



Published in final edited form as:

Sex Educ. 2014 ; 14(5): 556–567. doi:10.1080/14681811.2014.923304.

Public discourse on HIV/AIDS: an archival analysis of national newspaper reporting in Uganda, 1996–2011

Elizabeth Lagone^{a,*}, Sanyukta Mathur^a, Neema Nakyanjo^b, Fred Nalugoda^b, and John Santelli^a

^aMailman School of Public Health, Columbia University, New York, NY, USA ^bRakai Health Sciences Program/Uganda Virus Research Institute, Entebbe, Uganda

Abstract

Uganda is recognised as an early success story in the HIV epidemic at least in part due to an open and vigorous national dialogue about HIV prevention. This study examined the national discourse about HIV, AIDS, and young people in *New Vision*, Uganda's leading national newspaper between 1996 and 2011, building from a previous archival analysis of *New Vision* reporting by Kirby (1986-1995). We examined the continuing evolution in the public discourse in Uganda, focusing on reporting about young people. An increase in reporting on HIV and AIDS occurred after 2003, as antiretroviral treatment was becoming available. While the emphasis in newspaper reporting about adults and the population at large evolved to reflect the development of new HIV treatment and prevention methods, the majority of the articles focused on young people did not change. Articles about young people continued to emphasise HIV acquisition due to early and premarital sexual activity and the need for social support services for children affected by HIV and AIDS. Articles often did not report on the complex social conditions that shape HIV-related risk among young people, or address young people who are sexually active, married, and/or HIV infected. With HIV prevalence now increasing among young people and adults in Uganda, greater attention to HIV prevention is needed.

Keywords

HIV; Uganda; young people; news representations; archival research

Introduction

Uganda was an early leader in HIV prevention (Kirby 2008b, 2008c, 2008d; Kirby and Halperin 2008). After HIV infection rates surged throughout the country during the late 1980s, the country was the first in Sub-Saharan Africa to experience a considerable decline in HIV prevalence (Epstein 2007; Kirby 2008b, 2008c, 2008d; Kirby and Halperin 2008). The Ugandan AIDS Commission estimated that national HIV prevalence dropped from 18% in 1992 to 6% in 2002 (Kirby 2008c). Rates appeared to stabilise up until 2005 (WHO

*Corresponding author. elagone@gmail.com.

2008). Among the explanations for Uganda's success in decreasing HIV, many have highlighted the importance of sexual behaviour change messages (such as, Abstinence, Being Faithful, and Condom use) in contributing to behaviour change (Gray et al. 2006; Green et al. 2006; Epstein 2007; Kirby 2008c, 2008d; Kirby and Halperin 2008). HIV-related mortality may also be an important factor in contributing to early declines in HIV prevalence (Wawer et al. 2005).

Recent data from Uganda however finds HIV prevalence to have risen. Between 2004-05 and 2011, HIV prevalence increased from 1.5 to 2.4% among 15-19 year-olds and from 4.7% to 5.4% among 20-24 year-olds (Ministry of Health Uganda et al. 2011; Green et al. 2013). Rates of premarital sex among young people¹ aged 15-24 years also increased for young women, while condom use at last sex among unmarried young men and women fell (Ministry of Health Uganda et al. 2011). In the light of this, young people remain an important target group for HIV prevention messages in Uganda (Epstein 2007; Opio et al. 2008; Ministry of Health Uganda et al. 2011).

Previous analyses of Uganda's early successful response to the HIV epidemic suggest that many factors simultaneously contributed to the county's success in reducing the rate of new HIV infections. They include political and community mobilisation, and clear messages about HIV and risk reduction/behaviour change (Epstein 2007; Kirby 2008a; 2008c; Kirby and Halperin 2008). For example, the Straight Talk Foundation, founded in 1997 has long provided comprehensive sexual, reproductive health, and HIV education to young people all over Uganda primarily through newspaper inserts and radio programmes.² Research synthesised by Douglas Kirby explored Uganda's response to the emerging HIV epidemic from 1986-1995, identifying the behaviour changes that contributed to reducing HIV prevalence, as well as the policies, programmes, and interventions that supported this, including messages about “being faithful,” “zero-grazing,” and “loving carefully” (Kirby 2008a; 2008c; Kirby and Halperin 2008). By deciphering the components of Uganda's notable success in decreasing rates of HIV, this work made a valuable contribution to HIV prevention efforts in Uganda, as well as in other countries facing high or rising rates of HIV.

Kirby's analyses suggested that multiple forms of behavioural change were important in reducing HIV prevalence. Historically, communication about HIV in Uganda emphasised reducing the number of sexual partners and being faithful within marriages, as well as condom use and abstinence for those not in long-term relationships (Kirby 2008a, 2008b, 2008c, 2008d; Kirby and Halperin 2008). These messages, along with HIV testing in later years, are considered major factors in increasing education that led to changing sexual behaviours and decreased rates of HIV in the pre-ART era (Epstein 2007, Kirby 2008a).

One of Kirby's research methods was the analysis of newspaper articles from *New Vision*, the largest English-language national newspaper in Uganda, between 1986 and 1995. Given the importance of a shared understanding of HIV risk, analysing these stories provided insight into national level discourse around HIV and AIDs and its evolution over a 10-year

¹The use of young people throughout this paper refers to individuals aged 15-24 and does not adhere to the WHO, UNFPA, and UNICEF definition of young people (<http://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf>)

²See <http://www.straighttalkfoundation.org/> for more detail.

period. As HIV rates are again on the rise in Uganda, including amongst young people (Ministry of Health Uganda et al. 2011), we sought to extend Kirby's analysis of *New Vision* coverage of HIV risk factors and prevention and treatment methods between 1995 and 2011.

In principle, newspaper reporting can shape public knowledge, attitudes, and beliefs about different HIV risk factors, prevention, and treatment methods based on their coverage and tone (Muzyka et al. 2012). Likewise, newspaper messages may also reflect the broader political, economic, cultural and social environment (Tesh 1988). A study from India focusing on newspaper discourse on HIV and AIDS found that the metaphors of war were often employed when discussing the severity of the epidemic in the country with proffered solutions emphasizing “moral education, condom promotion, and access to ART” (de Souza 2007: 264).

Examining the Ugandan national newspaper's discourse around HIV and AIDS, can also provide insight into public discourse about HIV prevention and treatment (Rothman and Salovey 1997; Westwood and Westwood 1999). Over the past two decades, for example, Uganda has experienced major changes in availability of HIV treatment and prevention programmes. For example, in 2004, earlier radio advertisements promoting condom use were replaced by new advertisements promoting abstinence as a reflection of increased policy and funding support for abstinence messaging (Epstein 2007).

Young people's risk for HIV acquisition includes sexual behaviours such as multiple partners and unprotected sex; biological factors including STI infection and lack of male circumcision; and social factors such as relationship dynamics and access to educational opportunities (Bucholtz 2002; Kirby and Halperin 2008; UNAIDS 2008; Mmari and Blum 2009; Napierala Mavedzenge et al. 2011; Santelli et al. 2013). Inspired by Kirby's previous research, in this analysis we aimed to gain a deeper understanding of the national discourse about young people and HIV risk in Uganda today.

Methods

Archival analysis was used in this study given its utility in documenting and analysing communication messages (Lewis-Beck, Brymand and Futing Liao 2004). We reviewed newspaper articles covering a 15-year period - using a similar form of archival analysis to that conducted by Kirby. We also discussed our findings with experts in the field of young people and HIV programming in Uganda as part of an effort to validate our data interpretations. This study was part of the larger Rakai Youth Project, a mixed methods exploration of risk factors associated with HIV infection among adolescents and young adults, and HIV/AIDS policy and programmes in the Rakai district of Uganda. The Rakai Youth Project received approval from Institutional Review Boards at Columbia University, Johns Hopkins University, the Ugandan Science and Ethics Committee, and the Uganda National Council for Science and Technology.

Data sources

In this analysis, we focused upon newspaper articles published in *New Vision*, Uganda's leading national English language newspaper.³ We chose this publication because of its

wide circulation and large readership throughout the country and its role in reporting on national policies and messages. *New Vision* had a daily circulation of 32,218 copies in 2011, making it the most widely circulated newspaper in Uganda (Karatsi 2011).

Sampling of articles

We followed a systematic random sampling strategy to select newspaper articles. In each year, we sampled every other odd number week for the first half of each year (weeks 1-25) and every other even numbered week for the second half of the year (weeks 26-52). We then randomly sampled articles for two days per selected week. Thus, in total we sampled about 50 days in each year. We collected all the articles on the selected days that mentioned HIV or AIDS between 1996 and 2011. Articles from the years 1996-2004 were sampled from a previously assembled archive that had followed the same sampling scheme (Kirby 2008b, 2008c, 2008d; Kirby and Halperin 2008) as well as from the newspaper archives located at the *New Vision* headquarters. Articles between the years of 2005-2011 were sampled from Makerere University Library in Kampala, Uganda. Using this sampling framework, a total of 929 published articles mentioning HIV or AIDS between the years of 1996 and 2011 were identified.

Coding and analysis

Once selected, each article was reviewed and coded. We used Kirby's coding matrix from his previous analysis of *New Vision* articles as a model, incorporating some of the same themes to identify the key HIV and AIDS topics and the associated population age group described in. Based on previous research (Epstein 2007; Kirby 2008b, 2008c, 2008d, Kirby and Halperin 2008) and an initial review of newspaper articles, we grouped articles into the following two main categories:

(1) Social and individual factors associated with HIV Transmission (risk factors), including demographic or social characteristics and behaviours that enhance risk of HIV acquisition. Example factors included sexual activity, sexual concurrency, mother to child transmission, and domestic or gender based violence. A total of twenty-two risk factors were included in this category.

2) Prevention and treatment interventions associated with HIV and AIDS, including interventions that were available or became available during this time period that either prevent or treat those affected by or infected by HIV and AIDS. Examples included HIV testing, prevention of mother to child transmission (PMTCT), anti-retroviral therapies (ARTs) programs, information education campaigns (IEC), and HIV support services (i.e. charitable services for those affected by HIV and AIDS). A total of 13 intervention methods were included.

The two categories of HIV and AIDS related topics included in the analysis were not mutually exclusive and many articles referenced both categories. For each article, we noted when an HIV and AIDS topic corresponding to the above categories was mentioned and the

³See <http://www.newvision.co.ug>

population to which that topic/issue referred. Each category contained an “Other” variable that included all topics that were not mentioned with enough frequency or consistency to be included in the analysis on their own (examples include alternative medicine, the influence of western culture, and breakdown of family values).

Each article was also coded to note the target population. The population groups we coded for (young people, adults, HIV positive individuals, and the population at large or an unspecified population group) were then grouped into two main categories for the analysis: (1) young people, and (2) adults and the population at large, which included those coded as adults, HIV positive people, and the population at large or unspecified population group. These categories were viewed as mutually exclusive; however, an article could be coded for both groups if different HIV or AIDS topics were referenced with regards to different age groups in an article.

The coding tool was developed jointly by the co-authors. Prior to implementation, we tested the tool by comparing the coding results from several sampled articles. The bulk of the articles were sampled and coded by the first author and two Ugandan-based team members. To ensure inter-rater reliability between the three individuals who coded articles, we conducted training on coding with the Ugandan project staff, followed by a similar comparison between the coded articles. We ensured the validity of the coding mechanism by making photocopies of all articles coded so articles could be cross-checked in the future. Additionally, we met with key leaders in the field of HIV prevention and research in Uganda to verify our insights and interpretations.

We coded the articles using Microsoft Excel and analysed using SPSS V21.0 statistical software. We specifically explored the trend of HIV and AIDS articles and changes in discourse over time, and compared factors associated with HIV risk and interventions among young people and adults and the population at large.

Results

Overview of articles

In total, we sampled 929 newspaper articles about HIV and AIDS over a 15-year period between 1996 and 2011. Articles about HIV and AIDS appeared consistently throughout this time period. Considerably more articles were written on this topic after 2004 than in previous years. Our sampling strategy retrieved 20 articles per year between 1996 and 2003, and there was a surge in the number of HIV and AIDS articles in 2004, when we retrieved 129 articles. After 2004, we continued to find increased reporting on HIV and AIDS compared to pre-2004, and collected an average of 91 articles per year between 2005 and 2011.

Throughout the entire period sampled, there were considerably fewer HIV and AIDS articles that focused specifically on young people ($n = 283$), compared to articles with a focus on adults and the population at large ($n = 896$). We did not observe any trends over time that affected the proportion of articles related to these two population age groups. When there

was a rise or fall in frequency of articles written on HIV and AIDS, this proved to be the case for the articles focusing on both population age groups (see Table 1).

When we examined the content of the articles, we found that fewer articles discussed young people compared to adults and the population at large. Out of all of the articles sampled ($n = 929$), 53% ($n = 501$) discussed HIV-related risk factors and 78% ($n = 729$) focused on HIV and AIDS prevention and treatment interventions. Significantly more articles discussed both categories with regards to adults and the population at large: 43% ($n = 402$) described risk factors and 66% ($n = 618$) focused on intervention approaches affecting adults and the population at large. Concerning young people, only 15% ($n = 149$) and 17% ($n = 163$) discussed risk factors and intervention approaches relevant to young people, respectively. We also found that the topical focus of the newspapers articles about HIV and AIDS changed over time.

In 1996, for example, 100% of the HIV/AIDS articles sampled described risk factors associated with HIV/AIDS and 93% mentioned prevention methods (see Table 2). In the following years, mention of risk factors appeared less frequently in the *New Vision* articles. Apart from in 1996, articles about HIV risk factors appeared the most frequently in 1999 (70%) and the least frequently in 2010 (37%). Reporting on intervention methods (either prevention or treatment) became more prominent over time, appearing in 95% of the articles in 2001 and remaining highly prevalent in the following years.

Discourse on young people and HIV

Factors associated with HIV risk—Of the news articles referencing young people, the most frequently reported HIV risk factors included those related to sexual activity (17%), abstinence (14%), condoms (9%) and education about HIV, AIDS and sex (9%) (see Table 3). Early in the epidemic, articles cautioned against “careless sexual behaviour” and “unplanned or idle sex” as being factors increasing HIV transmission and increasing young people's vulnerability. Some articles also suggested that AIDS had broken cultural taboos surrounding discussion of sexual activity that now made it possible to talk to young people about safer forms of sexual activity. However, discourse about safer sexual activity tended to be limited in scope.

For example, an article from 1997 noted that representatives from the Uganda AIDS Commission advised individuals who did not abstain from sex before marriage, or who were not faithful to their partners, to use condoms. However, these representatives also “warned young people that condoms are not the answer.” Instead they urged the need to build on “good old traditions, help the children remain virgins” until marriage (Namutebi 1997). Discourse related to partners (concurrency, being faithful, and reduction in the number of sexual partners) was notably limited in articles discussing young people's HIV risk. And in articles discussing gender-based violence there was a near exclusive focus on young women as victims of sexual violence and abuse.

The frequency of articles mentioning key risk factors for young people varied over time, increasing in 2004 before decreasing in 2008-2009. Reporting on abstinence and the risk of sexual activity, for example, fluctuated in articles published between 1996 and 2004 (see

Table 4). The mention of risk from young people engaging in sexual activity peaked in 2006, only to markedly and consistently decline after 2008. Articles on abstinence among young people peaked in 2005 and 2009 and then declined.

HIV interventions for young people—Amongst the articles referencing young people and HIV intervention approaches, HIV support services for children and families affected by HIV and AIDS (31%) was most prevalent followed by ART treatment (10%), HIV testing (9%), and school-based interventions (7%) (see Table 3). The discourse around HIV support services for young people has been prevalent from the early years, but became more prominent in 2004 and thereafter (Table 5). These articles discussed services and programmes to help children and families infected or affected by HIV and AIDS. Articles on support services intervention declined in 2007, 2009 and again in 2011. Articles on support services mentioned programmes for orphans and vulnerable children run by local and international NGOs, but also the small scale community-based efforts of individuals in caring for and supporting orphans. For example, an article from January 2008, talked about a woman's motivation for starting an organisation for AIDS-orphans after her own sister's death due to AIDS. Her organisation provided a home, schooling, clothing, and medical care to orphans, as well as counselling to children infected with HIV.

Discourse around intervention methods was more robust after 2004 when many more became available. Prominent intervention methods did not appear frequently in the *New Vision* articles, however, until a few years after becoming available. For example, ART became available in Uganda in 2000, but was not widely reported on until after 2004. Discussion of ART for adults and the population at large appeared more frequently in the articles after 2004, and maintained a strong presence in the articles thereafter (data not shown). For young people, however, ART treatments took prominence in the newspaper articles only after 2006 (Table 5). Finally, there was an upsurge in reporting on the need for young people to engage in HIV testing after 2004.

Discussion

Our study shows that between 1996-2011 *New Vision* frequently reported on HIV and AIDS. Reporting increased substantially in 2004, coinciding with the rollout of national programmes on ART treatments (UNAIDS 2009). This upsurge of articles on HIV and AIDS presumably was motivated by interest in these new HIV prevention and treatment options. Increasingly over time, HIV prevention and treatment methods started to receive more newspaper coverage than risk factors.

On the whole, the discourse around HIV and AIDS in *New Vision* targeted adults and the population at large and addressed a variety of social and individual risk factors and prevention and treatment interventions. In comparison, discourse on young people and HIV was more limited. In particular, risk factors associated with HIV transmission among young people largely focused on school dropout and premarital sex after 2000; however, since 2006 there has been some increasing focus on condom use. Amongst articles discussing HIV intervention methods there was a major focus on HIV support services for young people and families affected by HIV after 2003. There was also an explicit emphasis on the need for

school-based interventions for young people, particularly in the early 2000s. Notably limited during this time, however, was discourse around young people access to HIV testing.

Our findings highlight that the national discourse on young people appearing in *New Vision* has focused on abstinence, schooling, and family support and has often failed to recognise that many young people are already sexually active, married, and HIV infected. Across the articles, there was a difference between topics covered on HIV amongst young people compared to adults and the population at large. Attention to young people's vulnerability and risk of HIV increased in the articles in the mid-2000s, but the causes of HIV risk have until 2011 largely remained focused on school dropout and pre-marital sexual activity. The focus on premarital sex ignores the fact that 13.5% of young people aged 15 to 19 years and 51.1% of young people aged 20 to 24 years in Uganda are already married. Similarly, the discourse on sexual abstinence among young people ignores the existence of those who are sexually active; almost half of young people aged between 15 and 24 years report having had sex (Ministry of Health Uganda et al. 2011). Reporting about school-based approaches for HIV prevention ignores the many young people who are not attending school; in Uganda the median years of education completed is 6.2 years among women aged 20-24 years, and 6.8 years among young men aged 20-24 years (Ministry of Health Uganda et al. 2011).

Limitations

There are several limitations to this study. First, *New Vision* was selected because it is the most widely circulated newspaper in Uganda and the medium the Uganda AIDS Commission uses to distribute HIV and AIDS information. The focus on only one English language print medium, however, narrows the scope of this study. Radio, for example, is a more widely used communication medium than newspapers in Uganda and young people in particular receive a lot of information via radio programmes. Unfortunately, we were unable to locate radio archives similar to those for *New Vision*. Beyond this, this archival analysis is unable to shed light on how community members perceived the HIV and AIDS messages promulgated through *New Vision*. Just as importantly, young people in general are not newspaper readers, so the analysis says little about the messages they received.

Implications

While national discourse on HIV in Uganda has changed as new policies, new prevention, and new treatment methods have appeared, reporting on HIV and young people has not. Young people in Uganda are diverse with high proportions being out of school and sexually active during adolescence. Early marriage and childbearing are common – as is exposure to HIV risk (WHO 2008). These groups need HIV prevention addressing their specific circumstances, including prevention services offering multiple avenues and approaches to risk reduction, such as those both inside and outside of school-based settings.

Additionally, there may be a need for HIV prevention efforts in Uganda to refocus on sexual behaviour change, as it did during the country's initial success at reducing rates of infection (Green et al 2006). As Kirby's original analysis suggests, however, diverse sexual behavioural change messages were critical to Uganda's early success (Kirby 2008c, 2008d; Kirby and Halperin 2008). Future conversation around HIV prevention policies and

programmes in Uganda needs to address the multiple realities confronting young people, and the context specific risk reduction messages and methods that young people may benefit from, and need.

Acknowledgments

We wish to acknowledge the contributions of Kristen Wunder, Ashley Schuyler, Gary Yu, and Rhoda Nambi. This work was supported by the NIH/NIHCD under Grant [number 5R01HD061092].

References

- Bucholtz M. Youth and Cultural Practice. *Annual Review of Anthropology*. 2002; 31:525–52.
- De Souza R. The Construction of Hiv/Aids in Indian Newspapers: A Frame Analysis. *Health Communication*. 2007; 21(3):257–66. [PubMed: 17567257]
- Epstein, H. *The Invisible Cure: Africa, the West, and the Fight against Aids*. Farrar, Straus and Giroux; New York: 2007.
- Gray RH, Serwadda D, Kigozi G, Nalugoda F, J Wawer M. Uganda's HIV Prevention Success: The Role of Sexual Behavior Change and the National Response. *Commentary on Green*. (2006). *AIDS and Behavior*. 2006; 10(4):347–50.
- Green EC, Halperin DT, Nantulya V, Hogle JA. Uganda's HIV Prevention Success: The Role of Sexual Behavior Change and the National Response. *AIDS and Behaviour*. 2006; 10(4):335–46.
- Green E, Kajubi P, Ruark A, Kanya 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. [PubMed: 23512872]
- Karatsi, R. Uganda: New Vision Is Highest Read Paper - Abc.. allAfrica. Sep 21. 2011 <http://allafrica.com/stories/201109220031.html>
- Kirby D. Changes in sexual behaviour leading to the decline in the prevalence of HIV in Uganda: confirmation from multiple sources of evidence. *Sexually Transmitted Infections*. 2008a; 84(Supplement 2):ii35–41. [PubMed: 18799490]
- Kirby, D. *Success in Uganda: A Review of Programmatic Approaches to AIDS Prevention and Their Impacts, 1986-1995*. ETR Associates; Scotts Valley, CA: 2008b.
- Kirby, D. *Success in Uganda: An Overview of Uganda's Campaign to Change Sexual Behaviors and Decrease Hiv Prevalence, 1986-1995*. ETR Associates; Scotts Valley, CA: 2008c.
- Kirby, D. *Success in Uganda: A History of Uganda's Successful Campaign to Decrease HIV Prevalence in the Early 1990s*. ETR Associates; Scotts Valley, CA: 2008d.
- Kirby, D.; Halperin, D. *Success in Uganda: An Analysis of Behavior Changes that Led to Declines in HIV Prevalence in the Early 1990s*. ETR Associates; Scotts Valley, CA: 2008.
- Lewis-Beck, M.; Bryman, A.; Futing Liao, T., editors. *Encyclopedia of Social Science Research Methods*. Vol. 1. Sage; Thousand Oaks, CA: 2004.
- Ministry of Health Uganda, ICF International, Centers for Disease Control and Prevention Uganda, USAID, WHO Uganda, Uganda Bureau of Statistics, and Uganda Virus Research Institute.. *Uganda Aids Indicator Survey*. Ministry of Health and ICF; Kampala, Uganda and Calverton, MD: 2011.
- Mmari K, Blum RW. Risk and Protective Factors That Affect Adolescent Reproductive Health in Developing Countries: A Structured Literature Review. *Global Public Health*. 2009; 4(4):350–66. [PubMed: 19462269]
- Muzyka CN, Thompson LH, Bombak AE, Driedger SM, Lorway R. A Kenyan Newspaper Analysis of the Limitations of Voluntary Medical Male Circumcision and the Importance of Sustained Condom Use. *BMC Public Health*. 2012; 12(1):465. [PubMed: 22720748]
- Namutebi J. Bishop calls for condoms. *New Vision*. May 29.1997
- Napierala Mavedzenge S, Olson R, Doyle AM, Changalucha J, Ross DA. The Epidemiology of Hiv among Young People in Sub-Saharan Africa: Know Your Local Epidemic and Its Implications for Prevention. *Journal of Adolescent Health*. 2011; 49(6):559–67. [PubMed: 22098766]

- Opio A, Mishra V, Hong R, Musinguzi J, Kirungi W, Cross A, Mermin J, Bunnell R. Trends in Hiv-Related Behaviors and Knowledge in Uganda, 1989-2005: Evidence of a Shift toward More Risk-Taking Behaviors. *Journal of Acquired Immune Deficiency Syndromes*. 2008; 49(3):320–6. [PubMed: 18845955]
- Rothman AJ, Salovey P. Shaping Perceptions to Motivate Healthy Behavior: The Role of Message Framing. *Psychological Bulletin*. 1997; 121(1):3–19. [PubMed: 9000890]
- Santelli J, Edelstein Z, Mathur S, Wei Y, Zhang W, Orr M, Higgins J, Nalugoda F, Gray R, Wawer M. Behavioral, Biological, and Demographic Risk and Protective Factors for New Hiv Infections among Youth in Rakai, Uganda. *Journal of Acquired Immune Deficiency Syndromes*. 2013; 63(3): 393–400. [PubMed: 23535293]
- Tesh, S. *Hidden Arguments: Political Ideology and Disease Prevention Policy*. Rutgers University Press; New Brunswick, NJ: 1988.
- UNAIDS. *Report on the Global Aids Epidemic*. UNAIDS; Geneva: 2008.
- UNAIDS and Uganda National AIDS Commission. *Uganda HIV Modes of Transmission and Prevention Response Analysis: Final Report, March 2009*. Uganda National AIDS Commission and UNAIDS; Kampala, Uganda: 2009.
- Wawer, M.; Gray, R.; Serwadda, D.; Namukwaya, Z.; Makumbi, F.; Sewankambo, N.; Li, X.; Lulato, T.; Nalugoda, F.; Quinn, T. Declines in HIV Prevalence in Uganda: Not as Simple as ABC; Paper presented at the 12th Conference on Reteroviruses and Opportunistic Infections.; Boston, MA, USA. 2005.
- Westwood B, Westwood G. Assessment of Newspaper Reporting of Public Health and the Medical Model: A Methodological Case Study. *Health Promotion International*. 1999; 14(1):53–64.
- World Health Organization (WHO), Regional Office for Africa. *HIV/AIDS Epidemiological Surveillance Report for the WHO African Region 2007 Update*. World Health Organization, Regional Office for Africa; Brazzaville, Congo: 2008.

Table 1

Numbers of HIV/AIDS articles focusing on young people and adults and population at large by year:
NewVision 1996-2011 (total n = 929).

Year	Articles focusing on young people	Articles focusing on adults and the population at large
1996	9	14
1997	3	15
1998	8	27
1999	4	10
2000	5	15
2001	8	21
2002	13	32
2003	8	20
2004	35	125
2005	31	95
2006	38	110
2007	23	88
2008	36	113
2009	22	89
2010	22	57
2011	18	65
Total	283	896

Table 2

Percentages of articles about HIV/AIDS *prevention and treatment interventions* (n = 776) and *social and individual risk factors* (n = 516) by year¹: *New Vision* 1996-2011.

Year	Prevention and treatment interventions ¹	Social and individual risk factors ¹
1996	93	100
1997	63	63
1998	58	48
1999	70	70
2000	52	40
2001	95	52
2002	68	41
2003	67	57
2004	79	55
2005	70	56
2006	73	60
2007	88	61
2008	81	56
2009	80	52
2010	90	37
2011	90	43

¹These two categories were not mutually exclusive and many articles referenced both categories. Denominator includes all articles reviewed in each year.

Table 3

Percentages of HIV/AIDS related articles on *social and individual risk factors* and *prevention and intervention approaches* for young people (n = 283) and adults and the population at large (n = 896): *New Vision* 1996-2011.

Social and individual risk factors	Young people¹	Adults and the population at large¹
Sexual activity	17	9
Abstinence	14	9
Other risk factors ²	14	16
Condoms	9	17
Education about HIV and AIDs, sex, etc.	9	8
School enrollment	6	0
Sexually transmitted infections	4	4
Poverty and social problems	4	4
Mother to child transmission	2	7
Concurrency	2	5
Partner's age	2	0
War	2	1
Marriage	2	1
Being faithful	2	9
Prevention and treatment interventions		
HIV and AIDS support services ³	31	16
ART treatment	10	30
HIV testing	9	23
School-based interventions	7	0
Advocacy/IEC campaigns	7	14
HIV counseling	6	16
PMTCT	4	8
Stigma reduction	4	10
Other prevention and treatment interventions ⁴	3	11
Male circumcision	2	3

¹ Percentages calculated separately for each population group.

² "Other risk factors" includes factors that appeared in fewer than 2% of the articles, including the individuals perceived risk of HIV; migration/mobility; prostitution; homosexuality; male circumcision; traditional values; gender-based violence, number of sexual partners, and the influence of western culture.

³ HIV Support Services included services and programs that help children, individuals, and families affected by HIV/AIDS.

⁴ "Other prevention and treatment interventions" include factors that appeared in fewer than 2% of the articles in reference to young people, including alternative medicine; HIV vaccination, increased access to HIV services; and community efforts.

Table 4

Numbers of articles on the *risk of sexual activity* and *abstinence* among young people: *New Vision* 1996-2011.

Year	Risk of sexual activity among young people	Abstinence among young people
1996	0	1
1997	1	0
1998	3	1
1999	1	1
2000	0	0
2001	0	0
2002	3	3
2003	0	0
2004	4	7
2005	4	8
2006	11	3
2007	6	2
2008	9	3
2009	3	8
2010	1	2
2011	1	2
Total	47	41

Table 5Numbers of articles about HIV interventions for young people: *New Vision* 1996–2011.

Year	Articles focusing on ART for young people	Articles focusing on HIV and AIDS support services for young people
1996	0	0
1997	0	1
1998	0	1
1999	0	0
2000	0	1
2001	1	3
2002	0	5
2003	0	2
2004	0	9
2005	1	10
2006	3	16
2007	0	7
2008	5	16
2009	2	3
2010	8	9
2011	7	4
Total	27	87