

## Abstract

As the spread of HIV/AIDS devastates sub-Saharan Africa, researchers and policy makers struggle to cope with the looming social, economic and medical catastrophe. We aim to contribute to this ongoing conversation by examining how the likelihood of current HIV/AIDS infection differs by religious affiliation. Since religious organizations can both facilitate and impede the spread of the disease, affiliation with a particular religion may have important consequences for health-related behavior for HIV/AIDS. Using data from the Demographic and Health Surveys for Burkina Faso, Cameroon, Ethiopia, Ghana, Guinea, Lesotho, Malawi, Rwanda, and Zimbabwe, we examine the affect of religious affiliation on HIV infection, controlling for an array of other control, intervening, and mediating variables. Surprisingly, we find modest evidence of religious affiliation on the likelihood of HIV/AIDS infection. We discuss the implications of this and outline future research that will illuminate the complex relationship between religion and HIV/AIDS in sub-Saharan Africa.

## Introduction

The remarkable ability of the virus that causes AIDS to adapt to new environments has led to a worldwide pandemic. According to UNAIDS, some 33 million people were living with HIV in December 2007, with an additional 2.5 million new infections annually. However, great geographical variation exists in terms of the devastating consequences of the disease, with some areas experiencing much greater suffering than others (Bwayo, Plummer, Omari, Mutere, Moses, Ndinya-Achola, Velentgas, and Kreiss 1994; Gray, Wawer, Brookmeyer, Sewankambo, Serwadda, Wabwire-Mangen, Lutalo, Li, VanCott, Quinn, and Team 2001; UNAIDS 2007).

Africa, whose infection rate is more than five times greater than any other region on earth, remains the most seriously affected region. Sixty-eight percent of adults and 90% of children living with HIV currently reside in Africa. Although the region's epidemics vary greatly in scale, Africa remains the only place on earth where the prevalence rate exceeds one percent.

We further current research on this topic by using representative samples from the Demographic and Health Surveys (DHS) and examining multiple countries within sub-Saharan Africa. Furthermore, many studies have not controlled for the broad array of control, intervening, and moderating variables we examine in this study. This study constitutes the most robust test of the link between religious affiliation and HIV/AIDS infection in sub-Saharan Africa to date.

Policymakers, practitioners, and scholars alike have attempted to find ways to alleviate such suffering. One area that has recently become of interest is the role religious groups can help mitigate the crisis, since religiously-motivated behavior may impact health in general (Ellison and Levin 1998) and disease transmission in particular (Reynolds and Tanner 1995). The restraints religion commonly places on sexuality helps drive down STDs among church members, whether in terms of affiliation or religiosity (Seidman, Mosher, and Aral 1992). If HIV and religious affiliation are indeed linked in some fashion, comprehension and prediction of the epidemic is one step closer (Piot, Bartos, Ghys, Walker, and Schwartlaender 2001).

Religious organizations are often the most visible social institution to the average citizen (Trinitapoli 2006), and often have better access to and credibility with at-risk populations than do government agencies and officials (McBride, McCoy, Chitwood, Inciardi, Hernandez, and Mutch 1994). In fact, distrust of government officials can be alleviated by religious leaders becoming involved in the prevention process (Lagarde, Enel, Seck, Gueye-Ndiaye, Piau, Pison, Delaunay, Ndoye, Mboup, and group 2000), especially among marginalized groups (McBride et al. 1994).

In practice, many religious organizations have AIDS response programs (Yates 2003). Despite this, global institutions such as the WHO, World Bank, IMF, and other large donors often shape policy in light of their financial prowess and large organizational structure, obligating smaller religious organizations to follow suit, regardless of the particular (religious) organization's goals or initiatives (Heimer 2007).

Religious differences in HIV infection rates come about by way of two separate processes—doctrinal differences and social interactions—emphasized within that particular religious group, and scholars must understand how both work to account for these differences. If, for example, religion's effects are entirely the result of group interactions and not doctrinal differences, there is nothing particularly interesting about religious organizations compared to schools or other organizations that facilitate social networks (Garner 2000). On the other hand, doctrinal differences can have important effects on sexual behavior, as illustrated by the lower Catholic fertility rate in the United States (Sander 1995; Westoff and Jones 1979), and there is no reason to believe that doctrine would have *less* of an influence on human behavior in sub-Saharan African than in the United States. Adherence to religious ideals may discourage risky behavior, thus potentially reducing congregation HIV infection rates (Agadjanian 2005). Members of religious traditions with strict norms and teachings governing sexual behavior may be less at risk for HIV infection (Gregson, Zhuwau, Anderson, Chimbadzwa, and Chiwandiwa 1995).