"Sexual behaviour and perceptions of risk: male rural-urban migrants in Tanzania"

Dr Ernestina Coast

London School of Economics[1]

Abstract

Migration is an important process of change for rural populations in developing countries. Migration is a primary cause of behaviour change – by their very act of migrating, migrants are different from those who do not migrate. The focus of the current study is male rural-urban migration in Tanzania and its interaction with HIV risk. The analysis presents results from a comparison with individual-level analyses of two populations, one (composed of recent rural-urban migrants) in an urban area and one in a rural area. Detailed migration histories (n=96 rural-urban migrants), in-depth interviews (n=96 rural-urban migrants, n=51 rural residents) and focus group discussions (n=8) form the basis of the study. Three key research questions are addressed: Does the sexual behaviour of rural-urban migrants differ from rural residents? How does the sexual behaviour of migrants differ from that of rural residents? Do rural-urban migrants have higher levels of HIV knowledge than rural residents? The results are counter-intuitive: rural-urban migrants – both married and unmarried – are not having sex in town. The perception of "risky sex" – itself a complex construction involving both individual- and community-level factors – is being clearly defined by rural-urban migrants in this study. Essentially, risky sex equals sex in town, and by avoiding sex in town most urban-rural migrants perceive themselves to be making a rational and logical decision to prevent the risk of infection. Whilst rural-urban migrants are self-defining as not wanting to become a bridge population, borne out by their lack of sex in town, resident rural populations have already categorized returnee migrants as bridge populations, regardless of their behaviour.

Abstract word count: 260 words

[1] Dept. of Social Policy, London School of Economics, Houghton Street, London, WC2A 2AE, UK
e.coast@lse.ac.uk

Sexual behaviour and perceptions of risk: Male rural-urban migrants in Tanzania

Introduction

Migration is an important process of change for rural populations in developing countries. Continuous and substantial rural-urban migration is occurring in sub-Saharan Africa, where over half of the population will live in urban areas by 2025, with many cities exceeding growth rates of 7% *per annum* (Zulu *et al*, 2004). Migration has been identified as an independent individual risk factor for the acquisition of HIV in a wide range of settings (Boerma *et al* 2002; Brockerhoff and Biddlecom, 1999; Hope, 2000; Lagarde, Pison & Enel, 1996; Lagarde, Schim van der Loeff, Enel, Holmgren, Dray-Spira, & Pison *et al*, 2003; Lurie, Williams, Zuma, Mkaya-Mwamburi, Garnett & Sturm *et al*, 2003; MacDonald, 1996; Nunn *et al*, 1995; Pison *et al*, 1993; Zuma, Gouws, Williams & Lurie 2003). Epidemiological modelling suggests that in the early stages of the HIV epidemic in South Africa, circular migration has a major impact on the propagation of HIV between communities (Coffee, Garnett & Lurie, 2000).

While the association of migration with patterns of HIV infection is well reported, the factors explaining this relationship are less well understood. Migration is a primary cause of behaviour change – by their very act of migrating, migrants are different from those who do not migrate. When people migrate, they are exposed to behaviours and norms that tend to be different from those of their place of origin. A common theme of analyses is the interaction between risk of HIV infection and the vulnerability of migrants, including (among other things) exploitation, harassment (including sexual), poverty, low status, disempowerment, segregation, isolation, job insecurity, stress (mental and physical), gender imbalances, increased alcohol consumption and discrimination. Fernandez (1998) suggests that isolation leads to increased sexual needs. Vulnerability has been operationalised formally elsewhere (see, for example, Tarantola, 1996), and migrant populations rank highly in these formal descriptions of vulnerability (Wolffers, Fernandez, Verghis & Vink, 2002).

White (2003) queries why HIV prevalence and mobility have been found to be associated, and questions whether it is due to contact with partners who were more likely to be infected with HIV because they happened to live in higher prevalence areas or whether the association is due to differing behaviour while away, such as contact with commercial sex workers (CSWs)? Guerny, Hsu & Hong (2003) report that male migrants tend to be poorly qualified and have low wages, resulting in their visiting the cheapest (and likely most highly infected) CSWs. The poor socio-economic status of rural-urban migrants might lead to direct involvement in high risk sexual behaviour (Nishigaya, 2002). The interaction between migration status and risk of HIV infection can be bi-directional. For example, Magis-Rodriguez, Gayet, Negroni, Leyva & Bravo-Garcia (2004) found that Mexican migrants had more sexual partners but tended to be more likely to use a condom than their non-migrating counterparts.

Migration is a two-way process, with implications for the migrant's place of origin, providing possible pathways for HIV infection. Studies have noted increased risks of

HIV infection upon return from migration as a result of improved socio-economic status in the rural area (Poudel Jimba, Okumura & Wakai, 2004; Chirwa, 1997). Rural partners of migrants have their own sexual networks, the extent and frequency of which might be affected by the duration of the migration (Orubuloye, Caldwell & Caldwell 1993; Lurie, Williams, Sturm, Garnett, Gittlesohn & Abdool Karim, 2000). Gendered aspects of migration must also be taken into account, and a few studies focus on female migrants (Bandyopadhyay & Thomas, 2002; Nishigaya, 2002; Smith-Estelle & Gruskin, 2003; Zuma, Gouws, Williams & Lurie, 2003;). HIV infection is itself a trigger for migration in a variety of contexts (Hosegood, McGrath, Herbst & Timaeus, 2004; Knodel & Van Landingham, 2003; Young & Ansell, 2003;). Rural sending communities can perceive rural-urban migrants to be disease carriers (Castle, 2004; Ososanya & Briger, 1994), and rural-urban migrants are frequently identified as "bridging populations" for HIV transmission between urban and rural areas (Morris, 1997; Nyanzi, Nyanzia & Kalina, 2003), although the concept of bridging populations is not without its critics (Desmond, Allen, Clift, Justine, Mzugu, Plummer & Watson-Jones *et al*, 2005).

Three key research questions form the framework of the current study:

1. Does the sexual behaviour of rural-urban migrants differ from rural residents?
2. How does the sexual behaviour of migrants differ from that of rural residents?
3. Do rural-urban migrants have higher levels of HIV knowledge than rural residents?

This study does not present data on seroprevalence.

Study context

The focus of the current study is on internal rural-urban migration in Tanzania and its interaction with HIV risk. The analysis presents results from a comparison with individual-level analyses of two male Maasai populations in Tanzania, one (composed of recent rural-urban migrants) in an urban area and one in a rural area. Studies have noted that ethnicity is strongly associated with risky sexual behaviour (see, for example, Kenya: Akwara, Madise & Hinde, 2003). This study focuses on one ethnic group, the Maasai of Tanzania. Most recent behavioural and knowledge research on the effect of migration on the spread of HIV has been based on urban samples, with little data collected on the behaviour of rural men or return migrants. This oversight makes it difficult to make statements about the relative risk of rural-urban migrants compared to their rural counterparts. Wolff, Collinson & Tollman (2002) study both rural and urban men and report high-risk behaviour as endemic among both populations, raising questions about the relative risk-taking of rural-urban migrants. By presenting data on the proximate determinants of HIV infection from both rural-urban migrants and rural residents drawn from one ethnic group, an attempt is made here to examine the impact of "change" i.e.: rural-urban migration on HIV-related behaviour within one ethnic group.

The Maasai of Kenya and Tanzania are one of the best-known pastoralist populations in the world, and are undergoing the same general process of diversification of rural livelihoods that is taking place across sub-Saharan Africa (Bryceson, 1999; Coast, 2002; Ellis, 2002; Iliya and Swindell, 1997). Outmigration from the traditional rural economy for paid employment elsewhere by Maasai men is a relatively recent phenomenon.

Some, largely destitute, Maasai women do migrate to urban areas, but on a much smaller scale compared to Maasai men. Recent research in other areas of Maasailand shows how, in the space of less than 5 years, outmigration for paid employment increased from less than 5% of households to above one in five households (Homewood, Coast & Thompson, 2005). Male Maasai outmigrants tend to be employed as watchmen (hereafter, *askari*) partly because of how they are perceived by non-Maasai – as fearless and warrior-like. It is estimated that 90% of Maasai migrants to Dar Es Salaam end up working as *askari*, the remainder work within the tourist industry, selling traditional medicines, and hairdressing (Kaunga, 2002). Maasai form a highly visible minority in urban areas – not least because of the tendency to continue wearing traditional clothing – bright red cloths combined with elaborately braided and decorated long hair. Maasai *askaris* are viewed as an inexpensive and expendable source of labour with no job security and low wages

Urban employment is a source of livelihoods diversification at both the personal and community level, and might be instigated as a result of personal decision-making or pressure from the wider kin group, some combination of the two forces. May (2002) suggests that young Maasai men are forced to migrate in order to acquire the necessary wealth to be able to afford the livestock to marry. In the current study, 57% of unmarried rural-urban migrants cited cost as the main reason for not yet being married, and some respondents did explain that the reason for coming to town was explicitly to earn enough in order to be able to marry. Rural unmarried men are significantly more likely to be engaged to be married than rural-urban migrants, perhaps providing some indirect evidence that rural-urban migrants are forced to acquire wealth from urban areas in order to be able to begin the process of marriage. Some migration for work in the rapidly expanding precious and semi-precious stones mining sector has also been documented. The impact on seroprevalence of highly mobile mining communities working in an extremely dangerous environment for which there are extremely large financial rewards for a very few have been noted in Tanzania (Clift, Anemona, Watson-Jones, Kanga, Ndeki, Changalucha, Gavyole & Ross, 2003).

In general, Maasai men and women have low levels of HIV/AIDS knowledge (Coast, 2003; Kulzer, 2001). The contested language used to describe HIV by Maasai has been noted in several locations (Coast, 2003; May, 2002, 2003). There is much confusion among Maasai about just what this “new disease” is – not least because of issues surrounding the vocabulary. The KiSwahili for HIV is *ukimwi*. The KiMaasai for HIV is *biitia*. Many Maasai believe that HIV is, in fact, an infection of the genitals, *enamuratoni*. For KiSwahili-speaking Maasai, the use of the word *ukimwi* appears relatively unproblematic. However, the use of the term *biitia* (literally: to shrink) is highly contested. Many illnesses and diseases among the Maasai are attributed to or described as “shrinking”, and it is assumed by many Maasai that HIV is simply another disease belonging to this aetiological group. The role of external perceptions relating to seroprevalence should not be ignored. Talle notes, "locally based rumours of pastoralists being less exposed to HIV transmission, as they are considered to be "fresh from the bush"" (1999: 122), noting that "the bush" is generally associated with freedom from disease.

Methodology

Detailed migration histories (n=96 rural-urban migrants), in-depth interviews (n=96 rural-urban migrants, n=51 rural residents) and focus group discussions (n=8) were used in this study. The questionnaire terminology was pre-tested, and all questionnaires were administered in KiMaasai by Maasai interviewers. Each interview was tape-recorded, allowing for a more "conversational" style of interview to develop, and for enumerators to reflect on interviews after they were completed. The author was not present at interviews, as the presence of a non-Maasai woman was considered to have potentially jeopardised interview quality and response rates. Any enumerator-administered data collection relies on respondents' own reports, and attention must be given to the accuracy of reports of behaviours that are extremely intimate and heavily value laden. Issues of validity are of concern, not least because self-reports of sexual behaviour are almost impossible to validate.

Data were only collected from men, and the exclusion of women from the current research is an acknowledged shortcoming. The questionnaire was restricted to heterosexual sexual behaviour, in keeping with strong cultural norms relating to same sex relationships that could jeopardise an interview, and hence completion rates. The cross-sectional design of this research produces a baseline description of the frequency and distribution of behaviours relevant to the HIV epidemic, and for change to be measured, a prospective cohort design would be preferable.

The study site for the rural-urban migrants was Arusha municipality and the rural study site was Engare Naibor, a Maasai village served by basic infrastructure and located approximately 30 kilometres from tarred road. The urban residents were sampled purposively from locations around Arusha. Maasai rural-urban migrants working as *askaris* tend to congregate at clearly defined locations during the daytime. Here, they swap news and pass on messages, allowing for news to be passed between the rural and urban areas. By identifying these gathering places, the interviewers were able to recruit Maasai rural-urban migrants to the survey. A completion rate of 94% was obtained. The rural respondents were chosen for interview based upon residence of Engare Naibor, and a 0% refusal rate was achieved. There were no significant differences in the socio-demographic characteristics (marital status [including polygyny], educational level, age distribution and religion) between the urban and rural samples.

For migrants working as *askaris*¸ monthly wages range from approx. US$14 to US$71. Arrangements for sleeping are made on an *ad hoc* basis for the majority, often in unfinished buildings on building sites. Terms and conditions of *askaris* work are tough, normally involving no days off during the months worked. *Askaris* find cover from the pool of newly arriving migrants, should they need to travel back periodically to their rural home. 49% of respondents had been in the urban area for less than one year, and 73% less than two years. Men migrated predominantly from the surrounding Arusha region, the longest distance to rural home was estimated at 250km.

Analyses

Differences in knowledge between rural-urban migrants and rural residents

Knowledge of HIV was consistently high in both rural and urban locations, with 98% of respondents reporting knowledge. However, as the contested language surrounding HIV for Maasai demonstrates, simple knowledge "Yes or No" of the disease does not translate into detailed, correct knowledge about its transmission. Respondents who stated that they knew of HIV were asked to list all of the ways that an individual could prevent infection with the disease - no prompts were given. Three responses were significantly different between rural residents and rural-urban migrants: abstinence; avoidance of prostitutes; and, reduction in the number of sexual partners. In urban areas the most common response was to avoid using CSWs (55.8% respondents), followed by a reduction in the number of partners (29.9% respondents). In rural areas abstinence (65.7%) was most commonly spontaneously mentioned, followed by monogamy. It should be noted that one quarter of those men responding that monogamy was a route to avoid HIV infection were themselves polygynously married at the time of the interview. The high unprompted responses referring to CSWs among current urban residents most probably reflects higher knowledge and exposure to CSWs, who are virtually absent in the rural area (although this is not to deny the existence of less formalised transactional sex in rural areas).

Knowledge about whether HIV could be cured was significantly different ($p < 0.050$), with rural-urban migrants significantly more likely to know that there was no cure for the disease. More detailed questioning about an individual's perception of their own risk vis à vis catching the disease did not reveal any significant differences between current place of residence. Respondents (unprompted) were asked to list all of the sources they could remember having heard about HIV from, regardless what the content of that information was. Significant ($p=.000$) differences were noted for TV and radio (urban residents significantly more likely to mention) and friends/relatives (rural residents significantly more likely to mention). The virtual absence of reference to written materials (including posters) is probably not only a reflection of low levels of literacy among Maasai in general, but also the paucity of HIV materials in languages other than English and KiSwahili.

A series of detailed questions on condom knowledge were asked, from "Do you know what a condom is?" to "Have you ever seen a condom" to "Where have you seen a condom?" to "Can you describe to me in detail how condom works?" Whilst there was no significant difference between rural resident and rural-urban migrants in terms of knowing what a condom was ("Yes/ No" response), there was a significant ($p=0.038$) difference between whether the respondent had ever seen a condom, with rural-urban migrants more likely to report having seen a condom than rural residents.

Given the very low penetration of social marketing campaigns (primarily for Salama brand condoms) into rural areas in general and Maasai areas in particular, it is unsurprising that rural residents are significantly less likely to report ever having seen a condom. For those respondents who reported that they had seen a condom, they were asked to describe how they had seen a condom. It is interesting to note that the majority

of respondents reported that they had not actually seen the condom, rather they had seen the condom packet on sale in shops, and had little idea about what it contained. Only one respondent reported enough curiosity to have bought a packet, and filled a condom with water to see what happened. Overall, levels of detailed knowledge about condoms are extremely low, even when people state that they know about condoms, or have seen one. For example, 69% of urban respondents had heard about condoms but when probed were unable to provide detailed information about how they worked (47% in rural areas). Even having seen a condom was still a poor indicator of detailed knowledge about their functioning, with 48% of urban respondents having seen condoms, but unable to describe how they worked.

Differences in behaviour

Differences in reported sexual behaviour were investigated between rural residents and rural-urban migrants. There was a significant difference in reported levels of total sex partners (including wives) for rural (M=2.08, SD=1.885) and urban men (M=1.41, SD=1.433, t(81)=-2.227, p=029). There was no significant difference in the reporting of extra-marital sex between married rural-urban migrants and rural residents, with approximately one third of currently married men reporting extra-marital sex in the preceding 12 months (urban=33%, rural=30%). In both urban and rural settings the percentage of polygynously married men who report extra-marital sex in the preceding 12 months is lower than that reported for monogamously married men, but the difference is not significant between the two marriage types.

41% of unmarried rural-urban migrants reported no sex in the 12 months preceding the interview, and the difference between rural and urban respondents in whether sex in the previous 12 months was reported was significant. There was also a significant difference in reported levels of sex partners for unmarried rural (M=2.04, SD=2.063) and rural-urban men (M=0.94, SD=1.451, t(43)=-2.478, p=.017). For unmarried men, regardless of current rural or urban residence, sexual partners are overwhelmingly located in the rural area. 95% of unmarried current urban residents report that sex partners over the past year were in their rural home area. The giving of gifts or money was very rare, and only one rural-urban migrant reported having sex with a CSW in the preceding year. Whilst unusual, the details of this individual case do warrant highlighting, especially his verbatim response to questioning about perceptions of risk regarding HIV,

> "I was in real shock when a friend told me about this disease *ukimwi* because when I went with this women to the guesthouse in the afternoon I did not know about this disease. I am now very scared because I think I am at risk of this disease".

He did not know about VCT or where to go for VCT.

Rural-urban unmarried migrants were significantly more likely to report that their current sex partners back in the rural area did not have any other partners in the preceding twelve months. However, the majority of respondents, whether rural or urban, expected that their sex partners did have other partners. Similarly, rural-urban migrants were more likely to describe their current partner as a "girlfriend" rather than a "casual partner", suggesting

either a lack of knowledge about sex partners who were geographically distant, or a correctly reported belief that the relationship was more established than “casual”.

Most unmarried respondents, both urban and rural report never use of condoms. Those 6 individuals reporting ”always” or “most of the time” condom use are interesting to examine in slightly deeper depth. All of the women with whom condoms were used always or most of the time were themselves educated – and Maasai – making them relatively unusual for Maasai women. It is reasonable to conjecture that condom use in these few cases is linked to either negotiation between the couple or, the educated female partner demanding condom use (either to avoid pregnancy or to avoid HIV infection). In two cases, where unmarried respondents reported condom use, but had two concurrent partners, condoms were reported as being used with both of the partners.

When questioned, 61% of respondents reported that they had changed their own behaviour since hearing about HIV, with no significant difference between urban and rural respondents. Given that levels of knowledge about how to reduce infection risks are relatively low, and there are significant differences between urban and rural residents in terms of what they report as routes to reduce infection (urban report avoid CSWs and rural report abstinence), it is pertinent to examine whether there is indirect evidence of behaviour change. The only route to validating this information is to compare reported behaviour with articulated behaviour change.

There is no significant difference in the reporting of extra-marital sex for currently married men relative to whether they report behaviour change as a result of knowing about HIV. 30% of currently married men reporting a behaviour change also report an extra-marital sex partner in the preceding 12 months, regardless of location. For unmarried men, however, there is a significant ($p=.016$) difference in whether they reported having sex in the preceding 12 months according to reported change in behaviour due to knowing about HIV. Closer examination of verbatim responses indicates a clear articulation among rural-urban unmarried migrants to avoid sex in towns – and this is reflected in data on the location of current sex partners (95% in rural home area). The majority of the responses clearly state the need to avoid sex in the urban area in order to prevent HIV infection.

> “Where I have a girlfriend back home, there is no AIDS, so I don't sleep around with women in town”
> (Rural-urban migrant, unmarried, 28 years old, *askari* for 19 months)

> “I’m not womanising – at least not in town – home [rural] is different! [Laughs]”
> (Rural-urban migrant, 21 years old, *askari* for 13 months)

> “I don’t have sex outside of my tribe, and our women are not in town”
> (Rural-urban migrant, unmarried, 22 years old, *askari* for 12 months)

A total of 7 respondents (6 rural-urban migrants, 1 rural resident) had ever been for VCT. Detailed questioning revealed that in only one of these cases had the decision to test been

taken “voluntarily” and with the intention of discovering his own status. The remaining 6 cases had all been tested in order to be able to donate blood to a relative.

Reporting of sexual behaviour (a “hidden discourse” Herrell, 1991:200) to an enumerator will always be fraught with issues of whether the reports are valid. For example, single men consistently report higher numbers of sexual partners than women (Dare & Cleland, 1994; Nnko, Boerma, Urassa, Mwaluko & Zaba, 2004; Reid, 1999). Is there evidence of “swaggering males” (after Nnko *et al*¸ 2002) in this dataset? How do the data reported here compare with extant data from other research? The only data with which comparisons might be made are Morley’s (1991) data, which report high levels of sexual networking – average of 11.8 sexual partners per year – for unmarried Maasai men. The current study reports considerably lower sexual partners, with a mean of 2.0 partners for currently unmarried rural men. Is there under-reporting of sexual partners in the current study, due to some form of interview or courtesy bias? Most evidence suggests that single men in fact over report sexual partners (at least relative to single women), so is there any reason why the Maasai men in this study would under-report sexual partners? Or is it reasonable to assume reasonable validity of the data? Enumerator training and interview conduct, combined with interviews carried out privately with Maasai enumerators in KiMaasai, meant that every effort was made to allow for valid reporting of sexual behaviour. The levels of reported sexual partners by unmarried men is in keeping with lifetime levels of reported sexual partners for older men, suggesting that the data are reasonably robust.

Discussion

Maasai rural-urban migrants – both married and unmarried – are not having sex in town. There is an explicit link made by Maasai rural-urban migrants between sex in town (not necessarily with CSWs, but with town women in general), and the risks of HIV infection. The reverse side of this perception is that HIV is considered to be only a disease of urban areas, and is not perceived to be present in rural Maasailand in general. Rural residents report significantly more sex partners than rural-urban migrants. What is perhaps most prominent (and counterintuitive) about the reporting of sexual behaviour by rural-urban migrants is the lack of sex whilst in urban areas. Over forty percent of unmarried rural-urban migrants reported no sex in the preceding twelve months, with total sex partners significantly different between urban and rural men. Just 5% of the preceding 12 months’ sexual partners were reported as having occurred in town. May’s ethnographic study of rural-urban Maasai migrants reported just 2 out of 47 interviewees referring to sex in town (Dar Es Salaam), although no data are provided on the reference time period, providing support for the low levels of sexual activity in town found in this study. Comparisons may be drawn here with Smith’s (2003) research which reveals that young Nigerian migrants do not perceive significant personal risk of HIV infection because they construct the risk of AIDS in ethical and moral terms, projecting immortality and danger onto imaginary others.

There is an urgent need to understand how people interpret risk. It is difficult to trace the linkage between perception of risk (with reference to sexual behaviour) and reported sexual behaviour, and the linkages remain unclear (Akwara, Madise & Hinde 2003). The dissonance between people's knowledge and the extent to which they avoid risk has been described as "one of the most vexing issues for public health workers and social science analysts" (Smith, 2003). The perception of "risky sex" – itself a complex construction involving both individual- and community-level factors – is being clearly defined by rural-urban migrants in this study. Essentially, risky sex equals sex in town, and by avoiding sex in town most urban-rural migrants perceive themselves to be making a rational and logical decision to prevent the risk of infection. In this study the majority of respondents construct risk at the societal level – town or ethnic group – and not at the individual level. There are important implications here for the design of intervention programmes, which generally target individuals (Smith & Watkins, 2005). It is a truism that knowledge does not cause in behaviour change. From an epidemiological perspective, the statistical risk of HIV transmission is well established, and the risk factors are clear when reduced to their proximate determinants. However, statistical risk is not the same as psychological risk, which in the current study is reduced to dichotomous values of town versus rural or Maasai versus non-Maasai rather than a nuanced range of risks.

It is generally acknowledged that motivations for sex are complicated, unclear and may not be thought through in advance. The data here suggest that, for rural-urban migrants at least, some very clear decisions are being made about whether or not to have sex in town. A small minority of respondents articulated that they could still be at risk if someone else were to infect their rural partners, even if they themselves abstained from sex in town. VCT, a mainstay of national and international HIV interventions, is barely known by the study population. Six out of seven respondents reporting VCT had only done so because of compulsion in order to donate blood.

Sexual behaviour remains the "primary target" of AIDS prevention efforts worldwide (UNAIDS, 1999: 5). However, many authors have argued that sexual behaviour alone is far too narrow a lens through which to examine the experience and behaviour of individuals (Collumbien & Hawkes, 2000; Dixon-Mueller, 1993; MacPhail & Campbell, 2001; Zeidenstein & Moore, 1995). If programmes are to be appropriately designed, there is a need to know the contextual realities of people involved in migration processes, including cultural explanations for and perceptions of morbidity and mortality.

Issue of access to culturally and linguistically appropriate HIV information are pertinent (Luginaah, Elkins, Maticka-Tyndale, Landry & Mathui, 2005). For example, the linguistic problems surrounding HIV/AIDS (*ukimwi* or *biitia* or *enamuratoni*) highlighted here are profoundly important for the development of relevant and appropriate IEC materials. In Namibia, research among the Kxoe highlighted a need for a specialist linguist to develop IEC materials (Brenzinger & Harms, 2001). Poudel *et al* (2004) call for the development of culturally appropriate interventions for HIV and STIs for migrants, although we must acknowledge the problem of limited institutional capacity to provide services in general for growing urban populations (Zulu *et al*, 2004).

Also of policy importance is how others, particularly service providers in the context of condom promotion and provision, view a group's sexuality. If, for example, a group of people is perceived as being unwilling or opposed to condom use, then a resource-poor service provider is unlikely to focus efforts on condom distribution among that particular population. Perceptions of one group about another group's "otherness" or "difference" have been proven to have a large impact on the level and quality of reproductive health services in general (Tweedie & Lemba, 1996). There is a generally held view among both non-Maasai and educated Maasai that Maasai are extremely traditional and conservative (Rugene & Newbery, 1998). The various conceptualizations of Maasai have tended to rely on images and preconceptions relating to Maasai men, both in historical and contemporary accounts (Hodgson, 1999). Ideas of Maasai traditionalism and conservatism are closely bound together with images of the Maasai male alternately as a fierce warrior or recalcitrant pastoralist. The result is that service providers tend to consider Maasai as unlikely to accept their services, and therefore tend not to offer services.

From an epidemiological perspective, migrant populations are often perceived to act as "bridge populations", forming a link between high and low prevalence groups (Morris, 1997). Focus group discussions in rural areas about returnee rural-urban migrants articulate this perception very strongly

> "If it [HIV] does come we just believe it will be the *askaris* in town who will have brought it and the real problem is that these guys go to town, they eat good food and they look healthy, so women like them. These guys come nice looking and the girls will run after them and if it's not them who bring the diseases I don't see how else the disease can get into Maasailand."
> Rural FGD#5, 18 years old, male, unmarried

Rural-urban migrants are self-defining as not wanting to become a bridge population, borne out by their lack of sex in town, but resident rural populations have to some extent already categorized returnee migrants as bridge populations, regardless of their behaviour. The potential for discrimination is great, and whilst the isolation of HIV positive individuals is "impractical and unethical" (White, 2003:753), it has been suggested for rural-urban returnee migrants both in Maasailand (ole Moono, 2000) and elsewhere (Castle, 2004).

There is a need for prevention efforts to be directed at rural-urban migrants (Lagarde *et* al, 2003; Nyanzi *et al*, 2003), which might involve migrant workers in the production and distribution of information materials on HIV/AIDS and migration (Abril, 2002). Alongside education strategies for absent males, there is also a need to take into account the needs of their partners, who are likely to be rural women (Campbell and Williams, 1999; Hughes, Hoyo, Puoane, Stein & Abdool-Karim, 2000).

At the regional level, the Great Lakes Initiative on AIDS (GLIA) that deals with the major transport routes between Mombassa and Goma and DES and Goma, acknowledges the cross border need for policy with respect to mobile populations in east Africa (Lyons,

2004). At the macro level, however, some authors (for example, Guerny, Hsu & Hong, 2003) argue that population movement patterns are determined by differences in levels of economic development between sending and receiving areas, therefore policy foci should incorporate the elimination of development-induced vulnerabilities. Decosas (1998) suggests that small improvements in the physical and social environment of migrants and their communities of origin may result in greater benefits than any targeted service provision. In Thailand, for example, the need to deal with institutional (kin and community) factors that promote recruitment into large-scale rural-urban circulatory migration for commercial sex work has been identified as key to risk reduction (Ford & Koetsawang, 1991).

The spatial, temporal, structural and institutional complexities (after Guerny, Hsu & Hong, 2003) of the migration process combined with the economic, legal and social vulnerability of rural-urban migrants (and their families) add to the complexities of HIV infection prevention in already culturally complex settings. However, successful programmes have been identified as sharing a common core of striving "to understand existing sexual cultures among migrants and their partners who live and work in transit settings" (Synergy Project 2002:43).

Urban migrants are an important target group for national AIDS prevention strategies in many sub-Saharan African countries, not least because urban areas are perceived as anonymous places where there is a loosening of familial and community control on sexual behaviour. This approach is not without its critics, who argue that approaches focussing on individual migrant communities ignore the structural or societal context within which migration occurs (Bloom, Urassa, Isingo, Ng'weshemi & Boerma 2002; Sweat and Denison, 1995; Synergy Project, 2004). For example, identified linkages between male rural-urban migrants and risk of HIV infection due to structural conditions created under apartheid, especially the housing of migrant workers in large single-sex hostels (Brummer, 2002).

Sexual behaviour is just one kind of human behaviour and demands an understanding of the socio-cultural context in which it takes place. Rural-urban migration is an important reality in the contemporary socio-cultural setting of HIV transmission for many Africans today, affecting individual- , community- and policy-level responses.

References

Abril, D.A., (2002). The involvement of HIV+ migrant workers in the production and distribution of information materials on HIV/AIDS and migration Paper presented at the 14th International AIDS Conference Barcelona, Spain, July7-12th, 2002.

Akwara, P. Madise, N.J. & Hinde, A. (2003). Perception of risk of HIV/AIDS and sexual behaviour in Kenya *Journal of Biosocial Science,* 35(3), 385-411.

Bandyopadhyay, M., & Thomas, J., (2002). Women migrant workers' vulnerability to HIV infection in Hong Kong. *AIDS Care,* 14(4), 509-521.

Bloom, S.S.M., Urassa, R., Isingo, J., Ng'weshemi, J. & Boerma, T.(2002). Community effects on the risk of HIV infection in rural Tanzania, *Sexually Transmitted Infections*, 78(4), 261-266.

Boerma, J.T. Urassa, M.. Nako, S. Ng'Weshemi, J. Isingo, R. Zaba, B. Mwaluko, G., (2002). Socio-demographic context of the AIDS epidemic in a rural area in Tanzania with a focus on people's mobility and marriage *Sexually Transmitted Infections*, 78 Suppl (1), 97-105.

Brenzinger, M., & Harms, G. (2001). HIV/AIDS threat and prevention in marginalised ethnic groups: GTZ.

Brockerhoff, M. & Biddlecom, A.E. (1999). Migration, sexual behaviour and the risk of HIV in Kenya *International Migration Review*, 33(4), 833-856.

Brummer, D., (2002). Labour migration and HIV/AIDS in southern Africa: IOM.

Bryceson, D.F. (1999). 'African Rural Labour, Income Diversification and Livelihood Approaches: A long term development perspective.' *Review of African Political Economy*, (80), 171-189.

Campbell, C. & Williams, B. (1999). Beyond the biomedical and behavioural: *Towards and integrated approach to HIV prevention in the South African mining industry Social Science and medicine*, 48(11), 1625-1639.

Castle, S. (2004). Rural children's attitudes to people with HIV/AIDS in Mali: *the causes of stigma Culture, health and sexuality*, 6(1), 1-18.

Chirwa, W.C. (1997). Migrant labour, sexual networking and multi-partnered sex in *Malawi Health Transition Review*, 7(3), 5-15.

Clift, S. Anemona A, Watson-Jones D, Kanga Z, Ndeki L, Changalucha J, Gavyole A, & Ross, D.A. (2003). Variations of HIV and STIS prevalence within communities

neighbouring new goldmines in Tanzania: *importance for intervention design Sex Transm Infect*, (79), 307-312.

Coast, E. (2000). *Maasai Demography* Unpublished PhD Thesis, University of London.

Coast, E. (2002). Maasai socio-economic conditions: cross-border comparison *Human Ecology*, Vol. 30 No. 1 (pp.79-105).

Coast, E. (2003). 'Wasting sperm: The cultural context of condom use among the Maasai of Northern Tanzania' Paper presented at The International Union for the Scientific Study of Population Workshop on Taking Stock of the Condom in the Era of HIV/AIDS, University of Botswana, 13-17 July 2003.

Coffee, M. Garnett, G.P. & Lurie, M. (2000). Modelling the impact of circular migration on the rate of spread and the eventual scale of the HIV epidemic in South Africa Paper presented at the 13th International AIDS Conference, Durban, South Africa, 9-14th July, 2000.

Collumbien, M. & S. Hawkes (2000). Missing men's messages: does the reproductive health approach respond to men's sexual health needs? *Culture, health and sexuality*, 2(2), 135-150.

Dare, O.O. & Cleland, J.G. (1994). Reliability and validity of survey data on sexual behaviour Health Transition Review Vol: 4, (pp.93-11).

Decosas, J. (1998). Labour migration and HIV epidemics in Africa *AIDS Analysis Africa* 8(5), 6-7.

Desmond, N., C. F. Allen, S. Clift, B. Justine, J. Mzugu, M.L. Plummer, D. Watson-Jones, D. & Ross, A. (2005). A typology of the groups at risk of HIV/STI in a gold mining town in north-western Tanzania: *Social Science and Medicine*, (60), 1739-1749.

Dixon-Mueller, R. (1993). The sexuality connection in reproductive health *Studies in Family Planning*, 24(5), 269.

Ellis, F., (2000). Rural Livelihoods and diversity in developing countries. Oxford: University Press.

Fernandez, I. (1998). Migration and HIV/AIDS vulnerability in South East Asia *AIDS Analysis Africa,* 4(5), 11.

Ford, N. & Koetsawang, S. 1991. The socio-cultural context of the transmission of HIV in Thailand. *Social Science and Medicine*, 33(4), 405-414.

Guerny, J. du, L. Hsu, N & Hong C. (2003). Population movement and HIV/AIDS: the case of Ruili, Yunnan, China United Nations Development Programme 9UNDP), South East Asia HIV and Development Programme: (pp.28) Bangkok, Thailand.
http://www.hiv-development.org/text/publications/RuiliModel.pdf
Accessed 30/12/2004 10:50am

Herrell, R.K. HIV/AIDS research and the social sciences (1991). Current Anthropology, Vol. 32, No. 2. (pp.199-203).

Hodgson, D. L. (1999). 'Once intrepid warriors: modernity and the production of Maasai masculinities.' *Ethnology,* (38), 121-150.

Homewood, K. Coast, E & Thompson, M. (2005). In-migrants and exclusion in east African rangelands: *access tenure and conflict Africa*, 74(4).

Hope, K.R. (2000). Mobile workers and HIV/AIDS in Botswana *AIDS Analysis Africa*, 10(4), 6-7.

Hosegood, V.N. McGrath, K. Herbst, I. & Timaeus, M. (2004). The impact of adult mortality on household dissolution and migration in rural South Africa *AIDS*, 18(11), 1585-1590.

Hughes, G. Hoyo, C. Puoane, T. Stein, Z. & Abdool-Karim, S.S (2000). Rural South African women and their risk for undetected sexually transmitted diseases and HIV infection. Paper presented at the 13th International AIDS Conference, Durban, South Africa, 9-14th July, 2000.

Hughes, G.D. (1999). The effect of oscillating male migration on rural South African women's health: implications for sexually transmitted diseases and human immunodeficiency virus Unpublished PhD thesis University of California, Berkeley.

Iliya, M., & Swindell, K. (1997). 'Winners and losers: household fortunes in the urban peripheries of Northern Nigeria.' (pp 85-100) in D. Bryceson and V. Jamal Farewell to farms. De-agrarianisation and employment in Africa. Ashgate: Aldershot.

Kaunga, J. Ole (2002). The living and working conditions of urban-based indigenous peoples: the case of the Maasai of Tanzania Indigenous Affairs Vol 3-4 (pp.9-15).

Knodel, J. & Van Landingham, M. (2003). Return migration in the context of parental assistance in the AIDS epidemic: the Thai experience *Social Science and Medicine*, 57(2), 327-342.

Kulzer,J. L. (2001). Socio-cultural norms and acceptability of HIV/AIDS prevention strategies among the Maasai of Simanjiro District, Tanzania Unpublished Master's Thesis, University of Washington.

Lagarde, E. Pison, G. & Enel, C, (1996). A study of sexual behaviour change in rural Senegal: *Journal of acquired immune deficiency syndromes and human retrovirology*, 11(3), 282-287.

Lagarde, E.M. Schim van der Loeff, C. Enel, B. Holmgren, R. Dray-Spira, G. Pison, J.P. Piau, V. Delaunay, S. M'Boup, I. Ndoye, M. Cœuret-Pellicer, H. Whittle & Aaby, P. (2003). Mobility and the spread of human immunodeficiency virus into rural areas of West Africa *International Journal of Epidemiology* (32), 744-752.

Lopez-Corral, J. *et al* (1992). The absence of infection with the human immunodeficiency viruses type 1 and 2 in an African Masai population. *Medicina Clinica*, 98(6), 237.

Luginaah, I.. Elkins, D. Maticka-Tyndale, E. Landry, T. & Mathui, M. (2005). Challenges of a pandemic: HIV/AIDS-related problems affecting Kenyan widows *SSM*, (60), 1219-1228.

Lurie, M. N., Williams, Brian. Zuma, Khangelani. Mkaya-Mwamburi, David. Garnett, Geoff. P. Sturm, A.W. Sweat, Michael. D. Gittelsohn, Joel & Abdool Karim, Salim. S. (2003). The impact of migration on HIV-1 transmission in south Africa: a study of migrant and non-migrant men and their partners *Sexually transmitted diseases,* 30(2), 149-156.

Lurie, Mark. Williams, Brian. Zuma, Khangelani. Mkaya-Mwamburi, David. Garnett, Geoff. P. Sweat, Michael. D Gittelsohn, Joel. & Abdool Karim, Salim. S. Who infects whom? HIV concordance and discordance among migrant and non-migrant couples in South Africa. (2003). *AIDS*, (17), 2245-2252.

Lurie, M., Williams, B. Sturm, A.W. Garnett, G. Gittlesohn, J. & Abdool Karim, S.S. (2000). Migration and the spread of HIV in southern Africa: prevalence and risk factors among migrants and their partners, and non-migrants and their partners Paper presented at the 13th International AIDS Conference, Durban, South Africa, 9-14th July, 2000.

Lyons, M., (2004). Mobile populations and HIV/AIDS in E Africa in HIV and IADS in Africa: beyond epidemiology Kalipeni, E., Craddock, S.J., Oppong, R., & Ghosh, J., (pp.175-190). Blackwell Publishing: Malden, Mass.

MacDonald, D. S. (1996). Notes on the socio-economic and cultural factors influencing the transmission of HIV in Botswana *Social Science and Medicine*, 42(9), 1325-1333.

MacPhail, C. & C. Campbell (2001). 'I think condoms are good but, aai, I hate those things': condom use among adolescents and young people in a southern African township *Social Science and Medicine,* (52), 613-1627.

Magis-Rodriguez, C. Gayet, M. Negroni, Leyva, R.& Bravo-Garcia, E. (2004). Migration and AIDS in Mexico: an overview based on recent evidence *Journal of Acquired Immune Deficiency Syndromes* 37 (Suppl 4):S215-S226.

May, R. M. & Anderson, R. M. (1987). Transmission dynamic of HIV infection *Nature*, 37-142.

May, A. (2003). Maasai migrations: Implications for HIV/AIDS and social change in Tanzania (pp.32). Unpublished manuscript.

May, A. (2002). Unexpected migrations: Urban labor migration of rural youth and Maasai pastoralists in Tanzania Unpublished PhD Dept. of Anthropology, University of Colorado at Boulder.

Moono, Ole. (2000). HIV/AIDS status and awareness among the Maasai in the Ngorongoro Conservation Area (NCA) Unpublished paper prepared for ERETO.

Morley, D. (1991). Kenya: Maasai warriors and their sexual partners *The Lancet*, (337), 667-8.

Morris, M. (1997). Sexual networks and HIV AIDS 11(Suppl. A) S209-S216.

Nishigaya, K. (2002). Female garment factory workers in Cambodia: migration, sex work and HIV/AIDS *Women and health*, 35(4), 27-42.

Nnko, S. Boerma, J.T. Urassa, M. Mwaluko, G. & Zaba, B. (2004). Secretive females or swaggering males? An assessment of the quality of sexual relationship reporting in rural Tanzania. *Social Science and Medicine*, 59(2), 299-310.

Nunn, A. J. Wagner, H.U. Kamali, A. Kengeya-Kayondo, J.F. & Mulder, D.W. (1995). Migration and HIV-1 seroprevalence in a rural Ugandan population AIDS (9), 503-506.

Nyanzai, S. Nyanzia, B. & Kalina, B. (2003). Urban husbands with rural wives: migration, employment and sexual health in a high HIV risk areas in Uganda *Urban Health and Development Bulletin*, 6(1-2), 79-86.

Orubuloye, I. O., Caldwell, P. &. Caldwell, J. C (1993). The role of high-risk occupations in the spread of AIDS: Truck drivers and itinerant market women in Nigeria *International Family Planning Perspectives*, 19(2), 43-48.

Ososanya, O.O. &. Brieger W. R (1994). Rural-urban mobility in south-western Nigeria: implications for HIV/AIDS transmission from urban to rural communities *Health Education Research*, 9(4), 507-518.

Pison, G. Le Guenno, B. Lagarde, E. Enel, C. & Seck, C. (1993). Seasonal migration: a risk factor for HIV infection in rural Senegal *AIDS* , 6(2), 196-200.

Poudel, K.C. Jimba, M. Okumura, J. & Wakai, S. (2004). Migrants' risky sexual behaviours in India and at home in far western Nepal *Tropical Medicine and International Health*, 9(8), 897-903.

Reid, E. (1999). Placing women at the centre of the Analysis UNDP: HIV and Development Programme No. 6.

Rugene, N. & Newbery, B. (1998). No more sleeping with the enemy. *New Statesman*, Dec: 67-68.

Smith, D.J. (2003). Imagining HIV/AIDS: morality and perceptions of personal risk in Nigeria. *Medical Anthropolog*, 22(4), 343-372.

Smith, K.P. & Watkins, S.C. (2005). Perceptions of risk and strategies for prevention: reponses to HIV/AIDS in rural Malawi *SSM* (60), 649-660.

Smith-Estelle, A. & Gruskin, S. (2003). Vulnerability to HIV/STIs among rural women from migrant communities in Nepal: a health and human rights framework *Reproductive Health Matters*, 11(220), 142-151.

Sweat, M.D. & Denison, J.A. (1995). Reducing HIV incidence in developing countries with structural and environmental intervention *AIDS* 9 (Suppl A):S251-257.

Synergy Project (2002) Keeping up with the movement: preventing HIV transmission in migrant work setting. University of Washington, Center for Health Education and Research pp. www.synergyaids.com

Talle, A., (1999). Pastoralists at the border: Maasai poverty and the development discourse in Tanzania. Anderson, D.M. & Broch-Due, V. The poor are not us: poverty and pastoralism in eastern Africa.. James Currey: Oxford.

Tarantola, D., (1996). Mann, J.M. & Tarantola, D. (Eds) AIDS in the world II: global; dimensions, social roots and responses. (pp.427-476). New York: Oxford University Press.

Tweedie, I. & Lemba, M (1996). Perceptions of health providers, family planning, and contraceptives in Zambia: Smoke that Thunders. Johns Hopkins School of Public Health, Center for Communication Programs.

White, R.G. (2003). What can we make of an association between human immunodeficiency virus and prevalence and population mobility? *International Journal of Epidemiology* (32), 753-754.

Wolff, B., Collinson, M. Tollman, S. (2002). Safer at home? Male labour migration and HIV risk behaviour in South Africa from a rural perspective Paper presented at the 14th International AIDS Conference Barcelona, Spain, July7-12th, 2002.

Wolffers, I, Fernandez, I. Verghis, S. & Vink, M. (2002). Sexual behaviour and vulnerability of migrant workers for HIV infection *Culture, health and sexuality*, 4(4), 459-473.

Young, L. & Ansell, N. (2003). Young AIDS migrants in southern Africa: policy implications for empowering children *AIDS Care*, 15(3), 337-345.

Zeidenstein, S. & Moore, K. (eds) (1995). Learning about sexuality: A practical beginning New York: The Population Council.

Zulu, E., Doodoo, F.N. Ezeh, A.C. (2004). Urbanization, poverty and sex: roots of risky sexual behaviours in slum settlements in Nairobi, Kenya in HIV and AIDS in Africa: beyond epidemiology (pp.176-174) (eds.) Kalipeni, E. Craddock, S. Oppong, J.R. Ghosh, J. Blackwell Publishing: Mass.

Zuma, K. Gouws E., Williams B., Lurie M. (2003). Risk factors for HIV infection among women in Carletonville, South Africa: migration, demography and sexually transmitted diseases *International Journal of STDs and AIDS*, 14(12), 814-817.

Full word count: 7621