"Knowledge of HIV/AIDS in India: Does context matter?"

Extended abstract submitted for presentation at the 2008 annual meetings of the Population Association of America

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September 2007

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Introduction

In this paper, we conduct a multi-level analysis that simultaneously considers the influence of individual characteristics and community characteristics on HIV/AIDS knowledge amongst women in India. Some previous work has considered individual-level correlates of HIV/AIDS awareness in India and other research suggests how community and social networks might play a role. We advance existing research by integrating individual and contextual perspectives by using a multi-level modeling approach. We specifically investigate whether women know about the existence of HIV/AIDS, the source from which they report learning about HIV/AIDS, and whether they have accurate information about prevention. This work could have various policy implications, including providing clues about where to target awareness and prevention programs and how community dynamics might be used as a tool to inform what tack policy efforts should take.

We use data from the 1998-99 National Family Health Study (NFHS-2). This was a key point in the recent history of HIV/AIDS in India, as the rate of the disease has increased markedly since then due in part, evidence suggests, to a societal denial/lack of awareness (Chakraborty et al. 2004). Studying the level and correlates of this awareness will also provide a useful baseline for an analysis of changes in the spread of HIV/AIDS knowledge in India between 1998 and 2006, when the third wave of the NFHS was fielded.

Background

Pervasive poverty, low levels of education, and gender stratification have increased India's vulnerability to the HIV/AIDS epidemic (Bloom and Griffiths 2007, Chatterjee 1999). HIV/AIDS knowledge in general and about prevention in particular has been shown to be higher amongst men, but both genders overall may lack the sexual negotiation skills necessary to conduct discussions about individual-level prevention or safer-sex (AIDS Weekly Plus 1997). In high HIV/AIDS prevalence areas, women from socially and economically backward groups are less likely than their male counterparts to have HIV/AIDS general or prevention knowledge (Pallikadavath et al 2005a).

On an individual level, women who are older, uneducated, rural, poor, not exposed to television, and who have never used a modern family planning method are less likely to possess HIV/AIDS prevention knowledge (Balk and Lahiri 1997 and Pallikadavath et al 2005b). Women with greater autonomy are more likely to be knowledgeable about HIV/AIDS, and are more likely to be knowledgeable about and use condoms (Bloom and Griffiths 2007). Television has been shown to be the most common source for HIV/AIDS knowledge amongst women of reproductive age, followed by billboards, newspapers, and magazines (Dutta 1998). Despite low levels of overall HIV/AIDS awareness and prevention awareness, there is a strong positive association between HIV/AIDS knowledge and condom use (Balk and Lahiri 1997).

There is some empirical evidence about the role of social networks and community on HIV/AIDS awareness. Women with more frequent exposure to AIDS information in the media are significantly more likely to talk about HIV/AIDS within their various social networks (Chatterjee, 1999). Possessing HIV/AIDS knowledge from a number of different sources rather than a single source has been associated with an increased likelihood of having discussed HIV/AIDS with friends, family members, and

spouses (Dutta, 1998). For sex workers, community advocacy has been instrumental in spreading HIV prevention knowledge amongst community members, and has led to a statistically significant increase in condom use (Pardasani, 2005).

While researchers have paid some attention to networks and community, much of the research on HIV/AIDS in India focuses on individual or family characteristics as explanatory variables. Ignoring the social impact of the community in a country like India provides an incomplete explanation at best. Hindu culture stresses the importance of the collectivity. Thus, the concept of a community with shared norms and values is particularly important to understand social life in India. Communities set the context for social life and individual action is often affected by groups or communities of which the individual is a member. In our analysis, we attempt to provide a more complete explanation by including the impact of the village (in rural areas) and urban neighborhoods on awareness of AIDS at the individual level.

Analytical plan

We use data from the 1998/99 National Family Health Survey to perform a multi-level analysis of whether women are aware of the existence of HIV/AIDS and whether they have accurate information about methods of prevention. Following existing research (Balk and Lahiri 1997 and Pallikadavath et al 2005b), we take into account individual-level factors such as education, socioeconomic status, rural versus urban residence, age, exposure to media, and whether or not respondents have used modern family planning.

But we use multi-level modeling to incorporate village- and neighborhood-level characteristics in an effort to achieve a more complete understanding of HIV/AIDS awareness and its correlates. Our main contextual-level variables for the analysis of general HIV/AIDS awareness are the proportion of women who are literate and the proportion of women who work. The literacy rate serves as a proxy for education. Village- and neighborhood-level education provides an indication of local women's ability to process information. Women's labor force participation gives an indication of women's exposure to other women. Education essentially provides an indication of the quality of information available from community and social network members. Labor force participation provides an indication of the extent of social networks, which has implications for the availability of information on HIV/AIDS.

In our analysis of the source from which respondents report learning about HIV/AIDS and in our analysis of knowledge of how to prevent the spread of the disease, we also include a village- or neighborhood-level measure of what proportion of individuals have heard of HIV/AIDS.

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