Title: Religion and HIV/AIDS Behavior of Men in sub-Saharan Africa: Evidence from Two Surveys in Ghana

Baffour K. Takyi PhD
Associate Professor
Department of Sociology
University of Akron
Akron, Ohio 44325-1905
(330) 972-6887 (phone)
(330) 972-5377 (fax)
E-mail: btakyi@uakron.edu

Gabriel B. Fosu, PhD
MEASURE Evaluation [ORC Macro]
11785 Beltsville Drive
Calverton, MD 20705
Tel: 1 (301) 572-0587
Fax: 1 (301) 572-0999
Gabriel.B.Fosu@orcmacro.com

Adjunct Associate Professor
University of Maryland, Baltimore Campus
Sociology Department
&

Stephen Obeng-Manu Gyimah, PhD
Assistant Professor
Department of Sociology
Queens University
Kingston, ON, Canada
E-mail: gyimahs@post.queensu.ca

[Paper Prepared for Presentation at the Annual Meeting of The Population Association of America, Philadelphia, PA: March 31-April 2, 2005]. Direct all correspondence to Baffour Takyi at: btakyi@uakron.edu

Introduction

Two decades or more into the worldwide HIV/AIDS pandemic, AIDS continue to exact significant toll on Africans. Even though the epidemiology of sub-Saharan Africa's HIV pandemic is uneven, and the reasons behind the reported patterns are not that clear, existing studies have pointed to a host of factors, including medical (e.g., the co-existence of sexually transmitted infections (STIs)), behavioral (e.g., pre and post marital sexual behavior), socio-economic and cultural contexts (subordinate position of women, circumcision, age difference between spouses, poverty, poor social health services, migratory pressures, and political (civil unrests and conflicts) as important determinants of the causes and course of the epidemic (Caldwell 2000; Brockerhoff & Biddlecom, 1999; Oppong, 1995; Caldwell and Caldwell, 1993; Caldwell, Caldwell and Orubuloye, 1992; Caldwell, Caldwell & Quiggin 1989;).

Although the role of socio-cultural factors in sustaining the spread of HIV/AIDS in Africa has been alluded to in several studies (see e.g., Susser & Stein, 2000; Caldwell, 2000), seldom do researchers and policy-makers look at one salient cultural variable—religion—and how it shapes AIDS-related behavior in Africa. Indeed it is only recently that a number of studies have begun to explore the role of religion and religious practices in Africa's HIV/AIDS behavior (see e.g., Takyi, 2003; Lagarde et al, 2002). Thus while the sub-Saharan Africa remains at the epicenter of the worldwide HIV/AIDS pandemic, and where religion plays a critical role in the lives of the people, only a handful of studies have explored certain aspects of religion vis-à-vis HIV link. It is not clear, for instance, how religion intersects with other processes to impact on the dynamics of HIV/AIDS behavior.

Furthermore, the few existing studies on religion and AIDS in Africa tend to focus on women samples (see e.g., Takyi, 2003). Hence, we know very little about how religion impacts the behavior of African men. In a region where many studies have shown that men's behavior are relevant to our understanding of women's reproductive health behavior (see e.g., Dodoo, 1995; Ezeh, 1993; Dodoo & Landewijk, 1996), it is important for health officials and policy makers looking for effective strategies for HIV/AIDS prevention programs to examine the critical links between men's behavior in the discourse on religion and HIV/AIDS in Africa. For, such neglect not only reduces our comprehension of HIV/AIDS related behavior, but also hampers our response to the epidemic, particularly in a region where HIVAIDS has had a tremendous effect on the lives of the people.

The need to look at the role of religion and HIV/AIDS behavior is also underscored by the high levels of religiosity and religious involvement of Africans. For instance, many

researchers have pointed to the increasing resurgence and revival of religious activities in many African countries during the last several decades (Ojo, 2000; Bediako, 1995; Gifford, 1994a, 1994b, Jenkins 2002) suggesting that Africa and other Southern regions have now become the center of worldwide Christianity. In addition, a burgeoning research literature have suggested that religion has emerged as a potent social force in Africa with immense implications for private and public life (see e.g., Kirby, 1997, 1993; Meyer, 1995; Aboagye-Mensah, 1994; Pobee, 1991).

The hypotheses guiding the study emanates from findings from previous research. First, the literature on religious dynamics in the sub-continent suggests three interrelated assumptions for our study: first, religious beliefs and involvement in the sub-Saharan context are central to the social construction of wellness and health risks, including reproductive preferences (Adongo, Phillips and Binka, 1998), disease classification (Fosu, 1995, 1981), and the utilization of health services (Kirby, 1997). Second, religion provides the social context for exploring the role of social interaction in reproductive-related behavior in Africa (Kohler & Watkins, 2002; Kohler, Behrman & Watkins, 2001; Agadjanian, 2001; Rutenberg & Watkins, 1997). While social capital gained through the network of relationships and Church-based social interactions could lead to the diffusion of AIDS-related information, depending on the size, type, and context of the ties, these social networks could also constrain individual actions thereby influencing how people react to the epidemic. Third, the various religious bodies tend to advocate premarital abstinence and marital fidelity as preferred forms of HIV/AIDS prevention. In testing our hypotheses, we draw on data from the 1998 and 2003 waves of Ghana Demographic and Health Surveys (GDHS) which has measures on religion and AIDS that allow us to examine men's HIV-related behavior for these two time periods.

Data, Measures, and Methodology

Data used in this study come from the 1998 and 2003 waves of Ghana Demographic and Health Surveys (GDHS). These cross-sectional surveys were conducted by Ghana Statistical Service (GSS), with support provided by the United States Agency for International Development (USAID), the Ministry of Health and Ghana Health Service, ORC Macro International and the Noguchi Memorial Institute for Medical Research at the University of Ghana, Legon. The Ghana Demographic and Health Surveys are based on a national representative sample of women between the ages of 15-49 and men aged 15-59. In the 1998 survey, 4,843 women and 1,546 men was interviewed, while the 2003 wave interviewed 5,691 women and 5,015 men.

For both waves, detailed information on the respondents' socio-demographic characteristics including their age, education, religion, place of residence, and reproductive health was collected. In addition, GDHS98 & 2003 also include several items on AIDS-related knowledge and behavior which allow for the examination of men's HIV-related behavior in Ghana. The main question asked the respondents to indicate their knowledge about HIV/AIDS. Following this, other questions were used to tap perceived risks status, knowledge about transmission and preventive modes, changes in behavior, and types of behavior changed. The knowledge and preventive transmission items dealt with documented and undocumented modes of AIDS transmission.[1] In general, these questions began with the following statement: "Do you believe that AIDS is transmitted by any of the following means: ----?"[2] The responses were then coded as "yes", "no", and "don't know"/no answer, making it possible to construct "correct" and "incorrect" transmission knowledge scales for the study. In general, the responses to these questions were recoded as "yes" or "no" to denote accurate knowledge or otherwise. To examine the extent of knowledge about AIDS, an index was also constructed from the number of correct items the respondents reported regarding AIDS preventive modes, and the specific behaviors changed. In constructing our measures, women who gave "don't know" and "no answer" responses were treated as inaccurate and classified accordingly for each item.

Key explanatory variables considered in the study include religion, which we define in terms of denominational affiliation. Using the responses to this question, the respondents were grouped into those belonging to mainline as opposed to non-mainline Christian denominations. Other categorization looked at specific Christian groups: Protestants, Catholics and Pentecostals. For the non-Christian groups, they were categorized according to their faith as follows: Muslims, and believers of African traditional religions (ATR). The latter also include all those who reported no-religious affiliation.

Control variables included in our models are age, current marital status (coded as yes versus no), ethnic background (coded as Akan versus non-Akan), place of residence (coded as urban versus rural), and education (coded as some schooling versus none). A measure that taps the respondents' exposure to AIDS information, including the mass media, community members, health care providers, and friends was also included in the equations. Our final measure focuses on perceived risk status for AIDS, which was coded as a binary to denote "at risk" versus "no-risk (see Appendix for descriptive information of the women by their religious affiliation).

In the analysis, we first use chi-square techniques to evaluate the relationship between AIDS-related knowledge and behavioral by religious affiliation. Logistic regression models were then used to examine the effect of religious affiliation and other predictors on AIDS-related knowledge and protective behavior.

Limitations of Study: Despite the advantages that the GDHS offer [e.g., allowing public health officials to gauge the extent of knowledge and response at the national level], we need to point out that such a population-based survey has its own limitations as applied to the study of AIDS sexual behavior. For example, self-reports of sensitive questions bearing on sexuality, including AIDS behavior change may be affected by underreporting of sexual behavior. In addition, the questions on religion are somewhat limited because no attempts were made to collect information about the nature, context, and extent of interaction among members of the various religious groups. As a result, we are unable to explore the whether the specific behavior changed or not is the result of social interactions, or test other cultural-effects of religion on AIDS behavior. Similarly, we are unable to assess the possible impact of religious switching on AIDS behavior even though there is the possibility that some people do change their religion over their lifetime.

Findings

Preliminary findings from our analysis of data from the 1998 wave suggest that religion has a significant effect on men's AIDS-behavior. At this point we are waiting the release of the 2003 data (next week by DHS) which would allow us to look at changes over time, trends and patterns, and also the role of religious and non-religious measures on AIDS-related behavior.

References:

Agadjanian, V. 2001. "Religion, social milieu, and contraceptive revolution." Population Studies 55: 135-148.

Auvert B, Buve A, Lagarde E, Kahindo M, Shege J, Rutemberg N, Musonda R, Laourou M, Akam E, Weiss HA. 2001. "Male circumcision and HIV infection in four cities in sub-Saharan Africa." AIDS 15 (Suppl 4): S31-40.

Bediako, K. 1995. *Christianity in Africa: Renewal of a non-Western religion*. Edinburgh: Edinburgh University Press.

Behrman, JR., Kohler, HP, & Watkins, SC. 2002. "Social Networks and Changes in Contraceptive Use over time: Evidence from Longitudinal Study in Rural Kenya."Demography (Nov): 713-739.

Brockerhoff M and Biddlecom A. 1999. "Migration, Sexual behavior and the risk of HIV in Kenya." International Migration Review 33 (4): 833-856

Buve A, Lagarde E, Carael M, Rutemberg N, Ferry B, Glynn JR, Laourou M, Akam E, Chege J, Sukwa T. 2001. "Interpreting sexual behavior data: validity issues in the multicentre study on factors determining the differential spread of HIV in four African cities." AIDS 15 (Suppl 4): S117-26.

Caldwell J and Caldwell P. 1993. "The Nature and Limits of the Sub-Saharan African AIDS Epidemic: Evidence from Geographic and Other Patterns." Population and Development Review 19(4): 817-848.

Caldwell J and Caldwell P. 1996. "The African AIDS Epidemic." Scientific America (March): 62-68.

Caldwell J, Caldwell P and Orubuloye, I. 1992. "The Family and Sexual Networking in Sub-Saharan African." Population Studies 46 (3):385-410.

Caldwell J, Caldwell P and Quiggin P. 1989. "The Social Context of AIDS in Sub-Saharan Africa." Population and Development Review 15 (2): 185-234.

Caldwell J. 2000. "Rethinking the African AIDS Epidemic." Population and Development Review 26 (1):117-135.

Carael M. Sexual behaviour. 1995. In: Cleland J, Ferry B eds. S*exual behavior and AIDS in the developing world*. London: Taylor and Francis, pp. 75-123.

Dodoo, F. N-A. (1995). Explaining contraceptive use differences: Do men play a role? African Population Studies, 10, 15-37.

Dodoo, F. N-A., & van Landewijk, P. (1996). Men, women, and the fertility question in sub-Saharan Africa: An example from Ghana. African Studies Review, 39, 29-41.

Ezeh, A. (1993). The influence of spouses over each other's contraceptive attitudes in Ghana? Studies in Family Planning, 24, 163-174.

Garner RC. Safe sect? 2000. "Dynamic religion and AIDS in South Africa." Journal of Modern African Studies 38: 41-69.

Ghana Statistical Service (GSS) and Macro International Inc. (MI). 1999. Ghana Demographic and Health Survey 1998. Calverton, Maryland: GSS and MI.

Gifford, P. 1994. "Some recent developments in African Christianity." African Affairs 93:513-534.

Gifford, P. 1998. *African Christianity. Its Public Role*. Bloomington and Indianapolis,

Gregson, S., Zhuwau, T., Anderson, R.M., & Chandiwana, S.K. 1999. "Apostles and HIV/AIDS in Southern Africa" American Journal of Public Health 90 (7): 1042-8.

Jenkins, P. 2002. *The Next Christendom: The Coming of Global Christianity*. Oxford and New York: Oxford University Press.

Kirby, J. 1997. "White, red and black: Color classification and illness management in Northern Ghana." Social Science & Medicine 44: 215-230.

———. 1993. "The Islamic dialogue with African traditional religion: divination and health care." Social Science & Medicine 36: 237-247.

Kohler, H, Behrman, J. and Watkins, S. 2001. The density of social networks and fertility decisions: Evidence from South Nyanza District, Kenya. Demography38: 43-58.

Lagarde E, Enel C, Seck K, Gueye-Ndiaye A, Piau JP, Pison G, Delaunay V, Ndoye I, Mboup S. 2000. "Religion and protective behaviors towards AIDS in rural Senegal." AIDS 14: 2027-33.

Miller L, Gur M. 2002. "Religiousness and sexual responsibility in adolescent girls." Journal of Adolescents Health 31: 401-6.

Oppong, C. 1995. "A High Price to Pay: For Education, Subsistence or a Place in the Job Market." Health Transition Review 5 (Suppl.): 35-56.

Rutenberg, N. & Watkins, S.C.. 1997. "The Buzz Outside the Clinics: Conversations and Contraception in Nyanza Province, Kenya", *Studies in Family Planning* 28(4): 290-307.

Susser, I. & Stein, Z. 2000. "Culture, sexuality, and women's agency in the prevention of HIV/AIDS in Southern Africa" *American Journal of Public Health* 90 (7): 1042-8.

Takyi BK. 2003. "Religion and women's health in Ghana: insight into HIV/AIDS preventive and protective behavior." Social Science and Medicine 56: 1221-34.

Valente, T., Watkins, S., Jato, M., Van der Straten, A. and Tsitol, L. (1997). "Social network Associations with contraceptive use among Cameroonian women in voluntary associations." Social Science & Medicine 45:677-87.

[1] Questions here included items such as the avoidance of blood transfusion, homosexual relations, sex with prostitutes, kissing, mosquito bites, injection with used syringes, sharing razor blades, abstaining from sex, and use of condoms.
[2] This refers to the documented and undocumented transmission and preventive modes previously specified.