in English onto password-protected

computers equipped with anti-virus software. To protect confidentiality of participants, transcripts were assigned a unique study identification number and stored in locked cabinets or password protected electronic files, accessible only to study personnel. An audit trail of recordings, transcripts, notes, and coding was established.

Category construction methods informed by grounded theory were used to analyze and represent the data (Corbin & Strauss, 2008). Transparency of this inductive approach, in which analytic procedures are both described and reflected in resulting categories, helps to validate the qualitative analysis (Mishler, 1986). Transcripts were reviewed to identify content on antecedents of adolescent sexual decision-making. Patterns of content appearing repeatedly in the data formed the basis for thematic categories. Categories were developed to name, define, and illustrate content themes. Categories were grouped into risk and protective factors and assembled into an explanatory framework depicting social, economic, and cultural influences on sexual decision-making and risk-taking for youth.

Results

Study participants

Half of adolescent participants were girls and half were boys; ranging in age from 14 to 18 years. Seventy-one percent self-identified as Christian and the remainder as Muslim. Most lived with their parents; four lived with a brother or sister, and three lived with aunts or uncles.

Key informants included nine women and six men, from 25 to 75 years. Educational backgrounds ranged from primary school through university. Most described themselves as community educators, teachers, or counselors (86%). Over 90% self-identified as Christian; a minority self-identified as Muslim. Ten were married; the remainder were single or widowed.

Five thematic influences on sexual decision-making were inductively identified through data analysis and grouped into larger categories termed "risk" and "protective" factors for HIV/AIDS.

Risk factors

Social pressure

Social pressure emerged as a powerful influence on sexual activity, taking two forms, here termed: exchange of sex for luxury items, and peer pressure.

Exchange of sex for luxury items. Participants discussed the influence that a desire for material goods had upon sexual behavior and decision-making. Both boys and girls repeatedly cited cell phones, perfumes, powders, and expensive clothes as highly prized commodities. These items, along with access to money for leisure activities, were often described as being provided by older boys or men in exchange for sex with adolescent girls. While girls who engaged in these behaviors were not considered poor by local standards, many could not afford to buy these items for themselves. Some of these relationships were described as coercive in nature, where girls were forced to have sex against their will:

> He can be having money and he will tell the girl that [they should] go in town together to cut hair, and when they reach there, you may find that he has convinced the owner of the salon to close her in the shop and they force her to have sex.

Other interviewees discussed these sexual relationships in terms of "love." For example, one said:

> She told me that she loves that boy – that is why she had sex with him. He takes care of her . . . Like he can give her everything she asks for . . . Like if she asks for clothes, he can buy it for her. If she says let's go out, he does not refuse, so they go out and enjoy. Like if she wants money the boy can give her such things.

Peer pressure. Unlike pressure to obtain luxury items, which was depicted as coming from actual or potential sexual partners, peer pressure was neither individualized nor sex-specific. Instead, peer pressure played to a young person's desire to fit in with the larger group by conforming to a perceived behavioral standard. In this way, "the others are doing it" became a powerful argument for having sex:

> There is that peer influence. Sometimes they are being laughed at by their fellow friends. There is that saying they have of, 'others are doing it' and those who are doing it laugh at those who are not doing it . . . how can you be there without a boyfriend?

Decline of the Senga

"*Sengas*" have gradually disappeared, and neither parents nor schoolteachers have replaced the Father's sister as a source of sexual education trusted by both adolescents and parents. While HIV risk-reduction programs are implemented by nongovernmental organizations (e.g., The AIDS Service Organization) and churches, many interviewees described a void, a "culture of silence," that leaves youth without an opportunity to discuss sexuality. An adult key informant described it this way:

> It may be difficult for the parents to talk about sex with their children. [Sengas] are people whom you think are able to talk with your child... And when a young person sees that old person, she will keep on following her.... Traditionally, those are secret things. It is really secret to tell your child about sex.

Barriers to condom use

Adolescent interviewees generally regarded condoms as unacceptable because obtaining them required an acknowledgement of sexual activity before marriage. A strong cultural sanction against premarital sex pervaded this community. To purchase a condom as an unwed adolescent was to disregard cultural norms. Inaccurate understandings of condoms' effectiveness also detracted from their use. Some shared the idea that "holes" in the condom allowed the HIV virus to pass through. Condom use also was described as "bad manners," since it suggested suspicion of HIV infection, and/or multiple concurrent partnerships. One adolescent noted:

> (Interviewer: "Why do you say that youth should not use condoms?") "Those are bad manners which I have told you... youth are not supposed to use it".

Protective factors

Knowledge of HIV transmission and modes of prevention

Both key informants and youth reported that information on HIV/AIDS was widely available in Mbarara, Uganda. Adolescents' understanding of safe sex practices was vague, but they accurately described effective modes of prevention based on the highly pervasive ABC (abstinence, be faithful, use a condom) model. Abstinence was highlighted as the primary mode of protection against pregnancy and HIV acquisition. In addition, some adolescents were able to discuss the importance of getting tested for HIV:

> (Interviewer: "How can someone avoid acquiring HIV virus?") "First and foremost you should avoid having sex. Secondly, you should avoid sharing sharp things to the people whether infected or not. You can also go and have the test... If they are a wife and husband and they go for a test and they find that one of them is infected, they can advise them to use a condom.

Despite this, concerning inaccuracies were discernible. For example, several male adolescents independently raised the issue of anal sex, with one suggesting that it was associated with a lower likelihood of HIV transmission than vaginal sex.

Moral injunction against sex before marriage

A moral injunction, rooted in prevailing conservative religious norms, emphasized negative consequences of premarital sex. Fears centered upon: (1) Pregnancy and concomitant stigma resulting in lost opportunities for higher education, income, and career – particularly for girls; (2) Disappointment from parents and other respected elders; and (3) Punishment from God and the community at large.

> If you go [to church] and read the Bible... like when they talk about King David who had sex with someone's wife and God punished him by making his family commit other crimes and even the death of his son. So when you read such, you know that God does not like that, so you avoid sex such that God does not punish you.

Explanatory framework

Three themes were classified as risk factors pulling adolescents towards unsafe sex: social pressure, the decline of the *Senga*, and barriers to condom use. Two protective themes emerged: knowledge of HIV transmission and effective prevention; and moral injunction against pre-marital sex. The tension between risk factors and protective factors encompasses individual, interpersonal, and cultural levels of analysis. These complex, contradictory influences are visually displayed in the resulting explanatory framework (Figure 1).

Discussion

We examined adolescents' and key informants' accounts of adolescent sexual decision-making in Mbarara, Uganda to understand why youth engage in risky sexual behaviors despite the potential for HIV acquisition. Clearly evident from the inductive analyses were influences simultaneously "pushing" youth in the direction of unsafe sexual activity while also "pulling" them away from sexual risk-taking (Figure 1). "Push" factors were centered on potential gains (e.g., luxury items, peer acceptance), whereas "pull" factors highlighted losses (e.g., educational opportunities, respect of elders). The qualitative analysis does not allow us to gauge the relative power of "pushing" vs. "pulling" factors. However, a predominance of risk over protective influences is one way of understanding persistence of sexual risk-taking on the part of Ugandan youth.

The explanatory framework developed from this analysis reflects the prominence of sociocultural and economic influences as they appeared in the qualitative data. The visual representation of the conflicting

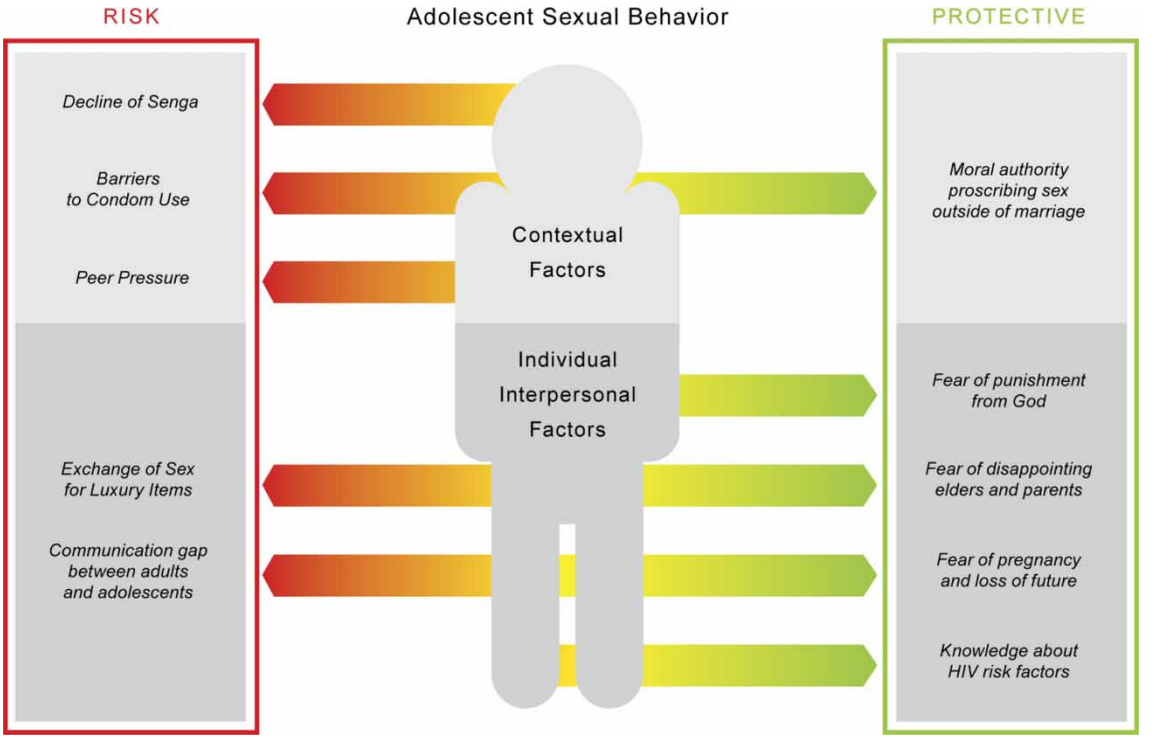

Figure 1. Explanatory Framework of Adolescent Sexual Decision Making in Mbarara, Uganda.

influences pushing adolescents towards risky behavior and pulling them away from risk-taking is consistent with the socio-ecological model (Bronfenbrenner, 1979), which represents influences on behavior and health as multi-layered and interacting. Youth's narratives made it clear that they are confronting multiple social, cultural, and economic pressures. As has been noted in previous literature (Fantasia, 2011; Michels et al., 2005), sexual risk-taking is not simply a matter of individual decision-making in isolation. Understanding the significance of social pressures to engage in risky sex; the cultural meaning of and significant barriers preventing condom use; the lack of control some feel as a result of external forces; normative curiosity about sex; an infusion of sexual violence in sexual experiences; and the communication gap left by the decline of the *Senga* helps to explain why information campaigns and/or improved access to condoms may be insufficient to reduce risky behavior (Gill, Hamer, Simon, Thea, & Sabin, 2005; Marston & King, 2006; Ponton & Judice, 2004; Uganda HIV/AIDS Partnership, Uganda Ministry of Health, Uganda AIDS Commission, MEASURE Evaluation Project, 2004). Adolescent HIV risk-reduction programs that integrate cultural norms, such as replacing the traditional *Senga* with contemporary communication modalities like the Internet (Bull et al., 2010; Ybarra, Kiwanuka, Emenyonu, & Bangsberg, 2006), may be both engaging and relevant for youth (Lightfoot, Kasirye, Comulada, & Rotheram-Borus, 2007). Prevention programs also should target barriers of condom use and recognize that sexual risk-taking is a dynamic process influenced by social context.

Transactional sex merits special mention. The wish to possess particular commodities conferring status on an individual, designating him or her as part of a desired peer group, is broadly characteristic of adolescent development (Milner, 2004; Simon & Gannon, 1986). Girls' use of sex to obtain such commodities in the Ugandan context may be shaped by a combination of influences, including culture, gender inequality, and lack of easy access to luxury goods. Because they likely have more money, older men may make attractive transactional sex partners.

Limitations

The study was carried out in a single location in rural southwest Uganda. It, therefore, necessarily reflects the particularities of this location. As qualitative research, the work identifies concepts, and posits relationships among concepts, based on the data. It does not assign relative weight or importance to individual concepts, or to risk versus protective factors in the population studied. Interview questions were framed in general terms to circumvent adolescents' anticipated reluctance to speak frankly and in

detail about personal experiences of sex. To offset any resulting limitation on data richness, we followed general questions with requests for "stories" about events or experiences of which interviewees "were aware." Finally, in working with translated materials, there is always a risk of losing content and/or misinterpreting statements, despite systematic data quality assurance procedures.

Conclusion

The narratives and resulting explanatory framework suggest that adolescent sexual risk behavior persists within the context of high HIV prevalence due to the predominance of influences pushing youth toward sexual risk-taking over those pulling them away. Like young people all over the world, youth in Uganda are subjected to pressures to engage in risky sex. Socio-cultural and economic influences specific to this context may foster an environment where social pressure to have sex is particularly strong. HIV prevention programs designed for Ugandan adolescents should take social, cultural, and economic influences and their complex interrelations into account.

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Note

1. Ybarra M.L. CyberSenga: Harnessing the power of the Internet to prevent HIV in Ugandan youth. 2007 2012; NIMH 5R01MH080662-02 ($432,174).

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