Title: HIV/AIDS in Tanzania: Gender Based Structural Interventions

Introduction

Current research on AIDS in Africa seeks to integrate both cultural and structural explanations as an alternative to research paradigms that focus on individual behavior (Parker 2001). Heavily influenced by developments within interactionist sociology, cultural anthropology, and women's studies, AIDS research now considers the broader set of social representations and cultural meanings that shape sexual experiences in different contexts. This shift of emphasis has drawn attention to the socially constructed (and historically changing) identities and communities that shape sexual practice within the flow of collective life. With this new focus, special attention to social determined differentials in power, particularly between females and males has come to the forefront of AIDS research.

Perhaps most theoretically akin to the idea that cultural and structural forces shape vulnerability to HIV, some scholars have examined and revealed how gendered power relations influence joint fertility decisions (Takyi and Dodoo 2005; Bankole 1995; Mwageni et al 1998; Dodoo and Tempenis 2002). These studies find that women with more power, such as those from matrilineal families (Takyi and Dodoo 2005) or those with higher education (Hollos and Larsen 2004), are better able to influence reproductive decisions. While researchers have begun to incorporate structural and cultural arguments into theories on the spread of the AIDS epidemic, it is not clear if interventions have taken note of this development. Are there gender-based structural or cultural interventions in the field?

Structural interventions are defined as "interventions that work by altering the context within which health is produced or reproduced in the social, economic, and political environments that shape and constrain individual, community and societal health outcomes" (Blankenship et al. 2000: 11). Cultural interventions are a subset of structural interventions addressing social systems of meaning. For instance,

gender based cultural interventions seek to transform social constructions of masculinity and femininity and the unequal distribution of power implicit in their definitions (WHO 2003). In general, there has been little success in lowering the HIV/AIDS rates in Africa. This may be due to an overwhelming focus of interventions on changing individual behavior rather than changing norms, values, and power relations that reproduce and perpetuate risky behaviors through collective systems of meaning.

Structural and Cultural vs. Individual Based Interventions

Structural interventions are governed by the assumption that they locate, often implicitly, the cause of public health problems in contextual or environmental factors that influence risk behavior, rather than in characteristics of individuals who engage in risk behaviors (Blankenship et al 2006). Hence, they address the origin of HIV risk from a broader perspective and are not limited to an individual's psychology which requires persuasion to change behavior (Parker 2001). They may relate to economic, social, policy, organizational or other aspects of the environment (Sumartojo 2000). Of significance is that they include interventions that may not be obviously associated with HIV risk, but still may influence it.

Critics of structural approaches to HIV prevention argue that structural interventions lead to stigmatization and the loss of individual rights. Also, they require more than traditional public health inputs; that is, they require multisectoral collaboration (Sumartojo 2000). For example, while traditional individual based interventions can be implemented relatively easily, particularly if a willing collaborator is found, structural interventions require major changes in law, policy, procedures, or complex social processes, which may involve more than one sector of a country. Thus, they are difficult to initiate and maintain. Moreover, evaluating their effectiveness is also complicated by the participation of many different sectors of a society.

On the other hand, individual based or behavioral interventions deal with individuals, one by one. They adopt a view of behavior as personally motivated or resulting exclusively from a person's conscious decisions. Research indicates that many of these interventions have been very successful in changing behavior when they are tailored to the needs and values of the groups they are designed to reach (e.g. condom use among commercial sex workers and their clients in Thailand; abstinence among religious youth in the US; free HIV testing for adults in Tanzania and Trinidad) (Valdiserri, Ogden & MacCray 2003). However, they often require a lot of staff time and reach a limited number of persons. Furthermore, those who do receive interventions may face pressures to continue high-risk behaviors from their peers who do not receive the intervention. Finally, little is known about their long-term impact (Blankenship et al 2006).

Structural interventions change or influence social, political, or economic environments in ways that help many people all at once—perhaps without their even knowing it (Friedman & McKnight 2003). Structural interventions may contribute to change that is longer lasting (Blankenship et al 2006). As some scholars have demonstrated, the political economic factors that drive the AIDS epidemic in virtually all settings are intertwined with gender and sexuality hierarchies that leave women, particularly low-income women, especially vulnerable to HIV (Farmer 1992). This implies that gender as a structural factor rather than individual behavior may be accountable for HIV vulnerability, and it suggests gender focused cultural interventions are warranted.

With a focus on gender, our project investigates the degree to which AIDS prevention programs in Tanzania adopt structural, and specifically cultural strategies and we explore how such programs are implemented. The Tanzanian case is especially instructive because the country has a slightly higher than average HIV prevalence rate in Africa (i.e. 7% and 6% respectively) (UNAIDS/WHO 2005). Tanzania is home to a large number of AIDS intervention programs that are funded and/or administered by various sources. Yet, until now, there was no register of programs with information designating their focus as

structural or cultural versus individual, and no systematic detail on how, and the degree to which programs incorporate gender.

HIV/AIDS in East Africa

About two-thirds of all people infected with HIV and 72 percent who die from AIDS are from Sub-Saharan Africa. Adult prevalence in the region is five times the worldwide prevalence rate (UNAIDS 2006). Those infected with HIV in Sub-Saharan Africa have contracted the virus almost exclusively through heterosexual sexual contact, not via injection drug use or men having sex with men which are proportionately large sources of HIV infection in Eastern Europe, Central Asia, and Latin America. Within Sub-Saharan Africa, East Africa has HIV prevalence above average yet not as high as southern parts of the region where prevalence rates reach 20 to 30 percent of the adult population (e.g. Lesotho, Botswana, and South Africa). Within East Africa, Tanzania has higher than average HIV prevalence – about 7 percent of the adult population is infected (TACAIDS 2005). Areas in Tanzania that had particularly high infection rates have experienced a slight decline, but rates remain above average for the region and have been relatively stable in recent years, despite increases in interventions (Lugalla et al 2004).

Uganda, Tanzania's neighbor to the north, is often touted as a success story of the late 1990's for lowering HIV prevalence in part through its ABC campaign (Abstain, Be faithful, use Condoms) which focused on behavioral change. However, recent evidence hints at possible erosion of these gains (UNAIDS 2006). This raises the question of whether or not improvements garnered through interventions aimed at behavioral change can be sustained long after exposure to the intervention.

Some scholars note that in addition to knowledge about disease transmission patterns, one needs economic independence to re-negotiate gendered interactions to make one less vulnerable to HIV. These scholars conceptualize AIDS as a disease of poverty (Farmer et al. 1996; Aggleton 1996; Ankrah 1991;

Schoepf 1991). However, this framework is not consistent with the current social class gradient in HIV/AIDS prevalence in Tanzania and Uganda. In Tanzania, infection rates are three times higher among those in the highest wealth quintile (11% for women and 9% for men) than those in the lowest wealth quintile (3% for women and 4% for men) (TACAIDS 2005). This suggests that economic structural conditions may not solely drive risky behavior. Perhaps cultural meanings, which often span across all socio-economic strata, are a more likely source. It also suggests that women and men not only understand and respond to the sexual possibilities available to them based on their social positions but also their identities, including gender identities (Parker 2001), and their moral commitments in pursuit of respect or valuation (Sayer 2005).

Gender Relations in East Africa

Among sexually active adults, condom use is the most common means of protection against HIV infection or transmission. Thus, the degree to which gender shapes condom use and negotiations over sexual matters more generally become key research questions. Here we can learn from the literature on if and how differences between husbands and wives in fertility preferences influence the use of contraception. Before we look specifically at this literature, it is important to briefly sketch the African cultural context as it relates to gender for unfamiliar readers.

Two aspects of the African family system are especially important to gender relationships. First, in most areas of Africa, the family system is patrilineal, meaning that the male line of decent is favored over the female line. This has implications for specific practices like the inheritance system, but also shapes gender relations more generally such that men have more power than women (Dodoo and van Landewijk 1996; Takyi and Dodoo 2005). Second, the African family favors lineage ties over conjugal family ties (Caldwell and Caldwell 1990). This means that ties to one's parents and children are often more important

than ties to one's spouse. Thus, partner preferences regarding relationship decisions do not hold as much sway as is typical where conjugal ties have priority (Dodoo 1998). In combination with a patrilineal society, this translates into relatively little power for women in family decision making. Finally, development policies of the 1990s in some parts of Sub-Saharan Africa generated more resources for men, and this is hypothesized to exacerbate women's already weak relative position (Haddad 1991) Thus, structural and cultural features of African society put men in a favored position relative to women. While circumstances such as education and employment opportunities are gradually changing in women's favor, especially in urban areas, the class gradient in HIV rates indicates that socioeconomic gains do not translate into lower risk.

The literature on the ability to realize fertility preferences offers some keen empirical insights regarding the influence of gender in the cultural context of sub-Saharan Africa. Early studies that explored fertility preferences revealed that Sub-Saharan African women had more children than they wanted. Moreover, almost one-third of women who reported a desire to stop or delay having children did not use contraception (Bongaarts 1991; Westoff 1988). The discovery of this gap, commonly known as the KAP-gap or the unmet need for contraception, motivated the implementation of family planning programs to provide women with contraception that would help them realize their fertility goals (Dodoo and van Landewijk 1996). However, early studies were based only on women's reports of fertility preferences. Given the important cultural features that put women at a power disadvantage in relationships, it is perhaps no surprise that women were not able to realize their preferences especially since men generally reported wanting to continue having children (Dodoo and Seal 1994; Mott and Mott 1985). More recent studies examine the joint preferences of men and women. In general, these studies find that condom use is highest when both partners want to stop having children (Dodoo and van Landewijk 1996; Dodoo 1998; Bankole 1995) and when both partners are better educated (Egero and Larsson 1999; Hollos and Larsen 2003), but

when there is disagreement between partners, men's desires are substantially more likely to influence couple contraceptive behavior (Dodoo and van Landewijk 1996; Dodoo 1998; Bankole 1995).

Studies that examine variation in the cultural context show that women's ability to realize fertility preferences varies by how 'traditional' the community is. For example, in rural areas of Kenya where the gender organization of families is more traditional, women have less power over contraceptive use than in less 'traditional' urban areas (Dodoo and Tempenis 2002). Furthermore, in less traditional matrilineal communities in Ghana, women have more power over contraceptive use than more traditional patrilineal communities in the country (Takyi and Dodoo 2005).

In Tanzania, women's access to education, their growing participation in formal employment, and their central role for sustaining households in the wake of the Tanzanian economic crisis of 1980's, are among the factors that have contributed to gradually improve the negotiating power of women in marriages. However, in spite of this, childbearing and sexuality decisions in most cases still rest with males. Economic liberalization in the aftermath of the economic crisis and serious land shortages constitute the main driving forces for a transition to smaller families (Mwageni et al 1998; Egero and Larson 1999). Furthermore, to have fewer children in Tanzania is associated with a life path for adherents of the Christian religion that encourages ideals of successful life and considers many children as costly and detraction from pursuing career goals. As such, among the Pare in Northern Tanzania couples that had fewer children were likely to be Christians as opposed to Muslims (Hollos and Larsen 2004). Thus, when Tanzanian men put the idea of family planning into practice, it is usually in recognition of the economic costs of children or for religious reasons, not because they have adopted new ideas about masculinity.

The same gendered power structure that influences reproductive decisions can easily be applied to the ability to negotiate conditions of sexual relations to prevent HIV infection or transmission. Several factors may make the preferences of men and women misaligned with regard to sexual relations and the risk of HIV. First, women are more biologically susceptible to HIV infection than men (WHO 2003), thus they may be more motivated to protect against it. Second, men more often report an aversion to condom use, one of the most effective means to prevent infection, because it is believed to inhibit intimacy and pleasure during sex (Caldwell 2001; Kapiga and Lugalla 2002). Third, several scholars note a hegemonic masculinity based on a set of beliefs that males are biologically programmed to need sex, often from more than one woman, and that sexual health-seeking behavior is unmanly (Orubuloye et al 1997; Mwaluko et al 2003; Kapiga and Lugalla 2002). Such beliefs may undermine efforts that promote abstinence and faithfulness among men and thus heighten the risk of HIV infection.

A Framework for Gender-based Interventions

Gender theorists have re-conceptualized gender from an identity or role to an institutionalized system that categorizes people as men or women and organizes social relations unequally on the basis of this categorization (Ridgeway and Smith-Lovin 1999; Risman 2004). This re-conceptualization suggests that widely shared hegemonic cultural beliefs about gender and their impact on social relational contexts are among the core components that maintain or change the gender system (Ridgeway and Correll 2004). The idea that cultural beliefs impact social interactions by shaping the context of these interactions suggests that the gender system operates on multiple levels from the individual level (e.g. individuals define themselves in relation to others) to the interactional level (e.g. social interactions are shaped by beliefs about gender) to the institutional level (e.g. cultural beliefs and the distribution of resources according to these beliefs are assumed by organizations and structures) (Ridgeway and Correll 2004). This view of gender as a system squares well with the view of HIV interventions as structural. The focus of much important theorizing on sexuality in relation to HIV/AIDS over the course of the past decade has thus moved from behavior, in and

of itself, to the cultural settings within which behavior takes place—and to the cultural symbols, meanings, and rules that organize it (Parker 2001).

Across most societies, women and men differ in the resources and opportunities granted to them, and in normative ideas of masculinity and femininity to which they are expected to adhere. However, within and across societies, there are many different resource arrangements and definitions of masculinity and femininity that vary by time, social class, race/ethnicity, sexuality, and age. This variability indicates that modifications in gender based structural systems and cultural definitions are possible (WHO 2003).

A WHO report (2003) on integrating gender into HIV/AIDS programs suggests a typology of gender-based approaches that fall at various points on a continuum representing the degree to which interventions attempt to alter the roots of the gender imbalance in society by moving from simply 'doing no harm' to those that empower women and girls (WHO 2003).

The four types of gender-based interventions suggested by the report are: gender segregate programs; gender sensitive programs; gender transformative programs; and empowering programs. Gender segregate programs are interventions that provide separate programming for men and women. Such programs avoid doing harm by offer different services for women as compared to men when their needs differ, but they also ensure that services do not treat women and men differently when their needs are the same. When men and women's needs are the same, yet they do not receive the same services, harm may be done. For example, programs that focus on mother to infant transmission of HIV for married or partnered women by targeting the pregnant women can be harmful because they do not include men or discussions about the male role in influencing their partner's thoughts, attitudes, or behaviors. Other gender segregate interventions offer separate programs for men and women on condom use, but do not address the relational aspects of the sexual exchange (i.e. engaging the sexual partner). However, programs for the use of microbicides and female condoms are separate and sensitive to female's different needs, hence they can

work as gender segregate programs. For example, the latter programs can work in circumstances where women can decide to practice safe sex (i.e. sex work).

Gender sensitive programs are interventions which recognize that "the prevention, care, treatment, and support needs of men and women are often different, not only because of physiological differences, but more importantly, because the context of gender roles and relations substantially influences how men and women will respond to initiatives designed to reduce risk or vulnerability or to alleviate the impact of AIDS" (WHO 2003). Educational messages about prevention that recognize the gender power imbalance are one example of this type of programming. Programs that promote the development of female-controlled prevention technologies are also examples of gender sensitive approaches. While gender sensitive programs address gender by acknowledging differences in power, they usually do not attempt to change the conditions that create gender-related differences in the first place (WHO 2003).

Gender transformative programs "seek to transform gender roles and create more gender equitable relationships. These programs extend gender sensitive approaches because they seek to change the underlying conditions that cause gender inequities" (WHO 2003). They consider both men and women important in combating HIV/AIDS, and they attempt to reach both. An example of a gender transformative program is one that uses drama to stimulate discussions among participants about challenging dominate norms of masculinity and femininity (WHO 2003). These types of programs directly address relational contexts that evoke hegemonic gender beliefs which influence people's sexual relationships and their evaluations of themselves and others in gender typical ways (Ridgeway and Correll 2004).

Finally, *empowering programs* are those that seek to equalize the gender balance of power in areas outside the domain of sexuality in order to ultimately reduce vulnerability to HIV (WHO 2003). For example, micro finance projects for women seek to enhance their status in society by helping to generate

income. It is believed that this general increase in power will diffuse to their relationships with men, and eventually increase women's power in matters of sexual decision making.

Of these types, gender segregate programs are the least structural in nature because they treat gender as a role or identity rather than an institution or social system. Gender-sensitive programs do very little to change those structural conditions that create gender-related barriers in the first place. Programs that seek to transform gender roles and create more gender-equitable relationships are more advanced than gender-sensitive approaches because they seek to change the underlying structural conditions that cause gender inequities. They also transform HIV/AIDS initiatives by reaching both women and men, recognizing both as critical players in ensuring the effectiveness of programming.

Lastly, gender empowering programs are considered the most structural as they want to equalize the gender power balance emanating from women's economic subordination (WHO 2003). While perhaps the most structural in nature, empowering programs deal almost exclusively with the relative socio-economic deprivation of women, not their socio-cultural subordinated position. We believe that transformative programs, by addressing the cultural meanings of gender, which are also at the root of the economic power imbalance between men and women, may hold more promise than empowering programs for combating HIV/AIDS. Essentially, empowering programs assume that if women gain more economic power, they will enact that power in sexual relations as well. However, because we see that class-advantaged persons in Tanzania and Uganda have *higher*, not lower, HIV prevalence rates than those less advantaged, it seems that transforming cultural meaning, above and beyond economic disparities, is necessary to reduce vulnerability to HIV.

Are there gender-based programs in Tanzania? If so, how are they distributed in this typology?

While the WHO (2003) typology implicitly suggests that most programs will fit into one these four categories, we believe that many programs will contain elements of multiple categories. Do most programs

that incorporate gender fit neatly and exclusively into one of these categories? Do programs reflect the theoretical notions of gender as a structural system? If so, how do they attempt to change the gender system?

Present Study

In this study we assess the degree to which interventions aimed at dealing with HIV/AIDS have adopted gender-based strategies in Tanzania. First, we describe the prevalence of interventions which are based exclusively or in part on structural or cultural strategies. We examine the characteristics of these programs such as their geographic reach, target population and funding source. Then, among structural or cultural strategies, we report the prevalence of programs with gender-based elements. Finally, in keeping with our theoretical understanding of gender as a social system, we map Tanzanian interventions onto the gender-based intervention typology offered by the WHO report (2003) to see which types of gender-based interventions are most common. We examine in some detail the content of those gender-based interventions that aim to change the cultural or structural features of Tanzanian society—transformative or empowering interventions.

Data & Methods

We use program reports and publications obtained from program offices, printed materials and internet information from 83 HIV/AIDS intervention programs and a few interviews with key persons in Tanzanian HIV/AIDS prevention. We identify most intervention programs from a fairly comprehensive database of HIV interventions maintained by the Tanzanian Commission for AIDS (TACAIDS). The interviews with key persons were conducted by the lead author in the summer of 2006 to learn of additional programs and to augment the information gleaned from the program

documents.

With these data, we have created an inventory of AIDS prevention programs in Tanzania, and coded data for key program features such as: geographic reach, target populations, funding source, and other elements. Importantly, we code for the individual, structural, or cultural nature of the program, and the ways in which gender is incorporated into programming. We employed several stages in our coding procedures. First, before collecting documents or doing interviews, we developed a set of program dimensions that we wanted to include in our coding rubric. Once we had interview notes and documents about all programs, we read through the materials several times considering the dimensions we set out to code and the definitions of various categories of those dimensions (e.g. structural, cultural, individual) as established in prior literature. As new categories arose in one program or another, we revisited our coding of all prior programs to ensure consistency in coding across programs. Thus, our coding was an iterative process of revisiting program materials numerous times until a coding consensus was reached across all programs. Below we describe the state of programmatic affairs and examine in some depth several programs that have unique and promising gender-based interventions.

Results

Table 1 describes the prevalence of programs that focus on changing individual behavior, features of the culture, or features of the structure of Tanzanian society. Many programs have multiple foci, or operate to change both behavior and structural features of society, for example. The top panel of Table 1 shows that most programs have some element that focuses on changing individual behavior (about 70 percent). As expected, it is quite common for programs to attempt to change individuals' behavior to lower the risk of HIV infection or transmission. Just over half of the intervention programs have a structural (but non-cultural) element. For example, these programs may focus on improving educational opportunities for

young people or providing micro financing to entrepreneurs for small businesses establishment. Structural interventions like these can indirectly minimize the risk of HIV infection by enhancing knowledge and/or providing alternative futures. Only about one-third of programs (36 percent) contain a cultural element. That is, fewer programs attempt to change the cultural context that creates vulnerabilities to HIV/AIDS.

Table 1: Prevalence of Individual Behavioral, Structural, and Cultural Elements in Intervention Programs

Program has a:	Percent
Individual behavioral	
element	69.0
Structural element	55.8
Cultural element	35.6

Program has component elements:	Percent
behavioral only	31.3
structural only	21.7
cultural only	0.0
behavioral and structural	10.8
behavioral and cultural	13.3
structural and cultural	9.6
behavioral, structural,	
cultural	13.3
Total	100

The second panel of Table 1 shows how programs combine these three elements – behavioral, structural, and cultural. Here we see that almost one-third of programs focus exclusively on changing individual behavior. About 20 percent of programs focus exclusively on changing the structural environment. Surprisingly, none of the 83 programs deal exclusively with cultural features of society. However, cultural elements are combined with behavioral and structural elements in some programs. For example, 13 percent of programs couple behavioral and cultural elements; 10 percent couple structural and

cultural elements; and 13 percent combine all three elements. The remaining 11 percent of programs combine behavioral and structural features.

When taken as a whole, we can see that just over half of programs have a single focus, and usually this focus is on changing individual behavior. When programs are multi-faceted, behavioral change continues to figure prominently. Cultural elements appear in programs, but always in combination with other foci – never the sole focus of the intervention program.

Unfortunately, from the program documents we analyzed, it is difficult for us to know the relative weight of each element when they are combined in programs. Where we feel we have enough information to assess the primary foci for the program, the behavioral element is often show-cased more in the printed material.

Next, because we are interested in the prevalence of behavioral versus structural and/or cultural programs, we divide the programs into two groups: programs with a behavioral focus only and programs with some structural or cultural element. Table 2 shows similarities and differences in these two sorts of programs with regard to program geographic reach, funding, management, curriculum development, and target populations and age groups. First, regarding geographic reach, we see that programs that focus exclusively on individual behavior are slightly more likely to reach across Tanzania, while those that contain structural or cultural elements are slightly more likely to focus more narrowly on a region within the country. Perhaps this is because structural or cultural features are more place-specific. For example, building educational infrastructure (a structural type of focus) may be more of an issue in rural areas than urban areas. Thus, programs with goals of altering structural features may work best if they focus on the structural context in a specific region of the country.

Table 2: Description of Programs by Individual Only v. Those with Structural or Cultural Elements

	Program Focus		
-	Individual	Structural or	
	Behavior	Cultural	
_	Focus Only	Element	
	n=26	n=57	
Program Geographic Reach			
Country-wide	36.0	32.1	
Regional	56.0	67.9	
Other	8.0	0.0	
Total %	100.0	100.0	
Program Funding			
Foreign funding	73.1	72.7	
local funding	7.7	5.5	
both foreign and local	19.2	21.8	
Total %	100.0	100.0	
Program Management			
Foreign	50.0	64.3	
Local	7.7	7.1	
both foreign and local	42.3	25.0	
Total %	100.0	100.0	
Program Curriculum			
Foreign	30.8	21.1	
Local	19.2	24.6	
both foreign and local	50.0	54.4	
Total %	100.0	100.0	
Torget Denulation(a)			
Target Population(s) general public	19.2	49.1	
Students	80.8	59.6	
young adults	76.9	56.1	
persons living with	70.5	30.1	
AIDS	16.0	61.4	
Target Age Group(s)			
Adolescents	8.08	76.8	
young adults	65.4	89.3	
Adults	26.9	75.0	
all sexually active ages	53.8	76.4	

Next, the general funding source (foreign or local) is almost identical across these two sorts of programs. Foreign funding is the dominant source of funding for both behavioral focused programs and those that seek to address structural or cultural issues. Regarding program management, a small percentage of programs are managed only by local people regardless of program focus (about 7 percent). Structural or cultural programs are more likely than behavioral programs to have foreign-only program management. While half of all behavioral programs have foreign-only management, a relatively large proportion (42 percent) combines foreign and local management. So, in total, 50 percent (8 + 42) of behavioral focused programs have some local management, whereas only 32 percent (7 + 25) of programs with structural or cultural elements have some local management. We are somewhat surprised by this, as we suspected that programs that address structural, and especially cultural elements would likely benefit more from local involvement because structural or cultural features require a deep and nuanced understanding of the history and norms of the society. Local people are more likely to have this sort of understanding.

The next program feature we examined was program curriculum. Again, we coded who was responsible for designing the curriculum as foreign, local, or both. Behavioral focused programs are more likely to be foreign designed (31 v. 21 percent), whereas programs with structural or cultural elements are more likely to be locally designed (25 v. 19 percent). About half of all programs have curriculum that is jointly designed by foreign and local persons. This fits better with our expectation that structural and cultural focused programs should be more effective if local persons help develop the programs. While program management may be foreign, the actual curriculum that is delivered to program participants in structural and cultural programs is more likely to be informed at least in part by local voices than it is in behavioral focused programs.

The next two sections address the target populations of programs. Here we expected that programs that have structural or cultural elements will attempt to reach a broader audience because they aim to change general features of society like the educational system or gender norms. Indeed, we find that programs with a structural or cultural element are more than twice as likely to target the general public than programs that focus exclusively on changing individual behavior (49 v. 19 percent). In contrast, programs that focus exclusively on changing individual behavior are more likely to target specific groups like students or young adults, although programs with structural or cultural elements also target these groups to a reasonably large degree. We assessed the degree to which programs targeted people living with AIDS. We found that this was a much more common target population for programs with structural or cultural elements than for programs that focused exclusively on individual behavior. Upon closer inspection (not shown), persons living with AIDS was a primary target group for structural programs much more often than cultural programs, and the type of structural programs targeted to this group were largely infrastructure building projects (hospitals, schools, orphanages, etc) that would directly help sick people or their families.

Finally, we assess the target age groups for the two types of interventions. Here we see that structural and/or cultural interventions are equally as likely to target adolescents, and more likely to target all other age groups than behavioral interventions. Again, this may have something to do with the broad appeal necessary for structural or cultural changes to take hold in a society.

Next, in Table 3 we turn to the primary interest of our study, the degree to which structural or cultural interventions engage gender issues. Of the 57 programs that have some element of structural or cultural programming, almost half (26) of them engage issues of gender1. Next, we coded programs that incorporate gender into the four-type schema offered by WHO (2003) gender segregate, gender sensitive, gender transformative, and empowering programs. Interventions that engage gender issues could have various programs that fit into different types in this schema. For example, an intervention could have one

program that is gender sensitive and another that is gender transformative or a single program could employ both gender sensitive and gender transformative strategies. An intervention like this was coded to have both a gender sensitive and a gender transformative program. About one-quarter of the programs that engaged gender issues in some way offered gender segregate programs. Recall that gender segregate programs are those that simply offer different programming for males and females.

One-third of the interventions offered gender sensitive programming. For example, among the interventions in Tanzania, one gender sensitive intervention is the female condom project by Population Studies International (PSI). This project is sensitive to the gender differential power relations existing in the sexual domain, with men having the upper arm. The female condom aims to give women a chance to decide for themselves to have safe sex, without men. PSI primarily targets female sex workers, and more generally, it almost exclusively targets women.

Table 3: Prevalence of a Gender in Programs with a Structural or Cultural Element

	yes	no	
Program deals with gender	45.6	54.4	
N	(26)	(31)	
	, ,	. ,	
If Yes, type of gender			
programming:	n=26		
Gender Segregate	25.9	74.1	
Gender Sensitive	33.3	66.7	
Gender Transformative	38.5	61.5	
Empowering	80.0	20.0	

About 40 percent of interventions that engage issues of gender were coded as gender transformative. Recall that this type of gender program is the most cultural in nature in that it attempts to change underlying gender norms. An example from our data of this type of intervention is the 'Twende na Wakati' project.

Twende na Wakati

Twende na Wakati' has been applied to HIV prevention and control in the form of popular radio and television soap opera. By role modeling people discussing HIV and family planning, the project intended to stimulate interpersonal communication about AIDS in audience individuals, in order to challenge some of the actions pertaining to how best to live in the AIDS era. The characters in 'Twende na Wakati' were designed to provide negative, transitional and positive role models for HIV prevention behaviors from a local perspective. These include how men only decide whether a couple should use a condom or not, men's continuing extra marital relations, women's silences and beliefs about if sex is better without condoms, etc. By dramatizing these scenes in context of everyday life this project offers a space to critically discuss prevailing unequal conditions perpetuating gender inequality. Hence this is a gender transformative project as it prompts people *to discuss* how to change conditions creating inequality such as silence is part of femininity and man are expected to have much sex, and forge equitable roles. The aim was for people see themselves in the characters and reflect (Radio Tanzania 1993).

Hence this is a gender transformative project as it prompts people to discuss how to change conditions creating inequality and forge equitable roles. The aim is for people to see themselves in the characters and reflect. Another transformative project is Kivulini² Women's Rights Organization. The Kivulini intervention program aimed to get participants talking about women's rights, the impact of domestic violence, human rights, and HIV/AIDS in the Mwanza community of Tanzania. It is transformative because it challenges conditions of women subordination.

Kivulini

Through education sessions, theatre productions, and song and dance, the program attempted to create an awareness of the link between HIV/AIDS and gender based violence and to challenge current attitudes surrounding sexual practices to ensure reduction in the transmission of HIV. The Kivulini women believe that creating violence-free communities involves empowerment of entire communities to promote women's rights. To create an

¹ The words 'Twende na wakati' means 'Let's go with the times' in Swahili.

² Kivulini means in the shade/shelter in Swahili .It implies a safe place where women, men and children feel supported

equitable environment for men and women the project attempts to change the conditions allowing violence by supporting women's rights, particularly women's right to live free of violence, by mobilizing the whole community to challenge. Its efforts include the Local Government, Street Leaders and Sungu Sungu (informal community policing). Groups whose close ties to the community, are often the first level of response to women experiencing violence and, as leaders, they deeply influence the environment and culture within communities (Kivulini Women's Rights Organization 2005).

Finally, of all of the interventions that engage gender, a surprising 80 percent are empowering interventions. Empowering interventions are those that address gender inequities in structural features of society (schools, the labor force, health care, etc). These sorts of interventions attempt to alter structural features with the hope of ultimately reducing vulnerability to HIV by increasing women's power. We found that many addressed gender inequities in the areas of emancipative resources such as economic material, knowledge of rights such as legal rights, skills, self esteem building, education, and training. For example, 'The Girls Talk Project', empowers women by providing micro-finance services so that they can generate income and depend less on men. The project aims to empower women against gender violence, rape, and transactional sex due to poverty. These all amount to increased vulnerability to AIDS infection. This project is gender empowering because it works at equalizing gender differentials in economic power.

'Tuseme'³project, on the other hand, is a school-based theatre initiative. It is a project that aims to empower girls to understand and overcome problems that can hinder their academic and social development, such as teenage pregnancies, by providing forums to discuss day to day issues. It is empowering through self expression skills building.

Tuseme

Using a performance-based approach, a play, dance, song, puppetry or game drives the process and post performance discussions are held. The project is gender empowering in that it cultivates a habit of dialogue and interpersonal communication amongst women and between men and women from a young age, of different life issues including favorable and unfavorable social norms. The project's objective is that this skill for self expression will trickle down to all areas of life including sexual relations. And a girl and boy will grow up

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³ In Swahili, 'Tuseme' means 'Let's speak' and 'Twende na Wakati' means 'Let's go with the times'.

without the social inhibitations of fearing to express themselves as has been with traditionally socialization. (i.e. women speaking about sexual matters, and men speaking about health needs) (FAWE 2004).

Our data revealed an interesting pattern that we did not initially anticipate, although we are not surprised by it: many of the programs that engage gender in Tanzania use women, not men, as the point of entry into addressing gender issues. In doing so, they assign sexual health issues to be women's issues. Most of these programs attempt to affect gender change with women alone, while only a few proceed to address women and men, from a relational perspective. Among those that do address men, it is often after women's issues have first been established as the primary topic of interest. Such strategies fail to recognize that men are also gendered beings affected by existing gender norms.

Perhaps the over-emphasis on women is an unintended consequence of the work of early feminists who emphasized the emancipation of women from their subordinated position throughout history. While important, such efforts were perhaps at the expense of an understanding of men as gendered persons. This led to a systematic treatment of gender studies as women's studies, a flaw that is now realized as rendering the project of women's emancipation difficult. The World Bank (2005) asserts that changing gender norms will be possible only when it is widely recognized that gender is relational, that it is short-sighted to seek to empower women without engaging men, and that is difficult if not impossible to change what manhood means without also engaging young women. Despite this realization, programs still tend to treat HIV-gender related issues as women centered, perhaps in part because of the increasing feminization of the epidemic. In doing so, they fail to acknowledge that gender oppress men as well as women – albeit in different ways and with different consequences (Mane and Aggleton 2001). Women-centered programs are unable to address relational issues that require the by-in and participation of both men and women.

Conclusion and Discussion

Against a backdrop of increased research attention to cultural and structural explanations for the AIDS epidemic, we set out to examine how and the degree to which intervention programs in Tanzania had followed suit and adopted cultural and structural programming. Furthermore, because of the central role that sexual contact between men and women plays in HIV transmission in Sub-Saharan Africa, we wanted to know the prevalence of interventions that acknowledged gender as an important structural or cultural feature.

Our results indicate that interventions that focus on changing individual behavior are more prevalent than those that focus on changing structure or culture. However, a non-trivial proportion of programs contain elements that address changing the structure or culture of the society. Most often, programs that have a structural or cultural focus also have an individual focus. That is, there are relatively few programs that focus exclusively on changing structural elements of society, and none that focus exclusively on changing culture. Structural and cultural programs tend to be more regional in their reach (v. national), but they are more often managed solely by foreign persons. Importantly, however, curriculum for these programs is more likely to have at least some local involvement than programs that focus exclusively on changing behavior. Finally, structural and cultural programs are more likely than behavioral programs to target the general public across all age ranges, probably because they are seeking to change things that require large-scale adoption (e.g. definitions of masculinity) in order to sustain real change in a society.

We find it interesting that there are no culture-only focused programs, especially since the scholarly literature has suggested that cultural and structural features are at the root of the HIV/AIDS epidemic. There are several possible explanations for the lack of cultural-only focused programs. First, culture is a system of social meanings. Changing social meanings is a murky endeavor because the methods by which meanings

change are not clear. In contrast, there are many models for seeking behavioral change for health benefits (e.g. smoking cessation, exercise promotion, etc), so these seem more straightforward. Second, it may be difficult to measure the effectiveness of programs that have the goal of changing meanings of masculinity and femininity. Because funding is often tied to measurable results, funding for programs that exclusively address cultural change may be difficult to obtain. Finally, changing meanings and beliefs is a long-term project. Because there is urgency in efforts to lower HIV/AIDS rates, it may be difficult to wait for cultural change to take hold.

Both of these characteristics – a long time horizon and ambiguous measures of success – are unattractive for funders who often want measurable program results in short order. For example, a review of requests for proposals for several of the major HIV/AIDS funders like Global Fund, World Bank, and the US PEPFAR reveal that most stipulate that proposals must include in their project design; 1) a measurable results framework containing impact indicators; and 2) a program evaluation plan for showing the extent to which the impact indicators are realized within first two years of funding.

Thus, it should not be surprising that they appear only along side behavioral or structural projects in intervention programs. The later two types of projects are usually quicker to produce change, and their outcomes are more easily measurable. By combining cultural and other sorts of programs, funders are able to hedge against delayed results but still test cultural change strategies which may have broader reach, be more sustainable in the long run, and have other positive side effects.

Are gender issues incorporated into structural or cultural interventions? We find that they are – about half of the programs that focus on structure or culture address gender issues (37 percent of all programs studied). How gender is incorporated, however, differs across programs. Our analysis indicates that programming that seeks to empower women is the most common sort of gender incorporation. This type of program is inherently structural in nature because it seeks to improve women's participation in many

societal institutions that are associated with well-being like education and the labor force. Yet, according to the WHO (2003) typology we have used, empowering programs do not deal directly with power imbalance in the sphere of sexuality. This is the purview of gender transformative programs. A substantial minority (39 percent) of the programs that engage gender strategies are gender transformative programs. Thus, the most common gender programming strategies are transformative and empowering, and these two types are the most cultural and structural, respectively. From this we can conclude that when gender is incorporated, it is often done so in a way that has the potential to alter structural or cultural features of society.

Tanzanian intervention programs that incorporate gender in some way do not fit neatly in the WHO (2003) typology of gender programs. Instead, we find that most programs contain elements of more than one gender strategy. This may be a beneficial or detrimental characteristic of these programs. On the one hand, programs that offer gender sensitive and transformative elements have the potential to reach people who are differentially open to various sorts of programming. For example, some program targets may not be willing to accept the idea that men should become less masculine as it is traditionally defined. However, these targets may be interested in adopting female-controlled contraception, a gender-sensitive program element, in order to reduce their risk. They may recognize the power differential between men and women but may not be willing to change that differential beyond relinquishing power through contraceptive control for a particular sexual interaction.

On the other hand, programs that contain multiple gender elements may struggle with competing messages. Advocating for female condom use recognizes power differentials, but it enables the continuation of these differentials by providing a device that allows women to secretly reduce their vulnerability to risk without having to address broader cultural gender norms. If this program also seeks to change broader cultural issues, these elements may seem in contradiction to one another.

While few programs serve both men and women in a relational context or focus solely on

men, there are some natural settings for such programs in Tanzania. For example, many churches require premarital counseling where the bride and groom must meet jointly and discuss relational issues. This is an existing context which is well-suited to relational interventions since both men and women are required to be present. Because it is in a church, however, the curriculum of such a program is necessarily constrained to content that is consistent with church teachings. This often translates into a focus on faithfulness.

Recently, several major funding sources have challenged the Tanzanian Consortium of Churches to develop innovative ways to combat HIV that are consistent with church teachings. In response, a new program was initiated called "Hakuna Lisolowezekana" with two components; "Bora Subiri" for youth and unmarried people and "Tosheka Naye" for married couples (Observer Reporter 2006). This suggests that the church recognizes the relational aspect of gender and is incorporating both men and women in programming. Perhaps future interventions will use men as an entry point. Research conducted by Barker (2000) in Brazil and by others in Argentina and Peru was influential in establishing that alternative, more equitable masculinities can exist (Necchi & Schufer 1998; Yon Jimenez et al 1998).

While this study has elucidated the prevalence of gender-based structural and cultural interventions in Tanzania, we could not evaluate their success. Future work should investigate the degree to which gender-based strategies are able to affect change. For example, are those who attend gender transformative interventions more likely to be actively working to change power dynamics in their relationships after program participation?

⁴ "Nothing is too difficult"

⁵ "Better wait"

⁶ "Be satisfied with her/him"

Our study contributes to a growing literature that begins to consider systems, structures, and processes that have been examined less frequently in relation to HIV prevention. We have done this by looking at the gender system as a social structural feature of society, and describing the degree to which structural interventions have developed to address how the current gender system in Tanzania creates and maintains vulnerability to HIV/AIDS. We are encouraged in finding that there are many gender-based structural interventions in Tanzania, and some of them attempt to change underlying culturally-based gender norms that grant more power to men in sexual matters.

However, as noted by other scholars, those attitudes and behaviors that are most difficult to change are those that are out of the control of the individual and/or those that individuals or groups of people have a compelling interest in maintaining (Blankenship et al 2000). Sexual relations are still governed by social meanings of gender in which respect is granted to those who conform to these inequitable gender norms that increase the risk for AIDS. This indicates that gender-based structural interventions which attempt to transform gender relations have a particularly challenging task. Moreover, the development and implementation of gender-based structural interventions will require consensus building in the face of considerable normative resistance given the historically entrenched gender-specific sexual scripts. However, the pay-off of gender-based structural interventions promises to be substantial in the numbers of people positively affected, the unintended but positive consequences of creating more equitable relationships between men and women, and the sustainability of positive change for future generations confronted with HIV/AIDS or any other relational challenge.

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