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A summary of Special Collection 1:
Social Interactions and HIV/AIDS
in Rural Africa

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Hans-Peter Kohler

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This special collection is edited by Susan Watkins, Eliya M. Zulu, Hans-Peter Kohler and Jere Behrman. The papers in this special collection were presented at the conference "Research on Demographic Aspects of HIV/AIDS in Rural Africa", held at the Population Studies Center, University of Pennsylvania, October 28, 2002.

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A summary of

Special Collection 1:
Social Interactions and HIV/AIDS in Rural Africa

Susan C. Watkins¹

Eliya M. Zulu²

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A summary

Special Collection 1: *Social Interactions and HIV/AIDS in Rural Africa* is a set of papers stemming from the conference “Research on Demographic Aspects of HIV/AIDS in Rural Africa”, held at the Population Studies Center, University of Pennsylvania, October 28, 2002. The aim of the conference was to provide a forum for the presentation of results, to an audience of experts, on a variety of demographic aspects relevant for the study of HIV/AIDS in rural Africa. The aim of the special collection is to make these results available to a wider audience.

Thirteen contributions were submitted to the journal *Demographic Research* and went through peer review. They were published on September 19, 2003 as the journal’s first “special collection” of material on a common topic. This short summary of the collection has been added to Volume 9 in order to include full details of the collection in the current running volume as well. The following pages list the contributions and give direct links where readers may download the material from the *Demographic Research* website. A full list of all papers is also available at: <http://www.demographic-research.org/special/1/>.

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Special Collection 1: Descriptions of Contributions
Social Interactions and HIV/AIDS in Rural Africa

Article 1

Susan Watkins

Jere Behrman

**Introduction to "Research on Demographic Aspects
of HIV/AIDS in Rural Africa"**

Hans-Peter Kohler

Eliya Msiyaphazi Zulu

This paper introduces a set of papers presented at the conference “Research on Demographic Aspects of HIV/AIDS in Rural Africa”, held at the Population Studies Center, University of Pennsylvania, October 28-29, 2002. The aim of the conference was to provide a forum for the presentation of results, to an audience of experts, on a variety of demographic aspects relevant for the study of HIV/AIDS in rural Africa. The aim of this volume is to provide these results to a wider audience. Although the topics covered are diverse, ranging from methodological issues in the study of HIV/AIDS such as sample attrition to substantive issues such as fertility, divorce, and women’s autonomy, the papers are united by their use of two similar data sets collected in rural Malawi and Kenya. This introduction thus begins by briefly describing the contents of the volume and the collaborators, and then focuses on a detailed description of the data used by all authors and on the threats to data quality in these contexts. We conclude that demographic studies of HIV/AIDS in rural Africa are likely to face similar threats, and that these should be routinely recognized and acknowledged.

<http://www.demographic-research.org/special/1/1/>

Article 2

**An Assessment of the KDICP and MDICP
Data Quality: Interviewer Effects, Question
Reliability and Sample Attrition**

Simona Bignami-Van Assche

Georges Reniers

Alexander A. Weinreb

This paper evaluates the quality of the data collected as part of the Kenya and Malawi Diffusion and Ideational Change Projects, two longitudinal household surveys that examine the role of social networks in influencing attitudes and behavior regarding family size, family planning, and HIV/AIDS in, respectively, rural Kenya and Malawi. We investigate three sources of non-sampling error: interviewer effects, response reliability and sample attrition, highlighting the interaction between them, and paying particular attention to their implications for AIDS-related behavioral research.

<http://www.demographic-research.org/special/1/2/>

Article 3

**Are we measuring what we want to measure?
An analysis of individual consistency in survey
response in rural Malawi**

Simona Bignami-Van Assche

The social context of survey interviews is likely to be important in survey measurement in developing countries, where respondents expect to benefit from participation. In the recent literature on survey measurement, however, there are few attempts to analyze the impact of the respondents' social context on response error, and they tend to be limited to developed countries. This paper follows the narrow path traced by these attempts. The opportunity for this study is offered by a set of 134 unplanned re-interviews collected during the fieldwork operations of a household panel survey in rural Malawi. Personal benefit was the main reason some respondents were willing to be re-interviewed, since the survey compensated them with an additional gift for the second interview. By comparing the answers to the first and second interview given by the re-interviewed respondents, this paper therefore assesses how the search for personal benefit (which captures some aspects of the respondents' social context) biased the results.

<http://www.demographic-research.org/special/1/3/>

Article 4

Susan Watkins

How do we know we need to control for selectivity?

Ina Warriner

In the previous two decades there has been considerable progress in recognizing biases due to selectivity that are associated with the use of observational data to make causal inferences and in developing models to control for these biases statistically. Often there is a difference between estimates produced by models that attempt to control for selectivity and those that do not. Since a difference alone does not persuasively argue for one model over another, analysts typically rely on their a priori expectations of selectivity based on theory or intuition. Here we suggest that the analyst's judgement about the appropriate analytical model may be informed by simple descriptive statistics and qualitative data. We use data on social networks collected in rural Kenya, since the analysis of networks is likely to raise questions of selectivity, and simple examples. Although we do not provide general rules for assessing when models that control for selectivity should be used, we conclude by recommending that analysts inform their judgement rather than rely on theory and intuition to justify controlling for selectivity. Although our data are particular, the implications of our approach are general, since a priori evaluations of the credibility of assumptions on which analytic models are based can be made in other settings and for other research questions.

<http://www.demographic-research.org/special/1/4/>

Article 5

Enid Schatz

**Comparing, Contextualizing, and Conceptualizing:
Enhancing Quantitative Data on Women's Situation
in Rural Africa**

Demographic research mainly focuses on objective variables found in census and survey data. As demographers' interests expand to socially constructed phenomena, the discipline needs to incorporate new tools appropriate for understanding more subjective phenomena. The integration of quantitative and qualitative methods provides the opportunity to analyze data both rich in local meaning and generalizable beyond a small "N." This type of triangulation is particularly necessary in the study of women's situation, an area where quantitative results have generally confounded demographers. Using survey and ethnographic data, this paper demonstrates ways in which qualitative data complements quantitative data on women's situation. I argue that such an iterative methodological process can enrich future investigations in this area by comparing findings, contextualizing quantitative results, and improving the conceptualization of future quantitative measures.

<http://www.demographic-research.org/special/1/5/>

Article 6

Georges Reniers

Divorce and Remarriage in Rural Malawi

The demographic study of nuptiality in African countries is not very developed and often of secondary interest in a discussion of the proximate determinants of fertility. This paper uses unusual marriage history data to examine divorce and remarriage in rural Malawi. Life table probabilities of divorce range from 40 to 65 percent and are among the highest on the continent. An investigation into the determinants of marital instability using proportional hazards models confirms the importance of kinship systems and female empowerment, but the mechanism underlying the high divorce rates in Malawi seems to be more complicated than that. This is, for example, illustrated in the effect of the polygyny variables. Marriage, divorce, and remarriage are further considered as empowering strategies that women deploy throughout their lives.

<http://www.demographic-research.org/special/1/6/>

Article 7

Michael Bracher

"Moving" and Marrying: Modelling HIV Infection among Newly-weds in Malawi

Gigi Santow

Susan Watkins

We use a microsimulation model to estimate the proportions of rural Malawian brides and grooms who are already HIV positive when they marry. The model, a demographic model of reproduction and mortality overlaid with a model of disease transmission, incorporates behavioural input data derived from the second round of the Malawi Diffusion and Ideational Change Project, which was conducted in three areas of rural Malawi in 2001. We estimate that HIV infection is present in between 13 and 20 per cent of couples. Although young women are more likely to be HIV positive than men of the same age, as a result of their low ages at marriage only around two per cent of brides are estimated to be HIV positive.

<http://www.demographic-research.org/special/1/7/>

Article 8

Eliya Msiyaphazi Zulu

**Spousal communication about the risk of
contracting HIV/AIDS in rural Malawi**

Gloria Chepngeno

This paper uses qualitative and quantitative data from married men and women in rural Malawi to examine how they comprehend their risk to HIV/AIDS and what preventive strategies they consider within marriage. Program efforts to promote behavior change have consistently focused on promoting chastity before marriage and fidelity while married or using condoms. These behavioral prescriptions are suitable for extramarital contexts but not within marriage, where the condom is far from being accepted as a suitable preventive tool and spouses face the reality that one's vulnerability to AIDS is not confined to his/her behavior alone. The survey data show, unsurprisingly, that those who have the most reason for concern (e.g. those worried about contracting the disease) and those who have greater program and informal social contacts are most likely to communicate. The semi-structured interviews show that husbands and wives use subtle and gendered strategies to encourage fidelity; they talk to each other about the consequences of HIV/AIDS on their children's and their own lives as a prelude for highlighting and justifying joint sexual prudence. These results show that rather than giving up to fate, marital partners are actively challenging and persuading each other to reform sexual behavior to avoid the intrusion of HIV/AIDS into the home.

<http://www.demographic-research.org/special/1/8/>

Article 9

Kirsten P. Smith

**Why are they worried? Concern about AIDS
in rural Malawi**

There are two main types of models of behavioral change. What are collectively referred to as "individual models" are the predominant frameworks for studying risk behaviors including those related to HIV/AIDS. Individual models focus on risk perceptions, attitudes, outcome expectations, perceived norms, and self-efficacy. Models of risk behavior that focus on social or community factors have more recently been developed in response to criticisms of individual models. I use longitudinal data from the Malawi Diffusion and Ideational Change Project to study worry about HIV/AIDS. Specifically, I ask, what factors determine how much a person worries about HIV/AIDS, and are the predominant factors those that individual models would suggest, or are there are other determinants that have a greater impact on worry? I find that levels of network worry and suspected spousal infidelity have the strongest and most robust influence on respondent worry, providing support for the importance of social factors.

<http://www.demographic-research.org/special/1/9/>

Article 10

Claire Marie Noël-Miller

**Concern Regarding the HIV/AIDS epidemic and
Individual Childbearing: Evidence from Rural
Malawi**

I examine if and how rural Malawians alter their childbearing as a consequence of concern regarding the HIV/AIDS epidemic. The paper is motivated by the debate which opposes two ideas regarding the childbearing effect of high HIV infection rates and heightened AIDS mortality: one, the acceleration of childbearing as individuals find themselves under time pressure to meet their reproductive goals and two, the decrease in childbearing as parents opt to avoid the risk of transmitting the virus. I find some evidence to support the hypothesis of reduced childbearing in the presence of high levels of worry regarding HIV/AIDS. However, this finding does not seem to apply to younger women, who are perhaps subject to relatively stronger childbearing promoting norms.

<http://www.demographic-research.org/special/1/10/>

Article 11

Amy Kaler

**"My Girlfriends Could Fill A Yanu-Yanu Bus":
Rural Malawian Men's Claims About Their Own Serostatus**

In this paper, I investigate the ways that young men in rural southern Malawi talk about HIV and their own perceptions of risk. I relate these findings first to evolving gender relations in Malawi during the AIDS epidemic, and second to HIV prevention measures, with specific recommendations for changes in existing prevention campaigns. I make three claims in this paper: first, that an unknown proportion of sexually active young men say that they are already HIV-positive, in the absence of any medical evaluation or any signs of AIDS; second, that men's claims to be HIV-positive emerge from a particular configuration of masculinity as well as from personal conviction; and third, that this belief is used to justify continuing risky sexual behaviour, such as having multiple partners or not using condoms, on the grounds that this behaviour is no longer dangerous if one has already contracted the virus. This paper is based on observational journals kept by local research assistants in which they recorded mentions of AIDS in informal conversations which they overheard or participated in. I discuss the advantages and disadvantages of this classically anthropological methodology, as distinct from the more survey methods more standard in demography.

<http://www.demographic-research.org/special/1/11/>

Article 12

Alexander A. Weinreb

**Change and instability: A multilevel analysis
of AIDS-related conversational networks
among Malawian women**

This article examines changes in network structure using data on conversational networks from the 1998 and 2001 rounds of the Malawi Diffusion and Ideation Change project. The principal aims are to show that network structure can change significantly in relatively short periods - in particular at times of rapid social change - and that multilevel analysis is an effective way to explore these types of changes. The article demonstrates that: (i) conversations about AIDS are increasingly occurring within all demographic groups in rural Malawi, (ii) AIDS-related conversational networks have diversified, (iii) there is significant village-level variance in characteristics of reported network partners, but it is a minimal source of total variance in such characteristics, and (iv) that there is significant covariance between the estimated residuals associated with key predictors of size of AIDS- related conversational networks.

<http://www.demographic-research.org/special/1/12/>

Article 13

Christoph Bühler

Talking about AIDS: The influence of communication networks on individual risk perceptions of HIV/AIDS infection and favored protective behaviors in South Nyanza District, Kenya

Hans-Peter Kohler

This paper explores the significance of social relationships to two important stages in the process of sexual behavioral change in response to increased HIV/AIDS risk in rural Africa: the perceived risk of becoming HIV-infected through unprotected sexual intercourse and the preferred methods of protection either through sexual fidelity, or through condom use. The empirical analyses are based on cross-sectional data from the 'Kenyan Diffusion and Ideational Change Project' (KDICP) which provides information about AIDS-related, ego-centered communication networks of Kenyan men and women. The results show that perceived risks, as well as preferred methods of protection against HIV-infection, depend in general on the prevailing perceptions and favored protective methods within personal communication networks. However, different influential network properties can be found. The risk-perceptions of women are shaped by strong relationships and cohesive network structures. Male's risk perception depends more on the number of risk-perceivers in their communication networks. Heterogeneous relationships of various kinds are influential on women's and men's probability of favoring sexual faithfulness as a method of protection against HIV-infection.

<http://www.demographic-research.org/special/1/13/>