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Empowerment, gender and HIV&AIDS in Tanzania: quantitative and qualitative analysis

Introduction

Empowerment is often prescribed as a solution to women's risk for HIV in sub-Saharan Africa, where the epidemic is increasingly gendered, yet rarely is the concept critically examined. The UNGASS on HIV/AIDS in June 2001 identified lack of women's empowerment as one factor that makes individuals particularly vulnerable to HIV infection (United Nations, 2001). The dominant discourse is that women's HIV risk stems from power inequalities in gender relations, where women have less access to power than men (Gupta, 1995).

If empowerment is to become more than a buzzword, it must be measurable, modifiable, and achievable. Simultaneously, if empowerment is to be fully understood, it must be known in the context of women who try to achieve and sustain it. This study thus combined quantitative measurement of empowerment and qualitative understanding of its meaning related to HIV in the context of Kilimanjaro, northern Tanzania. It aimed to listen to Tanzanians' explanations and solutions relating to HIV, from male and female perspectives. It also aimed to develop an instrument for quantifying self-efficacy as an aspect of empowerment, and relate it to self-reported HIV risk-reducing behaviours.

Quantitative background - self-efficacy

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Financial support: Council on African Studies, Yale University; Yale Centre for International and Area Studies; Fulbright Award 2002-2003; Yale Centre for International and Area Studies Pre-Dissertation Grant; Lindsay Fellowship for Research in Africa; Georg Walter Leitner Program in International Political Economy; University of Dublin, Trinity College, Trinity Fund for study in the U.S.

Initial results of this research were submitted as fulfilment of the Master's thesis requirement for the degree of Master of Arts in African Studies, Yale University, 2003. This work or any part thereof may be reproduced for non-commercial purposes only with the permission of the author. Reproduction of any part of this work for commercial or other purposes is strictly prohibited.

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Perceived self-efficacy (SE) is defined by Albert Bandura as beliefs about one's capabilities to organize and execute the actions required to achieve certain results (Bandura, 1997). SE captures an aspect of empowerment as a personally felt belief indivisibly linked to judgements of ability to function in real situations. SE must be based on the specific situation in which behaviours take place and the gradation of difficulty of the expected behaviours (Bandura, 1977, 1997). It is not a global construct such that one can feel 'empowered' or 'self-efficacious' in general, without relating it to a precise context. A more general appraisal of SE for a domain of activities may be constructed only through detailed judgements about each of multiple related activities in that domain (Bandura, 1997). SE measurement must be tailored to the activities and population under investigation (Bandura, 1997), in this case protecting oneself from sexual transmission of HIV, for a Swahili speaking population of Kilimanjaro region, Tanzania.

SE has played a significant role in non-HIV health behaviour changes (see review by O'Leary, 1985). The few studies of SE and HIV have focussed on condom use. Bandura rejects reducing protection against STIs to the "isolated act of donning a condom" (1997, p. 37) and highlights obstacles to condom use by women (1990). Instead, protection involves multifaceted behaviours in different situations, such as resisting pressure, acting effectively when intoxicated, and leaving risky situations. This must be supported by social action on policy and solutions engendered through collective efficacy (Bandura 1997, 1999).

Levinson (1998) found that contraceptive SE was significantly predictive of contraceptive behaviour for diverse groups of adolescent women. Higher SE for sexual behaviours was significantly associated with abstinence from intercourse and/or consistent use of birth control among American Indian adolescents (Chewning et al, 2000). Among 1496 control participants in the NIMH Multisite HIV prevention trial (Murphy et al, 2001) a multi-dimensional model accounting for situation and skill level provided an excellent fit for male and female samples, demonstrating that both situation and gradation of difficulty are important in safe-sex negotiation efficacy.

In a limited number of countries outside the US and Europe, SE has shown promising associations with HIV risk reduction behaviours. SE was correlated with higher levels of condom

use among young people in Cameroon (Meekers, 2002). Kerrigan (2003) found that safe sex SE was associated with consistent condom use among commercial sex workers in the Dominican Republic. High SE for condom use and strong refusal skills to unsafe sex were significantly associated with decreased HIV risk among Ecuadorian youth (Park et al, 2002). Galavotti and colleagues (2001) identified SE as one factor enabling entertainment education (such as HIV radio soap-operas) to effect widespread health behaviour change, particularly in majority world countries.²

In a review, Schiltz and Sandfort (2000) found that SE was one of the determinants of safe sex for people living with HIV. An enhanced HIV intervention involving support groups and peer advocates increased SE for HIV-positive women up to 18 months post-intervention compared to a standard HIV intervention group (Fogarty et al, 2000). As Murphy and her colleagues (2001) note, previous studies demonstrate that SE has a strong effect on health behaviour change, despite the use of less than optimal measurement techniques.

Qualitative background

In sub-Saharan Africa, 29.4m people were living with HIV at the end of 2002, when data was collected, and 58% of all HIV positive adults in the region were women (UNAIDS, 2002). In Tanzania, there were 750,000 women among 1.3m adults living with HIV. Adult HIV prevalence rate was 7.8%. UNAIDS (2001) found that 40% of Tanzanian adolescent girls harbour serious misconceptions about HIV. Heterosexual transmission accounted for 77.2% of 11,673 new HIV cases in Tanzania (Tanzania Ministry of Health, 2000), of which 322 were in Kilimanjaro. The Ministry estimates only 1 in 5 cases were reported. Around Moshi town, 16.6% of ante-natal clinic attendees tested positive for HIV in 2000. HIV prevalence among blood donors was 6.7% in Kilimanjaro compared to 9.9% nationally. Prevalence was significantly higher among female (13.3%) than male (9.2%) blood donors in the region, in line with national figures.

The United Republic of Tanzania is a multi-party parliamentary democracy. Swahili is the national language and is universally spoken. The Government is unusually open about gender

² 'Majority world' refers to countries variously identified as belonging to the 'developing', 'underdeveloped' or 'Third' world. The term 'majority world' springs from a desire to address the weighted political and post-colonial associations of other terms used in this context and an acknowledgement that these countries contain the majority of the world's people. It is contrasted to the (wealthier) countries of Europe, North America, Japan and Australia.

inequalities (United Republic of Tanzania, 2003a). Women, especially rural women, provide 80% of the labour force in rural areas and 60% of food production, but around 60% of Tanzanian women live in absolute poverty. Gender norms assume that a woman's primary commitment is to care for a family at home, and that women depend on male providers for cash needs. Legal rights are limited, customary laws are discriminatory, particularly concerning property inheritance, and violence against women appears prevalent, although recent revisions have improved women's legal status.

Tanzania's population is 34.6m and Kilimanjaro's is 1.4m of whom just over half are women (United Republic of Tanzania, 2003b). Over a third of the region's population lives in urban and rural Moshi. Average household size is 4.6. The Chagga are by far the largest ethnic group in Kilimanjaro. Traditionally, Chagga people place a high value on having a *shamba* or farm (Setel, 1999) on the slopes of Mount Kilimanjaro, and subsistence agriculture predominates. Due to high unemployment, men migrate for work to Moshi, Arusha, Tanga and Dar es Salaam, returning once or twice a year. Women largely manage families and farms alone. Alongside agriculture, many women engage in '*biashara ndogondogo*', petty trading.

Research Partners

This research was developed and conducted in partnership with KIWAKKUKI - Kikundi cha Wanawake Kilimanjaro Kupambana na UKIMWI/Women Against AIDS in Kilimanjaro - a Tanzanian NGO founded in 1990. Its leadership and membership is predominantly female but it also welcomes and involves men. Its office and information centre are in Moshi town, and it has 1420 voluntary members in regional grass-roots groups. It provides HIV education through the information centre, including videos and HIV discussions. During 2001, there were 22,683 visits to the centre, of which some were repeat visitors. KIWAKKUKI reached 18,865 people through village-based community empowerment sessions and trained 75 peer educators in 2001. It provides counselling, runs a home-based care programme, trains health workers, and provides orphan support. KIWAKKUKI is financially supported by international NGOs, facilitates income-generation activities, and runs a revolving credit fund.

KIWAKKUKI runs the Centre of Hope, a support group for people living with HIV and AIDS, a

unique service in the region that enables people to be open about their status. The group is run autonomously within KIWAKKUKI's activities by leaders living with HIV. The Centre of Hope meets once a month and provides outreach care for its 60 members.

Youth Alive is a HIV awareness organisation founded and run by young people. Now an autonomous group, it formed in connection with KIWAKKUKI, and collaborates with them on behaviour change programmes, which reached 16,257 youth in 2001. They have groups around Kilimanjaro, and undertake HIV education around Moshi.

METHODS

55 women and 30 men were recruited through research partners: 30 people living with HIV; 26 HIV information-centre visitors; 25 youth (aged 18-25) and 4 community workers. A 24 item Self-Efficacy (SE) scale on sexual behaviour and HIV, grounded in Bandura's social cognitive theory, was developed for this study as a first test of applicability of SE to HIV in Africa. Depression, social support and self-reported safer behaviours were measured. Semi-structured qualitative interviews elicited participants' solutions relating to experiences with HIV, empowerment, gender relations, discrimination and social norms.

QUANTITATIVE RESULTS

Demographic description of the sample

Table 1. Demographic characteristics by group (N=85)

	HIV	INFO	YOUTH	NGO	TOTAL
Participants	30	26	25	4	85
Average age (years)	42.3	38.6	23	40.5	35.4
Gender					
<i>Women</i>	21 (70.0%)	20 (76.9%)	10 (40.0%)	4 (100.0%)	55 (64.7%)
<i>Men</i>	9 (30.0%)	6 (23.1%)	15 (60.0%)		30 (35.3%)
Area of Residence					
<i>Rombo</i>	1 (3.3%)	1 (3.8%)			2 (2.4%)
<i>Hai</i>	5 (16.7%)	4 (15.4%)			9 (10.6%)
<i>Moshi Urban</i>	8 (26.7%)	10 (38.5%)	16 (64.0%)	2 (50.0%)	36 (42.4%)
<i>Moshi Rural</i>	14 (46.7%)	8 (30.8%)	8 (32.0%)	2 (50.0%)	32 (37.6%)
<i>Same</i>	1 (3.3%)	1 (3.8%)			2 (2.4%)
<i>Mwanga</i>		1 (3.8%)	1 (4.0%)		2 (2.4%)
<i>Other</i>	1 (3.3%)	1 (3.8%)			2 (2.4%)
Marital status					
<i>Married</i>	7 (23.3%)	11 (42.3%)	1 (4.0%)	3 (75.0%)	22 (25.9%)
<i>Single</i>	2 (6.7%)	9 (34.6%)	23 (92.0%)	1 (25.0%)	35 (41.2%)
<i>Living with partner</i>	1 (3.3%)		1 (4.0%)		2 (2.4%)
<i>Separated/Divorced</i>	2 (6.7%)	2 (7.7%)			4 (4.7%)
<i>Spouse deceased</i>	11 (36.7%)	1 (3.8%)			12 (14.1%)
<i>Married & Spouse deceased</i>	6 (20.0%)	2 (7.7%)			8 (9.4%)
<i>Multiple answers</i>	1 (3.3%)	1 (3.8%)			2 (2.4%)
Number of children					
<i>None</i>	2 (6.7%)	6 (23.1%)	24 (96.0%)	1 (25.0%)	33 (38.8%)
<i>One</i>	2 (6.7%)	3 (11.5%)		1 (25.0%)	6 (7.1%)
<i>Two</i>	4 (13.3%)	6 (23.1%)	1 (4.0%)		11 (12.9%)
<i>Three</i>	9 (30.0%)	1 (3.8%)		2 (25.0%)	12 (14.1%)
<i>Four</i>	3 (10.0%)	5 (19.2%)			8 (9.4%)
<i>Five</i>	6 (20.0%)	1 (3.8%)			7 (8.2%)
<i>Six</i>	1 (3.3%)	1 (3.8%)			2 (2.4%)
<i>Seven</i>	2 (6.7%)	2 (3.8%)			4 (4.7%)
<i>Nine</i>		1 (3.8%)			1 (1.2%)
<i>Ten</i>	1 (3.3%)				1 (1.2%)
Education					
<i>No primary education</i>	3 (10.0%)				3 (3.5%)
<i>Class 1-4</i>	4 (13.3%)	2 (7.7%)			6 (7.1%)
<i>Class 7</i>	19 (63.3%)	15 (57.7%)	1 (4.0%)		35 (41.2%)
<i>Standard 4 only</i>	2 (6.7%)	3 (11.5%)	5 (20.0%)	3 (75.0%)	13 (18.8%)
<i>Standard 4-6</i>	1 (3.3%)	3 (11.5%)	12 (48.0%)		16 (18.8%)
<i>College</i>	1 (3.3%)	2 (7.7%)	5 (20.0%)		8 (9.4%)
<i>University Degree</i>			1 (4.0%)		1 (1.2%)
<i>Graduate Degree</i>		1 (3.8%)	1 (4.0%)	1 (25.0%)	3 (3.5%)

Notes: Class 1-4: some primary schooling; Class 7: completed primary schooling; Standard 4: some secondary schooling; Standard 4-6: completed secondary schooling. All areas outside Moshi Urban can be considered rural or peri-urban.

Table 2. Socioeconomic characteristics by group

	HIV	INFO	YOUTH	NGO	TOTAL
Roofing Material (N=70)					
<i>Grass</i>	2 (9.1%)	1 (5.3%)	1 (4.0%)		4 (5.7%)
<i>Tin</i>	20 (90.9%)	16 (84.2%)	23 (92.0%)	4 (100.0%)	63 (90.0%)
<i>Tiles</i>		1 (5.3%)			1 (1.4%)
<i>Concrete</i>		1 (5.3%)	1 (4.0%)		2 (2.9%)
Running Water (N=70)					
<i>Yes</i>	1 (4.5%)	3 (15.8%)	14 (56.0%)	4 (100.0%)	22 (31.4%)
<i>No</i>	21 (95.5%)	16 (84.2%)	11 (44.0%)		48 (68.6%)
Electricity (N=69)					
<i>Yes</i>	4 (19.0%)	11 (57.9%)	20 (80.0%)	4 (100.0%)	39 (56.5%)
<i>No</i>	17 (81.0%)	8 (42.1%)	5 (20.0%)		30 (43.5%)
Television (N=70)					
<i>Yes</i>	1 (4.5%)	5 (26.3%)	12 (48.0%)	3 (75.0%)	21 (30.0%)
<i>No</i>	21 (95.5%)	14 (73.7%)	13 (52.0%)	1 (25.0%)	49 (70.0%)
Radio (N=69)					
<i>Yes</i>	13 (61.9%)	15 (78.9%)	24 (96.0%)	4 (100.0%)	56 (81.2%)
<i>No</i>	8 (38.1%)	4 (21.1%)	1 (4.0%)		13 (18.8%)
Bicycle (N=69)					
<i>Yes</i>	3 (13.6%)	3 (15.8%)	13 (52.0%)	1 (33.3%)	20 (29.0%)
<i>No</i>	19 (86.4%)	16 (84.2%)	12 (48.0%)	2 (66.7%)	49 (71.0%)
Car (N=70)					
<i>Yes</i>			6 (24.0%)	2 (50.0%)	8 (11.4%)
<i>No</i>	22 (100.0%)	19 (100.0%)	19 (76.0%)	2 (50.0%)	62 (88.6%)

This initial descriptive analysis indicates some differences between groups in terms of gender, relationships, number of children, education and socioeconomic status, with the HIV and INFO groups being more similar (though not uniformly) while the YOUTH group is more distinct from both. Further analysis will examine whether these variations are significant and the implications, if any, of these differences for self-efficacy for each group.

Key variables - Depression, Social Support and Self-Efficacy

Table 3. Group means for key variables - Overall Depression (including Anxiety Subscale and Depression Subscale), Social Support and Self-Efficacy (N=85)

		Anxiety Subscale	Depression Subscale	Overall Depression	Social Support	Self-Efficacy
HIV	Mean	21.10	34.67	55.77	26.53	61.47
	Std. Deviation	8.37	11.64	18.98	7.24	11.57
INFO	Mean	16.92	30.12	47.04	27.35	63.35
	Std. Deviation	7.09	9.57	15.37	4.95	15.68
YOUTH	Mean	15.44	26.92	42.36	31.12	72.40
	Std. Deviation	4.61	7.65	11.39	4.50	14.03
NGO	Mean	13.00	25.00	38.00	30.50	73.25
	Std. Deviation	2.16	6.06	7.87	7.14	.96
Total	Mean	17.78	30.54	48.32	28.32	65.81
	Std. Deviation	7.23	10.18	16.43	6.08	14.14

Note: HIV (N=30), INFO (N=26), YOUTH (N=25), NGO (N=4).

Compared to all other groups, the HIV group had the highest mean levels of overall depression and the lowest levels of social support. The HIV group had the lowest self-efficacy of any groups. YOUTH had the lowest depression levels and the highest level of social support. They had the highest levels of self-efficacy. INFO lay between the other two groups on all measures (Table 3).

Table 4. HIV and INFO Independent Samples Test

	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Anxiety Subscale	2.00	54	.05	4.18	2.09	-.02	8.37
Depression Subscale	1.58	54	.12	4.55	2.88	-1.21	10.32
Overall Depression	1.87	54	.07	8.73	4.66	-.62	18.08
Social Support	-.48	54	.63	-.81	1.68	-4.19	2.56
Self-efficacy	-.51	54.00	.61	-1.88	3.65	-9.20	5.44

Note: HIV (N=30), INFO (N=26).

Table 5. HIV and YOUTH Independent Samples Test

	T	df	Sig. tailed)	(2- Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Anxiety Subscale	3.02	53	.00	5.66	1.88	1.90	9.42
Depression Subscale	2.85	53	.01	7.75	2.72	2.30	13.20
Overall Depression	3.10	53	.00	13.41	4.33	4.72	22.09
Social Support	-2.75	53	.01	-4.59	1.67	-7.93	-1.24
Self-efficacy	-3.17	53	.00	-10.93	3.45	-17.85	-4.01

Note: HIV (N=30), YOUTH (N=25).

Table 6. INFO and YOUTH Independent Samples Test

	T	df	Sig. tailed)	(2- Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Anxiety Subscale	.88	49	.38	1.48	1.68	-1.90	4.86
Depression Subscale	1.31	49	.20	3.20	2.43	-1.69	8.08
Overall Depression	1.23	49	.22	4.68	3.80	-2.96	12.32
Social Support	-2.85	49	.01	-3.77	1.33	-6.44	-1.11
Self-efficacy	-2.17	49	.03	-9.05	4.17	-17.44	-6.67

Note: INFO (N=26), YOUTH (N=25).

Comparing groups, people living with HIV had slightly higher levels of overall depression than the INFO group at a level that approached significance ($p < 0.07$). The HIV group was not significantly different from INFO on self-efficacy or social support (Table 4). HIV and YOUTH participants were significantly different on all measures - the HIV group had higher overall depression (and higher scores on both subscales), lower social support and lower self-efficacy than the YOUTH group (anxiety: $p < 0.005$; depression symptoms: $p < 0.005$; overall depression: $p < 0.002$; social support $p < 0.008$; self-efficacy: $p < 0.003$) (Table 5). YOUTH participants had significantly more social support ($p < 0.006$) and significantly greater self-efficacy ($p < 0.04$) than INFO participants (Table 6). As might be expected, a one way analysis of variance indicates that there was a significant difference between the three groups on all five measures (anxiety symptoms: $p < 0.009$; depression symptoms: $p < 0.02$; overall depression: $p < 0.008$; social

support $p < 0.01$; self-efficacy: $p < 0.01$). A future analysis will examine group differences in self-reported HIV risk-reducing behaviours, although the smaller sample size for some measures constrains between-group comparisons.

Gender differences

Table 7. *Group means of women and men - 24-item Self-efficacy and 28-item Self-efficacy*

		N	Mean	Std. Deviation	Std. Error Mean
24 item Self-efficacy	Women	55	64.02	14.12	1.90
	Men	30	69.10	13.79	2.52
28 item Self-efficacy	Women	55	70.60	17.50	2.36
	Men	30	78.63	17.99	3.28

Table 8. *Gender 24 item and 28 item Self-efficacy Independent Samples Test*

	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
24 item Self-efficacy	-1.60	83.00	.11	-5.08	3.18	-11.40	1.24
28 item Self-efficacy	-2.00	83.00	.05	-8.03	4.01	-16.01	-.06

Note: N=85. Women (N=55), Men (N=30)

Comparing the 55 women and 30 men in the total sample, women had marginally higher mean levels of overall depression, broken down into slightly lower levels of anxiety and slightly higher levels of depression symptoms. Women had marginally lower levels of social support than men and lower levels of self-efficacy. None of these differences was significant. However, when four optional condom questions are included in the self-efficacy measure, women showed significantly lower mean levels of self-efficacy than men (Tables 7 and 8).

Table 9. Correlations between key variables (depression, social support, self-efficacy) and self-reported HIV risk reducing behaviours

		ANX SCORE	DEP SCORE	TOTAL DEP	SS SCORE	EFF SCORE	EFF SCO24	TALK PART	TALK KIDS	TALK FAMILY	USED COND	TALK COND
ANX SCORE	Pearson	1.000										
	Correlation											
	Sig. (2-tailed)	.										
	N	85										
DEP SCORE	Pearson	.774**	1.000									
	Correlation											
	Sig. (2-tailed)	.000	.									
	N	85	85									
TOTAL DEP	Pearson	.920**	.960**	1.000								
	Correlation											
	Sig. (2-tailed)	.000	.000	.								
	N	85	85	85								
SS SCORE	Pearson	-.505**	-.526**	-.548**	1.000							
	Correlation											
	Sig. (2-tailed)	.000	.000	.000	.							
	N	85	85	85	85							
EFF SCORE	Pearson	-.222*	-.171	-.204	.192	1.000						
	Correlation											
	Sig. (2-tailed)	.041	.118	.061	.079	.						
	N	85	85	85	85	85						
EFF SCO24	Pearson	-.281**	-.182	-.236*	.229*	.955**	1.000					
	Correlation											
	Sig. (2-tailed)	.009	.096	.029	.035	.000	.					
	N	85	85	85	85	85	85					
TALK PART	Pearson	-.211	-.149	-.184	.363**	.414**	.424**	1.000				
	Correlation											
	Sig. (2-tailed)	.088	.231	.140	.003	.001	.000	.				
	N	66	66	66	66	66	66	66				
TALK KIDS	Pearson	-.294	-.189	-.244	.242	.178	.232	.482**	1.000			
	Correlation											
	Sig. (2-tailed)	.056	.224	.115	.119	.253	.135	.001	.			
	N	43	43	43	43	43	43	43	43			
TALK FAMILY	Pearson	.013	.114	.078	.032	-.018	.030	-.011	.464**	1.000		
	Correlation											
	Sig. (2-tailed)	.915	.354	.528	.794	.884	.807	.931	.002	.		
	N	68	68	68	68	68	68	68	66	43	68	
USED COND	Pearson	.065	-.002	.026	.121	.531**	.383**	.401**	.087	.091	1.000	
	Correlation											
	Sig. (2-tailed)	.607	.985	.837	.340	.000	.002	.001	.592	.478	.	
	N	64	64	64	64	64	64	61	40	63	64	
TALK COND	Pearson	-.153	-.301*	-.254*	.374**	.729**	.632**	.509**	.314*	.063	.677**	1.000
	Correlation											
	Sig. (2-tailed)	.227	.016	.043	.002	.000	.000	.000	.045	.626	.000	.
	N	64	64	64	64	64	64	62	41	63	62	64

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Note: Pearson's correlations were used. Sample size for most behavioural measures is 61-68 as these measures were omitted from phase 1 of the study (15 participants). Sample size for 'talking to one's children about HIV' is lower as not all participants had children.

Self-efficacy/empowerment correlated with safer behaviour

The correlations between measures are one of the most interesting results of this small study. The relationships of the key variables of depression, social support and self-efficacy (24 items) to self-reported instances of HIV risk-reducing behaviours were examined, pooling all participants (Table 10). Self-efficacy was positively correlated with all three behaviours associated with reduced HIV risk: had talked to a partner about HIV ($p < 0.000$, $N = 66$), had talked to a partner about using condoms ($p < 0.000$, $N = 64$), and had ever used condoms ($p < 0.002$, $N = 64$).

Depression and lack of social support were negatively correlated with some safer behaviours. Higher depression levels were related to fewer instances of having talked to a partner about using condoms ($p < 0.05$, $N = 64$). Lower social support was related to fewer instances of having talked to a partner about HIV ($p < 0.003$, $N = 66$) or about using condoms ($p < 0.002$, $N = 64$). Depression, social support and self-efficacy had no associations with having talked to one's family or to one's children about HIV.

Of the behavioural measures, talking to one's partner about HIV was closely related to talking to one's children about HIV ($p < 0.001$, $N = 43$), as well as to talking about condoms ($p < 0.000$, $N = 62$) and ever use of condoms ($p < 0.001$, $N = 61$). Talking to one's children was closely related to talking to one's family ($p < 0.002$). As expected, having talked about using condoms with one's partner and ever use of condoms were closely correlated ($p < 0.000$).

As expected, the anxiety and depression symptoms subscales and overall depression scores were strongly positively correlated with each other ($p < 0.000$). This supports the reliability of these questionnaires in Swahili. Higher overall depression was strongly positively correlated with lower social support ($p < 0.000$).

QUALITATIVE RESULTS

The qualitative interviews provide a contextual analysis of the reality of the epidemic in Tanzania. Illustrative responses from a handful of participants appear below.

Empowerment

Asked what empowerment meant to her, one woman replied: “I’ve heard in the women’s groups, in meetings, like when they talk about microcredit programmes to women. I think things like that, assisting each other to be able to raise their income. ...The empowerment of each other has helped me the way women help each other by giving each other money in turns.” [100]³ Others echoed this: “I hear it’s a state of a woman being strengthened economically in the community.” [137] For others: “It means receiving education on HIV.” [109]

Becoming empowered meant “First to know their rights. Secondly to work hard also to care for their families...By not considering themselves inferior, working and not making themselves men’s subjects.” [137] Education was emphasised: Women need “support for education...so that she gets self awareness that she also has a right to speak, you see? Also that she has ability to work like a man, you see?... After getting education she will know that she has rights to cultivate a farm, a right to harvest, even to travel.” [100] Added one man: “The difficult thing here is education, people do not understand that men and woman have equal decisions and not that a man has more authority.”[127]

Decision-making

Participants indicated that women did not have power in many aspects of their lives, including over their household, children and education, especially if married. ”You have no authority. If you have you have no husband.” [102] Economic relationships affected female power: “It’s the lack of income because if the father has a job you will find that he has all the decisions on the family at large” [137].

In terms of decision-making power concerning sex and love, men and women were seen as having power in different ways. Men were considered the sexual initiators, and both men and women mentioned that men were able to coerce women into sex: “If ... I refuse sexual contact with my partner definitely there will develop hatred and it may lead to other bigger problems like rape” [100]. This was recognised by men: “Since a man can use force the woman can get injured in the process. Besides this can cause misunderstandings in the marriage” [112].

Sex was deeply intertwined with economic dependence: “There are risks of being raped by your

³ Each participant is identified by a number, which appears in square brackets.

husband or he may even stop giving you maintenance. Therefore you will get problems with your children. Therefore a woman is supposed to work hard to be able to feed the family. The husband could keep pestering me and if I keep refusing he could say ‘take your children and care for them on your own’” [100]. Men and women realised the infection risks inherent in this power dynamic: “Most of the time men use force or attract women by money, alcohol or another gift, and when a woman accepts that is the beginning of being infected” [127]. Education and communication between men and women were the main suggested solutions.

When women were seen as more powerful, it was characterised as the power to refuse sex to their partners. Stated some female participants: “Because I have the ability to say no” [128] and “It is a woman because if she refuses the act will not be done” [121]. However, these same participants mentioned the consequences of refusal: “A woman will be raped” [128]. “When a woman refuses to do sex, a man can stop providing the family needs hence there will be no peace in the house until the woman accepts having sex” [121]. Others felt decisions were shared: “The decision is with both partners...Both a husband and a wife are family administrators therefore there is no effect as both are equal” [118].

Male power was sometimes seen as culturally based: “It is due to culture and tradition. We Africans know that in marriage matters a man is dominant, therefore if your husband tells you to do something you can not disagree as he is the head of the family.” [125] “This is caused by African culture, in particular the Chagga where a woman does not have rights on her body” [242]. One man commented: “This has been there in the Tanzanian community since a long time ago - that a boy child should be more honoured. People are used to this and it is generally seen that a boy child is the one who has a voice in everything. ...Tanzanian women have not been given many opportunities for education. Therefore every day she becomes dependent. The husband/father is the one who the family depends on for everything. A woman will have a voice if she is also contributing a certain percentage to the family’s income” [101].

Gender differences in society's responses to men and women living with HIV

A participant would often give starkly contrasting responses to the following two questions:

How do you think a man will feel if his wife tells him that she is HIV positive?

“He will divorce her on that very same day” [242].

“First of all a man may decide to beat you or to abandon you” [100].

“Most of the time a man becomes very angry to the extent of chasing his wife away and blaming her for being unfaithful” [125].

How do you think a woman will feel if her husband tells her that he is HIV positive?

“She will have only to cry and then stay calm there is no other way” [242].

“She will not have done anything because every time women especially here in Chaggaland have no voice. What a man will say will be fine. That will be all, mmh, you’ll have to accept it if he says he has AIDS and even if you yourself are not yet infected he will force you to have sex with him” [100].

“I was very sad and sorry as I knew that my husband will die and leave me. The sadness caused me to dare to commit suicide. It is different from a man who will be harsh, cause troubles or quarrels” [125].

The expected community and family response if a woman became infected with HIV was repeated endlessly: “It takes her as a prostitute who will have brought home the virus” [110]. “It thinks it is the woman who went out in search of the virus” [111]. “Most of them consider that the woman was a whore” [127]. Yet the expected reactions of the community differed from participants’ own. A female participant remarked: “Isn’t it a man who brings HIV?” [126]

Reactions to a man becoming infected were more varied: “He is hated and isolated by the family. He therefore lives a life of fear” [108]. “On the side of a man they see is as normal and not bad” [137]. “The community gets feelings that if that man was a traveller then he got it during travelling” [122].

Solutions

Participants suggested that the community ought to provide psychological as well as material

support: “To comfort the PLHAs [People Living with HIV&AIDS] so that they live with hope and giving physical and economical support without any discrimination” [125]. Others mentioned abstention and long-term support: “Mainly it’s to advise that the infected should not have sex anymore. Also to give moral and material support to the patient like taking them to hospital. Then to give comfort to the wife or husband left behind” [122]. The value of participation was underlined: “The infected should be involved in activities they can perform including seeking their opinion on community issues. As such, they will not live isolated lives shrouded in fear” [108].

The government was expected to provide material support, especially medicine. “They should cooperate with the community and they should not regard this as a community disease but it is for the whole nation...The government should help with the drugs since some of these people are not able to buy medicine and their families are poverty stricken” [252]. In addition, “The government should go on doing research on getting a cure or a vaccine. And they should go on supporting us with medicine at least at a reduced price to enable the low income earners to afford them” [101].

Participants were critical of the government’s lack of action: “When there is a meeting of a political party’s gathering HIV education should be given first... now it is the time when the Government has opened its eyes. If it had done so earlier the effect could not have been at this extent. The Government has started to show its efforts after a high death rate” [242]. Participants described specific actions the Government should take, including eradicating female genital mutilation, supporting the unemployed, and elders, politicians and the President providing an example by testing for HIV.

Education is key

Many people felt education was fundamental to addressing HIV. “AIDS education should be spread in newspapers, schools, churches, mosques, also children should be educated” [122]. “In Africa where the disease spreads very fast, despite people seeing the effects of HIV, there is a need to educate people so as to save the manpower which is deteriorating” [125]. Education could vary for men and women but involved everyone – churches, teachers and students, all age

groups – as well as the participation of those living with HIV.

In devising solutions, women cannot be seen as identical. One participant observed [102]: “There are some women who differ from each other. There are women who are over-ambitious. For example, she sees her colleague wearing that dress, she will also want it. Therefore today she will go with Alhumain, tomorrow with Abdullah so that she gets money to go and buy that dress. There is another one who struggles on her own. Another one has AIDS brought home by her husband therefore she has no way of protecting herself. This is because if a man tells you something and you refuse you will be beaten or kicked out. Therefore you will be forced to submit. The truth is that some people get AIDS by themselves and others have AIDS brought to them.”

The impact of HIV was self-evident, as this woman [242] visiting KIWAKKUKI’s information centre warned: “If people’s minds will not be opened the world is going to be destroyed. Those who will remain will be very few. It is like for us the Chaggas who used to grind maize by using a mortar and pestle, and there are few seeds which come out unground. These will be the people who will remain in future if people will not change their behaviour.”

CONCLUSIONS

Partnership and innovative methodologies demonstrated that empowerment can be partially measured, understood and useful for addressing HIV in this Tanzanian context. Findings suggested that gender sensitivity, self-efficacy, education and economic independence are essential for women at risk for and living with HIV.

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