Chapter 8 A Detailed Analysis of the Social Support Networks of Older Adults with HIV in Uganda and South Africa



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Introduction

Social support is a broad concept measured in a variety of ways, such as by the composition of social networks; the amount of instrumental, emotional, or informational help provided; and perceptions of support availability and adequacy (Bajunirwe et al., 2009; Kinyanda et al., 2011; Moore et al., 2018; Uchino, 2009). Social networks are typically classified, with various refinements, as diverse or integrated, family-based, friend-based, or restricted/isolated (Brennan-Ing et al., 2017; Doubova et al., 2010; Fiori et al., 2006).

Cantor's Hierarchical Compensatory Model of Social Support proposes that older adults prefer support from people closest to them, such as partners, spouses, and children (Brennan-Ing et al., 2017; Cantor, 1979). When the support received from these close others is not available or is inadequate to meet their needs, older adults will turn to more distant family members, friends, or neighbors. If social support needs are still not met, older adults will then turn to formal services such as government or community-based agencies or, in some cases, rely on themselves alone. Many low- and middle-income countries, however, do not have a robust formal service sector (Hove et al., 2013). In sub-Saharan Africa, family members have been characterized as a "social security system" that provides critical support in times of need (Mathambo & Gibbs, 2009).

About 3.7 million adults aged 50 and older are living with HIV in sub-Saharan Africa (Autenrieth et al., 2018). Thanks to the growing availability of antiretroviral

therapies, that number is expected to continue to increase in this region and in other low- and middle-income countries (Autenrieth et al., 2018). Older adults with HIV experience high rates of comorbid diseases (Havlik et al., 2011; Sprague & Brown, 2017), suggesting they will require increasing assistance and support from their informal social networks of family, friends, and neighbors. Traditional cultural norms in sub-Saharan Africa identify family members, particularly women, as the primary sources of support for their older relatives, but increasingly these norms have changed, especially in urban settings, resulting in fewer informal support resources (Harling et al., 2020; Small et al., 2019). Data are scarce on the social network dynamics of older people with HIV in sub-Saharan Africa, and it is not clear if their informal networks will be adequate to meet the growing need as they face the challenges of aging, and aging with HIV, given the lack of formal service availability.

An abundance of research in high-income countries has examined the ways social support, or the lack of it, affects physical and mental health, but there is less information from countries with less individualistic, more interdependent cultures (Khamarko & Myers, 2013). The World Health Organization conducted a systematic review of research on social support and health outcomes among people with HIV in low- and middle-income countries. The researchers concluded that social support is positively associated with physical health and health behavior outcomes, as well as mental health outcomes such as greater self-esteem, self-efficacy, and active coping, and reduced psychological distress and depression, though some studies found no effects (Khamarko & Myers, 2013). In a more recent study of people with HIV in South Africa, social support and access to material and nonmaterial resources were strongly associated with well-being (Odek, 2014). While older participants in this study reported a greater number of close friends than younger participants did, they had fewer people they could turn to if they needed help in specific situations. And in a study in rural Namibia, social support from friends, though not from family or neighbors, was negatively associated with depressive symptoms (Kalomo et al., 2021).

Social Support Among Older Adults in Sub-Saharan Africa

The limited research available finds social networks among older adults in sub-Saharan Africa to be predominantly family-based. In a study of older people with HIV in Togo, the average network—defined as people one could call on if ill, talk over important matters with, and enjoy spending time with, excluding spouse or partner—had three members, mostly immediate kin (parents, children, siblings), though non-kin made up 40% of those whom respondents "really enjoy socializing with" (Moore & Prybutok, 2014, p. 334). In the rural area of Agincourt, South Africa, adults 40 and older were asked to name six adults they had been in touch with during the past 6 months. On average, relatives constituted two thirds of the network members providing support of all types (emotional, instrumental, financial,

and informational; Moore et al., 2018). On the question of relationship quality, however, those who reported negative interactions most often had them with relatives (55%) or partners (29%). This reflects the phenomenon that greater interaction with one's social network members also provides greater opportunities for negative interactions or so-called negative social support, such as marital discord or perceived criticism (Ahn et al., 2017). Thus, the existence of a network does not automatically mean the network confers only benefits.

Social networks tend to shrink as people grow older and retire, and friends and family members become ill or die. In high-income countries, this process has been described as *socio-emotional selectivity*, whereby people tend to focus on relationships that are the most emotionally important to them, letting other, more peripheral relationships fall by the wayside as they age (Carstensen, 1992). However, studies of social networks of older adults in rural sub-Saharan Africa have not found support for this process (Harling et al., 2020). The reduction in availability of family members to provide support is also a function of children being unavailable, primarily because of migration to obtain employment or from mortality, including death from HIV/AIDS (Harling et al., 2020; Mathambo & Gibbs, 2009; Schatz & Seeley, 2015; Small et al., 2019).

Provision of Assistance and Reciprocity

Many older adults in sub-Saharan Africa are care providers as well as care recipients, with older women providing assistance to partners, dependent adult children, and grandchildren because of the absence of caregivers in middle generations (Harling et al., 2020; Schatz & Seeley, 2015). An important component of social bonds in many societies is not only the receipt but the provision of aid, as seen in studies of older adults with HIV in Uganda and Burkina Faso (Mugisha et al., 2018; Ouedrago et al., 2019). HIV and aging may affect a person's ability to work, and older adults' resources often influence their status and authority as elders. Being able to provide care or perform work of some nature may be essential, lest one's status revert to "child-like" and "useless" (Freeman, 2016, p. 124).

Contextual Factors Affecting Social Support

Family and social networks may change in the wake of an HIV diagnosis. The social context of HIV and the level of stigma in the surrounding culture may greatly affect social support, and gender is also a factor. People with HIV may be blamed for acquiring the disease, and widows of men who died with HIV may lose support from the husband's family, endangering not only their social acceptance but their material support, according to a study in Burkina Faso (Ouedraogo et al., 2019). Family members in other cultures, such as the Igbo in Nigeria, may feel an obligation to support those with HIV (Muoghalu & Jegede, 2010).

Across sub-Saharan Africa, older adults and people with HIV vary in their need for and access to social support. Rural residents in areas with high levels of poverty may depend on each other for food and other material resources (Moore et al., 2018; Tsai et al., 2012). In other areas, modernization and development have spurred migration and social change, which may upset the fulfillment of traditional family roles (Cohen & Menken, 2006). In South Africa, apartheid policies into the 1990s affected family networks by encouraging urban migration for young adults but not their parents or children (Ramlagan et al., 2013).

Importance of Perceptions of Social Support

In terms of coping with the challenges of aging, and aging with HIV, perceptions of the availability and adequacy of social support are often more important than the amount of tangible support that is actually received. In their seminal review, Cohen and Wills (1985) found that while there are direct benefits based on the receipt of assistance from one's social network, positive perceptions of social support sufficiency provide an important buffering effect against stressful life circumstances, an effect that is significantly related to well-being. This buffering hypothesis is supported in research on people with HIV, including older adults. In a US sample of people with HIV including younger and older adults, perceived social support exerted a stronger positive effect on mental health than actual support received (McDowell & Serovich, 2007), while perceived support from friends has been associated with lower perceived HIV stigma among African American people with HIV (Galvan et al., 2008). Among older gay and bisexual men with and without HIV, perceived psychological and emotional connection to the gay community was significantly associated with lower levels of negative self-appraisals and greater engagement in fitness activities (Brennan-Ing et al., 2021). Another study on older men with HIV found that perceptions of adequate emotional support significantly mediated the association between health and depressive symptoms (Ogletree et al., 2019). Thus, when evaluating the impact of social support networks on older people with HIV in sub-Saharan Africa, it is important to understand the factors related to perceptions of sufficient social support in terms of the availability and adequacy of assistance.

Purpose and Rationale

The present study compares the social network characteristics and dynamics of older people with HIV in two sub-Saharan populations: (a) largely suburban and urban South Africa and (b) rural Uganda. The countries are distinct in their economic profiles: South Africa has a larger urban population (65%) compared to Uganda (22%; African Development Bank, African Union Commission, and United Nations Economic Commission for Africa, 2018), with an average household

income three times that of Uganda (Phelps & Crabtree, 2013). South Africa has a greater level of formal employment and a pension system (Cohen & Menken, 2006). Uganda had a larger household size in 2017, at 4.7, compared with 3.2 in South Africa and has a largely agricultural, informal economy (United Nations, 2017). Therefore, it is likely that social networks will differ between these two populations. Our analysis aimed to answer the following research questions.

- 1. What are the similarities and differences in the composition and social network dynamics (frequency of contact, provision of assistance) between older people with HIV in South Africa and Uganda?
- 2. What factors are associated with perceptions of instrumental and emotional support sufficiency among older people with HIV in South Africa and Uganda?

Method

Sources of Data

This study used data from the Research on Older Adults with HIV (ROAH) Africa project, the first comprehensive survey to provide detailed information on psychosocial issues focused on older people with HIV in sub-Saharan Africa, with a sample size of 209 participants (Brennan-Ing et al., 2016; Negin et al., 2016). Eligibility criteria were being age 50 or older at the time of the interview and having an HIV-positive serostatus.

Uganda participants (n = 101) were recruited from enrollees in the World Health Organization's Health and Wellbeing of Older People Study (WOPS) who were living in a rural area of Kalungu district in southwestern Uganda and in the periurban Wakiso district located in the vicinity of Entebbe (Nyirenda et al., 2013). The ethnicity of the majority of Uganda participants was Baganda, one of the prominent ethnic groups in eastern and southern Uganda (Nahemow, 1979). The Baganda have a patrilineal system of kinship and traditionally live in nuclear family households, often separated by large distances, originally because the availability of large areas of fertile land for farming promoted far-flung settlements. Marital instability along with migration for work has contributed to considerable variability in family arrangements, including foster children and widows living with grown sons (Nahemow, 1979; Seeley, 2015). These nuclear families are nested within the larger patrilineal kinship structure of the clan, with children joining the clan of their father and their mother being from a different clan. The bond with a person's clan persists despite geographical and social barriers (Seeley, 2015). The impact of the HIV epidemic in this region may have contributed to the geographic dispersal of nuclear families, but the pattern of dispersed settlement was well-established before the epidemic (Seeley, 2015).

South African participants (n = 108) came from an adult antiretroviral therapy clinic in central Johannesburg, South Africa (Nyirenda et al., 2015). In terms of

ethnicity, most South African participants reported being either Tswana (44%) or Zulu (22%), with less than 10% reporting other ethnicities (e.g., Xhosa, North and South Sotho, Afrikaans). Tswana society is traditionally clan-based and organized on paternalistic principles with the highest status accorded to ruling families (chiefs) and with social status and resources allocated based on the proximity of one's lineage to these dominant families (Kazankov, 2003). This organization led to the form of heterogenous large-family communities linked by bonds of location (neighbors) and lineage. Marriage forms the structural nexus of kinship ties among the Tswana and incorporates both parallel-cousins (child of parent's same-sex sibling) and cross-cousins (child of parent's opposite-sex sibling) resulting in complex intrafamily relationships (Reece, 2019). The Zulu also have a clan-based kinship system, which is not defined by actual ties of "blood and marriage" but belief in descent from a common ancestor (Loudon, 1957). Zulu clan systems are patriarchal in nature, and marriage between members of the same clan, or with the clan of one's mother, is proscribed, resulting in an exogamous family structure. Typically, Zulu households are organized around a man's household (husband, wife, and unmarried children), with married sons and their wives living in separate domiciles within the same compound (Loudon, 1957).

An interviewer-administered quantitative methods survey was used to collect information on demographics, mental health, physical health, social networks, HIV treatment experience, treatment adherence, health-related quality of life, and sexual behavior. Each in-person one-to-one interview lasted approximately 1–1.5 h. Interviews were translated from English into the local language of the participants. Written informed consent was obtained. Participants in the Uganda arm of the study were compensated for their time with a bar of laundry soap worth 4000 Uganda shillings (US \$1.50); participants in South Africa did not receive compensation for taking part in the interview. ROAH Uganda was approved by the Science and Ethics Committee of the Uganda Virus Research Institute and the Uganda National Council for Science and Technology. ROAH South Africa was approved by the institutional review board of the University of New England (Australia) and the Human Subjects Ethics Committee of the University of the Witwatersrand (South Africa).

Measures

Social Support

Social support, demographic, and health questions were adapted from the US ROAH study (Cantor et al., 2009; Karpiak & Brennan, 2009) for sub-Saharan Africa populations.

Social Network Components The presence of a spouse or partner in a participant's social network was determined by responses to the questions on current marital status. Participants were asked whether they had any of the following people in their

social networks: children, grandchildren and great-grandchildren, siblings, other relatives in frequent contact, close friends, and neighbors known well. If the participant answered affirmatively, they were then asked how many of these people were in their social networks. In the case of children and grandchildren/great-grandchildren, we asked about the total number who were born as well as the number still living. Functional social network members were designated if the older people with HIV saw at least one of the social network members face to face monthly or spoke to them on the phone at least weekly (Cantor & Brennan, 2000). The number of functional supports was the sum of the number of functional network elements reported by older people with HIV. The size of the social network was a sum of the number of members in the social network. In the case of children and grandchildren/great-grandchildren, the numbers who were currently living were used to compute social network size.

Frequency of Contact with Network Members For participants who reported children, grandchildren/great-grandchildren, siblings, and friends, we asked how often they saw at least one of these people face to face or spoke with them on the telephone using a 5-point ordinal scale ranging from "daily" to "once per year or less often." For participants who reported knowing a neighbor well, we asked how frequently they and their neighbors helped each other with three possible responses: "do not help," "help in emergencies," or "help all the time."

Closeness to Network Members and Friends with HIV/AIDS We asked participants how close they felt to members in their social network on a 4-point scale ranging from "very close" to "not close at all." For participants who reported friends in their networks, we asked how many of their friends also had HIV/AIDS on a 5-point scale ranging from "all" to "none."

Caregiving We asked whether participants were currently caring for a grandchild, a great-grandchild, or another child. For those who were caring for a child, we asked whether they were mainly responsible for the child, shared responsibility, or were not responsible for the child. For those who indicated either being mainly responsible or sharing responsibility, we asked why they were responsible as an openended question. We then coded the open-ended responses into eight categories (see Table 8.6). We also asked older people with HIV whether they were currently caring for an adult relative or friend. For those providing care to an adult, we asked about their relationship to the care recipient as an open-ended question. We then coded these responses into six categories of relationships (see Table 8.6). Last, we asked whether caregiving interfered with their ability to care for themselves (yes/no).

Assistance from Family and Friends We asked participants about the types of instrumental help and emotional support they received from family and friends/neighbors, respectively, and how often they received such help on a 6-point scale ranging from "not at all or occasionally" to "every day." We asked about five types of instrumental help with tasks of daily living (shopping or running errands,

housework or preparing meals, taking you or driving you somewhere, helping with mail or correspondence, managing money or paying bills) and three types of emotional support (giving advice on big decisions, talking to you if you are feeling low, and talking to you about personal matters). We calculated the number of ways family members and friends/neighbors helped, respectively, by summing the number of types of assistance provided at least once per month.

Negative Social Support We asked participants about the types and frequency of negative interactions with family and friends/neighbors, respectively, on a 6-point scale ranging from "not at all or occasionally" to "every day." The three types of negative interactions were network members being reluctant to talk, upsetting the person or hurting their feelings, and refusing to help them when asked. We calculated the indices of negative support from family and friends/neighbors, respectively, by summing the number of types of negative interactions that occurred at least once per month.

Perceptions of Support Availability and Adequacy Participants were asked about their perceptions of the availability and adequacy of instrumental assistance and emotional support, respectively. For the two questions on instrumental help and emotional support availability, participants responded on a 4-point scale: "all or most of the time," "some of the time," "only occasionally," or "not at all." For the two questions on instrumental help and emotional support adequacy, participants responded on a 4-point scale: "got all the help/support needed," "needed a little more," "needed some more," or "needed a lot more." We created indices of instrumental and emotional support sufficiency, by summing the responses to the two questions on instrumental help and the two questions on emotional support, respectively. For both indices, higher scores indicated more favorable perceptions of social support.

Covariates

Sociodemographic Characteristics Age in years was measured as a continuous variable. Gender was measured as a dichotomous variable of female or male. Marital status was a categorical variable: married, widowed, divorced/separated, cohabitating, being a co-wife, having multiple wives, and single or never married. Living alone was a dichotomous variable (yes/no) and derived from a question about the presence of other people living in the participant's household. Employment status was collapsed into four categories: working full- or part-time, unemployed, retired or living on a pension, and disabled or unable to work. Highest level of education consisted of five categories: none, primary (grades 1 through 7), secondary (grades 8 through 12), vocational or technical school, or tertiary. Participants were asked whether they were able to read and write (literate), which was coded as a dichotomy (yes/no). Participants were asked whether they owned their own phone, had access

to someone else's phone, or did not own or have access to a phone. We asked participants to identify the geographic area where they lived in one of five categories: city, suburb, town, trading center, or village. The research site was coded as South Africa = 1 and Uganda = 2.

Health and Mental Health Participants were asked to rate their health on a 5-point ordinal scale: excellent, good, fair, poor, or very poor. Due to the small number of responses in the last two categories, they were combined into a single category of poor/very poor. Participants were asked whether they had ever been diagnosed with acquired immune deficiency syndrome (AIDS), which was coded as a dichotomy (yes/no). The number of comorbid conditions in addition to HIV was calculated from responses to whether the participant had any of 26 medical conditions inclusive of an "other condition" with an open-ended description.

Depressive symptomatology was measured with the abbreviated 10-item version of the Center for Epidemiologic Studies Depression Scale (CES-D 10; Andersen et al., 1994; Radloff, 1977). Participants were asked about depressive symptoms experienced over the past days and responded on a 4-point ordinal scale: none of the time (less than 1 day or not at all), a little of the time (1–2 days), some of the time (3–4 days), or most of the time (5–7 days). Two items were reverse coded ("I felt hopeful about the future" and "I was happy"). Responses were summed and higher scores indicated greater depressive symptomatology (range = 0–30). Cronbach's alpha for the ten items was .72, indicating acceptable internal consistency reliability. The CES-D 10 scale has demonstrated high internal consistency with people with HIV in Uganda (α =0.92; Natamba et al., 2014) and South Africa (α =0.69–0.89; Baron et al., 2017).

Design and Analysis

This study used a cross-sectional design to examine differences in social network characteristics between older people with HIV in Uganda and South Africa. Significant differences in data between research sites were evaluated using chisquare tests for categorical and ordinal data and one-way ANOVA for continuous data. Due to the exploratory nature of this research, we did not adjust statistical significance levels for multiple comparisons and used p < .05 as our criterion for significant differences.

To examine independent variables associated with dependent variables of perceptions of instrumental and emotional support sufficiency, we conducted ordinary least squares multiple regression analyses. Prior to multiple regression, we conducted correlational analyses of potential independent variables (demographics, health, social network characteristics, and research site) and retained only those variables that were significant to develop parsimonious regression models. Listwise deletion of missing data was used for analysis. Potential multicollinearity of

independent variables was examined during the correlational analysis and through multicollinearity diagnostics in the multiple regression procedure. No significant multicollinearity was detected in the independent variables retained in the regression models. Regression models were evaluated by the significance of the model F-test, the amount of variance explained (R^2), and the significance of the individual regression coefficients.

Results

Sample Characteristics

The average age of the sample was 59.6 years (see Table 8.1). The older people with HIV from Uganda were significantly older on average compared to their peers from South Africa (61.0 years and 58.3 years, respectively). The South Africa sample had a significantly greater proportion of women (72%) than the Uganda sample (58%). Similar proportions of both groups were married, but older people with HIV in Uganda were significantly more likely to be widowed (46%) and less likely to be single or never married (0%) compared to their South African peers (25% and 22%, respectively). The older people with HIV in South Africa were more than twice as likely as older people with HIV in Uganda to report living alone (25% and 9%, respectively). Slightly less than one third of older people with HIV at both sites were living with a spouse or partner. However, older people with HIV in Uganda were significantly more likely to be living with a child or grandchild (58% and 59%, respectively) compared to their South African peers (32% and 31%, respectively). Relatively few older people with HIV lived with a parent, sibling, other family member, or friend, and there were no significant differences in this regard by site.

The vast majority of the older people with HIV in Uganda were working either full- or part-time (93%). In South Africa, while 50% of the older people with HIV were working, 19% reported being unemployed, and 31% were retired or receiving a pension. The proportion reporting being disabled and unable to work was 2% or less in both samples. There were no significant differences between the two samples in highest level of education; nearly two thirds reported attending only primary school, and about one in five had attended secondary school. Older people with HIV in Uganda were significantly more likely (70%) to be literate than those in South Africa (44%). Ninety percent of older people with HIV in South Africa owned a phone, and an additional 8% had access to a phone. Older people with HIV in Uganda were significantly less likely to own a phone (64%) and more likely to have access to someone else's phone (21%). Given the differences in study locations between the two samples, it was not surprising that nearly all participants in Uganda lived in a village or trading center (90% and 8%, respectively). In South Africa, most participants lived in urban areas such as in a city (8%) or the suburbs (76%).

 Table 8.1 Demographic and health profile of older adults with HIV in South Africa and Uganda

	Total		South	Africa	Uganda	l
	N	%	N	%	N	%
Gender*						
Male	72	34.4	30	27.8	42	41.6
Female	137	65.6	78	72.2	59	58.4
Marital status***		·	·		'	
Married	51	24.5	28	26.2	23	22.8
Widowed	73	35.1	27	25.2	46	45.5
Divorced/separated	42	20.2	20	18.7	22	21.8
Cohabitating	18	8.7	8	7.5	10	9.9
Co-wife	1	0.5	1	0.9	0	0.0
Single/never married	23	11.1	23	21.5	0	0.0
Living arrangement	·			·		
Lives alone**	36	17.3	27	25.0	9	9.0
With partner/spouse	64	30.0	34	31.5	30	30.8
With child***	93	44.7	35	32.4	58	58.0
With grandchild***	92	44.2	33	30.6	59	59.0
With parent	4	1.9	4	3.7	0	0.0
With sibling	20	9.6	8	7.4	12	12.0
With other family member	11	5.3	7	6.5	4	4.0
With friend	1	0.5	0	0.0	1	1.0
Employment status***				·		
Working full- or part-time	146	70.5	54	50.0	92	92.9
Unemployed	22	10.6	20	18.5	2	2.0
Retired/pension	36	17.4	33	30.6	3	3.0
Disabled/unable to work	3	1.4	1	0.9	2	2.0
Education	·	·		·		
None	32	15.4	17	15.9	15	14.9
Primary (grades 1–7)	129	62.0	63	58.9	66	65.3
Secondary (grades 8–12)	38	18.3	24	22.4	14	13.9
Vocational/technical school	2	1.0	0	0.0	2	2.0
Tertiary	7	3.4	3	2.8	4	4.0
Literate***	118	56.7	48	44.4	70	70.0
Have phone***	· · · · · · · · · · · · · · · · · · ·					
No	17	8.2	2	1.9	15	14.9
Own phone	161	77.4	96	89.7	65	64.4
Access to phone	30	14.4	9	8.4	21	20.8
Geographic location***		·	·			
City	9	4.3	9	8.3	0	0.0
Suburb	82	39.2	82	75.9	0	0.0
Town	9	4.3	7	6.5	2	2.0
Trading center	8	3.8	0	0.0	8	7.9
Village	101	48.3	10	9.3	91	90.1

(continued)

	Total South Africa			Uganda		
	N	%	N	%	N	%
Self-rated health***						
Excellent	15	7.2	1	0.9	14	13.9
Good	79	38.2	33	31.1	46	45.5
Fair	88	42.5	62	58.5	26	25.7
Poor/very poor	25	12.1	10	9.4	15	14.9
AIDS diagnosis***	73	35.8	15	14.2	58	59.2
	M	SD	M	SD	M	SD
Age**	59.60	7.10	58.26	6.08	61.03	7.82
Number comorbid conditions***	3.21	3.03	1.22	1.05	5.34	3.00
CES-D depressive symptoms***	9.81	6.16	7.52	4.22	12.26	6.94

Table 8.1 (continued)

Note. Total N = 209, South Africa N = 108, Uganda N = 101. Chi-square tests of significance for categorical variables and one-way ANOVA for continuous variables. Percentages may not sum to 100% because of rounding

A majority of the older people with HIV in Uganda rated their health as excellent or good (14% and 46%, respectively), significantly more than their peers in South Africa (1% and 31%, respectively). Despite their more positive evaluation of their health status, older people with HIV in Uganda were significantly more likely to report a prior AIDS diagnosis compared to those in South Africa (59% and 14%, respectively) and reported a greater number of comorbid conditions in addition to HIV on average (5.3 and 1.2, respectively). Older people with HIV in Uganda also had higher average levels of depressive symptoms (12.3) compared to those in South Africa (7.5) on the short version of the CES-D depression scale (Andersen et al., 1994; Radloff, 1977).

Social Network Composition

Approximately one third of older people with HIV in both samples reported having a partner or spouse (see Table 8.2), and nearly all had at least one child (97%). In terms of having a functional child, namely, at least one child in frequent contact, the proportions in both samples were nearly identical, with 82% of older people with HIV having this support element. However, older people with HIV in Uganda reported that they had had significantly more children and had more children who were living on average (10.0 and 7.0, respectively) compared to older people with HIV in South Africa (3.4 and 3.0, respectively). Older people with HIV in Uganda were significantly more likely to have a grandchild or great-grandchild compared to their counterparts in South Africa (96% and 84%, respectively), which is likely a result of having greater numbers of children. However, there were no significant differences in the likelihood of having a functional grandchild or great-grandchild

p < .05, p < .01, p < .001

between research sites (72% of the total sample). Regarding the number of grand-children and great-grandchildren, older people with HIV in Uganda reported significantly greater numbers on average (10.7 ever and 9.9 still living) compared to those in South Africa (3.9 and 3.8, respectively).

Older people with HIV in South Africa were significantly more likely to report having a sibling in their social network (98%) compared to their peers in Uganda (87%), but there were no significant differences in the proportions having a functional brother or sister (53% and 46%, respectively) and no significant differences in the number of living siblings between the two sites (approximately 4 on average). Older people with HIV in Uganda were significantly more likely to have another more distant relative in their network (75%) compared to their peers in South Africa (54%), but the proportion of those with a functional other relative did not differ significantly between the two sites (40% and 49%, respectively). But congruent with other data on the number of family members, older people with HIV in Uganda reported significantly more other relatives in their networks on average (3.8) than did those in South Africa (1.1).

We also found that older people with HIV in Uganda were significantly more likely to have non-kin members in their social networks and greater numbers of such people compared with their South African peers. Three quarters of the older people with HIV in Uganda reported having a friend, and 71% had at least one functional friend, while in South Africa the proportions were 43% and 42%, respectively. However, the average number of friends did not differ between sites and was 2.8 for the combined sample. Nearly everyone in the Uganda sample reported having a neighbor whom they knew well (96%), which was a significantly greater share than those in South Africa (67%), and the average number of these neighbors was significantly greater in Uganda compared to South Africa (3.0 and 2.0, respectively). There were no significant differences between the two sites in the number of functional support elements (approximately 3.4 on average), but the size of the social network (number of individuals) was approximately twice as large on average in Uganda (28.9) as in South Africa (14.3) (Table 8.2).

Frequency of Contact and Feelings of Closeness with Family

When comparing face-to-face and telephone contact with family members, older people with HIV in Uganda tended to have higher levels of in-person contact, while older people with HIV in South Africa were more likely to stay in touch with family members by telephone (see Table 8.3). This finding is partially explained by the fact that older people with HIV in Uganda were significantly more likely to be living with children and grandchildren than their peers in South Africa and somewhat less likely to have access to a telephone. Seventy-one percent of the older people with HIV in Uganda saw a child face to face at least weekly, but only 44% were in touch by telephone at least weekly. Among older people with HIV in South Africa, the proportion of at least weekly face-to-face contact was 57%, but 72% were in at least

Total South Africa Uganda N % N % N % Social network components Spouse/partner 70 33.5 37 34.3 33 32.7 Child 202 97.1 103 95.4 99 99.0 Functional child 172 82.3 90 83.3 82 81.2 96.0 Grandchild or great-grandchild** 187 89.9 91 84.3 96 Functional grandchild or great-grandchild 151 72.2 75 69.4 76 75.2 Sibling** 193 92.8 106 98.1 87 87.0 Functional sibling 103 49.3 57 52.8 46 45.5 Other relative*** 131 63.9 58 53.7 73 75.3 Functional other relative 93 44.5 53 49.1 40 39.6 Friend*** 121 58.5 46 43.0 75 75.0 Functional friend*** 117 56.0 45 41.7 72 71.3 95.8 Neighbor known well*** 161 80.9 70 67.3 91 Size of network components M SDM SDM SD Children*** 6.59 5.61 3.42 2.03 9.96 6.22 Living children*** 5.00 4.59 1.76 5.61 3.01 7.02 Grandchildrena *** 7.44 6.35 3.89 2.83 10.70 6.93 Living grandchildrena *** 6.99 6.03 3.84 2.84 9.89 6.70 Living siblings 4.19 3.28 4.00 2.05 4.44 4.37 Other relatives*** 2.39 1.41 4.75 3.68 1.10 3.81 Friends 2.76 2.51 2.61 1.97 2.85 3.24 Neighbors known well*** 2.47 2.06 1.99 2.29 3.00 1.62 Number functional supports 3.38 1.27 3.31 1.28 3.46 1.27 Size of social network*** 21.37 12.15 14.32 5.95 28.91 12.58

Table 8.2 Social network composition of older adults with HIV in South Africa and Uganda

Note. Total N = 209, South Africa N = 108, Uganda N = 101. Chi-square tests of significance for categorical variables and one-way ANOVA for continuous variables. Percentages may not sum to 100% because of rounding

weekly contact by telephone. A similar pattern was observed with contact with grandchildren or great-grandchildren. While the likelihood of living with siblings did not vary between groups, older people with HIV in Uganda were significantly more than twice as likely to see a sibling at least weekly than were those in South Africa (44% and 21%, respectively), while older people with HIV in South Africa were more likely than those in Uganda to be in at least weekly telephone contact (33% and 14%, respectively).

Despite different methods of maintaining contact with social network members, we did not observe any significant differences in reported closeness to family members based on research site (see Table 8.4). The vast majority of older people with HIV at both research sites felt very close to their children (85%) and grandchildren (83%). While not feeling as close to siblings as to children, approximately two thirds of older people with HIV felt very close, and one in five felt somewhat close

p < .05, p < .01, p < .001

^a Includes grandchildren and great-grandchildren

Table 8.3 Frequency of contact with family members among older adults with HIV in South Africa and Uganda

	Total		South	Africa	Ugano	da
	N	%	N	%	N	%
Children face to face***						
Once a year or less often	16	8.0	8	7.9	8	8.2
Several times a year	25	12.6	12	11.9	13	13.3
Monthly	30	15.1	23	22.8	7	7.1
Weekly	21	10.6	17	16.8	4	4.1
Daily	107	53.8	41	40.6	66	67.3
Children on telephone***						
Once a year or less often	13	6.6	6	5.9	7	7.4
Several times a year	16	8.2	3	3.0	13	13.7
Monthly	38	19.4	19	18.8	19	20.0
Weekly	85	43.4	54	53.5	31	32.6
Daily	30	15.3	19	18.8	11	11.6
Grandchildrena face to fac	e**					
Once a year or less often	19	10.2	8	8.8	11	11.5
Several times a year	21	11.2	11	12.1	10	10.4
Monthly	27	14.4	21	23.1	6	6.3
Weekly	22	11.8	14	15.4	8	8.3
Daily	98	52.4	37	40.7	61	63.5
Grandchildrena on telepho	ne***	'				
Once a year or less often	57	31.8	7	7.8	50	56.2
Several times a year	24	13.4	9	10.0	15	16.9
Monthly	33	18.4	24	26.7	9	10.1
Weekly	50	27.9	38	42.2	12	13.5
Daily	15	8.4	12	13.3	3	3.4
Sibling face to face***						
Once a year or less often	44	23.7	18	17.6	26	31.0
Several times a year	44	23.7	30	29.4	14	16.7
Monthly	40	21.5	33	32.4	7	8.3
Weekly	22	11.8	13	12.7	9	10.7
Daily	36	19.4	8	7.8	28	33.3
Sibling on telephone***		· ·				
Once a year or less often	33	18.2	7	6.9	26	32.9
Several times a year	41	22.7	19	18.6	22	27.8
Monthly	62	34.3	42	41.2	20	25.3
Weekly	37	20.4	28	27.5	9	11.4
Daily	8	4.4	6	5.9	2	2.5

Note. Total N = 209, South Africa N = 108, Uganda N = 101. Chi-square tests of significance. Percentages may not sum to 100% because of rounding

p < .05, **p < .01, ***p < .001

^a Includes grandchildren and great-grandchildren

Total South Africa Uganda N % N N % Children Not close at all 2 1.0 2 2.1 0 0.0 Not too close 7 3 3.6 4 4.1 3.1 Somewhat close 20 10.3 7 7.2. 13 13.4 165 85.1 84 86.6 81 83.5 Very close Grandchildrena Not close at all 4 2.2 2 2.2 2 2.2 5 Not too close 8 4.4 3 3.3 5.6 5 13 Somewhat close 18 10.0 5.6 14.4 Very close 150 83.3 80 88.9 70 77.8 Siblings Not close at all 11 6.0 5.0 6 7.1 5 9 Not too close 14 7.6 9.0 6.0 Somewhat close 39 21.2 19 19.0 20 23.8 120 65.2 67 67.0 53 63.1 Very close Other relatives Not close at all 3 2.3 0 3 4.1 0.0 Not too close 5 1 4 3.8 1.7 5.4 Somewhat close 32 24.2 15 25.9 17 23.0 42 50 Very close 92 69.7 72.4 67.6

Table 8.4 Feelings of closeness with family members among older adults with HIV in South Africa and Uganda

Note. Total N = 209, South Africa N = 108, Uganda N = 101. Chi-square tests of significance. Percentages may not sum to 100% because of rounding

to their brothers and sisters. A similar pattern was observed regarding other relatives, with 70% of older people with HIV feeling very close and 24% feeling somewhat close to these social network members.

Frequency of Contact with Friends and Neighbors

Older people with HIV in both South Africa and Uganda were in frequent face-to-face contact with friends (see Table 8.5), although those in Uganda were significantly more likely to see friends daily compared to their South African peers (63% and 50%, respectively). Older people with HIV in South Africa were more likely to see friends on a weekly basis (46%) than older people with HIV in Uganda (23%). And while 87% of the older people with HIV in South Africa spoke to a friend on the telephone at least weekly, only 31% of their Ugandan counterparts spoke to friends on the phone with this level of frequency. Over half of older people with

p < .05, p < .01, p < .001

^a Includes grandchildren and great-grandchildren

Table 8.5 Frequency of contact, friends with HIV/AIDS, and mutual neighbor assistance among older adults with HIV in South Africa and Uganda

	Total		South	Africa	Ugano	la
	N	%	N	%	N	%
Friend face to face*						
Once a year or less often	0	0.0	0	0.0	0	0.0
Several times a year	5	4.1	1	2.2	4	5.3
Monthly	8	6.6	1	2.2	7	9.3
Weekly	38	31.4	21	45.7	17	22.7
Daily	70	57.9	23	50.0	47	62.7
Friend on telephone***						
Once a year or less often	40	34.5	0	0.0	40	57.1
Several times a year	2	1.7	0	0.0	2	2.9
Monthly	12	10.3	6	13.0	6	8.6
Weekly	45	38.8	30	65.2	15	21.4
Daily	17	14.7	10	21.7	7	10.0
Friends with HIV/AIDS*						
None	36	36.7	12	31.6	24	40.0
A few	40	40.8	14	36.8	26	43.3
About half	4	4.1	3	7.9	1	1.7
Most	5	5.1	0	0.0	5	8.3
All	13	13.3	9	23.7	4	6.7
Help from/with neighbors*	***					
Do not help	26	13.3	13	13.7	13	13.0
Help in emergencies	75	38.5	62	65.3	13	13.0
Help all of the time	94	48.2	20	21.1	74	74.0

Note. Total N = 209, South Africa N = 108, Uganda N = 101. Chi-square tests of significance. Percentages may not sum to 100% because of rounding

HIV in Uganda reported being in telephone contact with a friend only once a year or less often. Many older Ugandans volunteered that they rarely spoke to their friends on the phone because they tended to live nearby, and they saw them in person often. Older people with HIV in South Africa were more likely to report that all of their friends also had HIV (24%), as compared to 7% of older people with HIV in Uganda. When asked about the amount of help they provided and received from their neighbors, older people with HIV in Uganda were significantly more likely to report they were involved with mutual assistance all of the time (74%) compared to older people with HIV in South Africa (21%). Among older people with HIV in South Africa, the majority were involved in helping and being helped by neighbors only in emergencies (65%), compared with 13% of older people with HIV in Uganda. There were no apparent differences between sites in the proportion who were not involved in helping relationships with neighbors (approximately 13%).

p < .05, **p < .01, ***p < .001

Table 8.6 Caregiving involvement among older adults with HIV in South Africa and Uganda

			Sout	h		
	Tota	1	Afri	ca	Uga	nda
	N	%	N	%	N	%
Currently caring for grandchild ^a or another child	88	47.3	36	40.0	52	54.2
Responsible for grandchild ^a or another child's care	***					
Mainly responsible	46	51.7	10	27.8	36	67.9
Share responsibility	36	40.4	20	55.6	16	30.2
Not responsible	7	7.9	6	16.7	1	1.9
Why responsible for grandchild ^a or another child's	care					
Parent working**	23	25.8	15	41.7	8	15.1
Parent died from HIV	20	22.5	11	30.6	9	17.0
Parent died from other illness**	10	11.2	0	0.0	10	18.9
Parent has HIV*	3	3.4	3	8.3	0	0.0
Parent has other illness/disabled	4	4.5	1	2.8	3	5.7
Parent unemployed or poor	14	15.6	8	21.6	6	11.3
Parents are separated/divorced	5	5.6	0	0.0	5	9.4
Grandparent request/need help*	7	7.9	0	0.0	7	13.2
Currently caring for adult relative or friend***	41	20.6	10	9.6	31	32.6
Relationship to care recipient						
Spouse or partner	3	8.1	2	20.0	1	3.7
Parent	7	18.9	2	20.0	5	18.5
Child	13	35.1	4	40.0	9	33.3
Grandchild	5	13.5	1	10.0	4	14.8
Other relative	5	13.5	1	10.0	4	14.8
Nonrelative	4	10.8	0	0.0	4	14.8
Caregiving interferes self-care	13	33.3	3	30.0	10	34.5

Note. Total N = 209, South Africa N = 108, Uganda N = 101. Chi-square tests of significance. Percentages may not sum to 100% because of rounding

Providing Care to Grandchildren or Other Adults

Grandchildren We asked older people with HIV whether they were currently caring for a grandchild, great-grandchild, or another child, and nearly half (47%) were engaged in childcare (see Table 8.6). The likelihood of providing care to a child did not differ significantly by research site. However, when asked about who was responsible for the child's care, older people with HIV in Uganda were significantly more likely to say they were mainly responsible (68%) than older people with HIV in South Africa (28%). Older people with HIV in South Africa were more likely to say they shared responsibility for childcare or were not responsible (56% and 17%, respectively) compared to their peers in Uganda (30% and 2%, respectively). We asked those who indicated some responsibility for caring for a grandchild or other child the reason why they were responsible, which generated a variety of responses.

^aIncludes grandchildren and great-grandchildren

p < .05, p < .01, p < .001

Older people with HIV in South Africa were more likely to be responsible for childcare because the parents were working (42%) compared to those in Uganda (15%). Twenty-three percent were responsible for a grandchild because the parent had died from HIV, which did not vary significantly by site, but grandparents in Uganda were significantly more likely than those in South Africa to be responsible because the parent had died from another illness (19% and 0%, respectively). Older people with HIV in South Africa were significantly more likely to be responsible because the parent had HIV (8%) compared to those in Uganda (0%), but there was no difference between sites on being responsible because the parent had another illness (5%). We also did not observe any significant differences between sites in the proportion of grandparents being responsible for childcare because the parents were unemployed or poor (16%), but grandparents in Uganda tended to be more likely to be responsible because the parents were divorced or separated compared to their counterparts in South Africa (9% and 0%, respectively). In addition, grandparents in Uganda were significantly more likely to be responsible for a grandchild because they had requested the child's help (13%) than were grandparents in South Africa (0%). This finding reflects that fostering is an important component of child socialization in Uganda and the foster child serves as a resource for emotional and instrumental support for the older adult (Kasedde et al., 2014).

Other Adults When asked whether they were currently providing care to another adult relative or friend, older people with HIV in Uganda were significantly more likely to be serving as caregivers compared to those in South Africa (33% and 10%, respectively). In terms of the relationship of the older people with HIV caregiver to the care recipient, there were no significant differences by research site. Most often care was being provided to a close relative, such as a spouse or partner (8%), parent (19%), adult child (35%), adult grandchild (14%), or other relative (14%). Eleven percent of older people with HIV were providing care to a nonrelative such as a friend or neighbor. One third of older people with HIV who were caring for an adult reported that being a caregiver interfered with taking care of themselves, and this proportion did not differ significantly between South Africa and Uganda.

Assistance and Support Received from Social Network

Need for Help and Sources of Assistance We asked participants whether they had ever needed physical, financial, or emotional help due to HIV either in the past or currently (see Table 8.7). Older people with HIV in Uganda were significantly more likely to indicate they currently needed physical help compared to their peers in South Africa (40% and 8%, respectively), while those in South Africa were more likely to say they needed such help in the past but not currently (43%) compared to older people with HIV in Uganda (16%). Regarding financial help, older people with HIV in South Africa were significantly more likely than their Ugandan counterparts to say they had never needed such help (58% and 31%, respectively). A

Total South Africa Uganda % N N % Need physical help re HIV*** Never 97 46.6 53 49.1 44 44.0 Not now but in the past 62 29.8 46 42.6 16 16.0 Currently need help 49 23.6 9 8.3 40 40.0 Need financial help re HIV*** 94 45.4 63 58.3 31 31.3 Not now but in the past 49 23.7 32 29.6 17 17.2 Currently need help 64 30.9 13 12.0 51 51.5 Need emotional help re HIV*** Never 85 40.7 43 39.8 42 41.6 Not now but in the past 89 42.6 56 51.9 33 32.7 Currently need help 35 16.7 9 26 25.7 8.3 Who provided needed help 24 13.3 7 17 Spouse/partner 8.8 16.8 Child 57 31.5 23 28.7 34 33.7 Sibling*** 24 13.3 18 22.8 6 5.9 Other family member*** 38 21.0 32 40.0 6 5.9 11 6.1 2 9 8.9 Friend 2.5 5

Table 8.7 Need for help due to HIV and sources of assistance for older adults with HIV in South Africa and Uganda

Note. Total N = 209, South Africa N = 108, Uganda N = 101. Chi-square tests of significance. Percentages may not sum to 100% because of rounding

7

8.9

5.0

6.7

12

Neighbor

majority of older people with HIV in Uganda reported currently needing financial help (52%) compared to only 12% of their South African peers. In terms of emotional help, older people with HIV in South Africa were significantly more likely to say they had needed this help in the past (52%) than those in Uganda (33%), but less likely to currently need emotional help (8% and 26%, respectively). When asked who provided help due to HIV when needed, most older people regardless of research site indicated a child (32%), while 13% said a spouse or partner had provided help. Older people with HIV in South Africa were significantly more likely to have gotten help from a sibling or other family member (23% and 40%, respectively) compared to those in Uganda (6% and 6%, respectively). Friends (6%) and neighbors (7%) were the least likely social network members to have provided help needed because of HIV.

Help from Family Members An interesting picture emerged when analyzing differences in levels of support and assistance received from family members among older people with HIV in Uganda and South Africa. Overall, older people with HIV in Uganda were significantly more likely either to get very little help (not at all/only occasionally) or to receive help frequently (daily) with instrumental tasks. In con-

p < .05, **p < .01, ***p < .001

trast, older people with HIV in South Africa were more likely to receive help more intermittently, ranging from monthly to several times per week (see Table 8.8). To illustrate, regarding shopping or running errands, older people with HIV in Uganda were more likely to say they never or occasionally received such help (47%, com-

 $\textbf{Table 8.8} \hspace{0.1cm} \textbf{Assistance from family members among older adults with HIV in South Africa and Uganda} \\$

		Not at a		Onc per moi	nth	mor	es per	One per wee		wee	es per k	Eve	,
Type of assistance		N	%	N	%	N	%	N	%	N	%	N	%
Shop or run	Total	67	32.7	21	10.2	12	5.9	11	5.4	45	22.0	49	23.9
errands***	South Africa	20	19.0	16	15.2	6	5.7	10	9.5	32	30.5	21	20.0
	Uganda	47	47.0	5	5.0	6	6.0	1	1.0	13	13.0	28	28.0
Housework or	Total	71	34.8	20	9.8	8	3.9	4	2.0	24	11.8	77	37.7
prepare meals**	South Africa	28	26.9	11	10.6	4	3.8	4	3.8	20	19.2	37	35.6
	Uganda	43	43.0	9	9.0	4	4.0	0	0.0	4	4.0	40	40.0
Take or drive you	Total	96	46.8	50	24.4	25	12.2	9	4.4	18	8.8	7	3.4
places***	South Africa	37	35.2	30	28.6	13	12.4	8	7.6	15	14.3	2	1.9
	Uganda	59	59.0	20	20.0	12	12.0	1	1.0	3	3.0	5	5.0
Help with mail/	Total	99	48.3	34	16.6	28	13.7	7	3.4	17	8.3	20	9.8
correspondence*	South Africa	57	54.3	19	18.1	10	9.5	4	3.8	11	10.5	4	3.8
	Uganda	42	42.0	15	15.0	18	18.0	3	3.0	6	6.0	16	16.0
Manage money	Total	133	64.9	44	21.5	13	6.3	2	1.0	10	4.9	3	1.5
or pay bills**	South Africa	63	60.0	29	27.6	9	8.6	2	1.9	2	1.9	0	0.0
	Uganda	70	70.0	15	15.0	4	4.0	0	0.0	8	8.0	3	3.0
Give advice on	Total	76	37.1	66	32.2	36	17.6	4	2.0	14	6.8	9	4.4
big decision***	South Africa	40	38.1	45	42.9	15	14.3	3	2.9	1	1.0	1	1.0
	Uganda	36	36.0	21	21.0	21	21.0	1	1.0	13	13.0	8	8.0
Talk when feeling	Total	78	38.0	50	24.4	38	18.5	2	1.0	23	11.2	14	6.8
low***	South Africa	47	44.8	31	29.5	21	20.0	2	1.9	2	1.9	2	1.9
	Uganda	31	31.0	19	19.0	17	17.0	0	0.0	21	21.0	12	12.0
Talk about	Total	90	44.1	59	28.9	31	15.2	2	1.0	12	5.9	10	4.9
personal matters**	South Africa	55	52.9	31	29.8	13	12.5	1	1.0	3	2.9	1	1.0
	Uganda	35	35.0	28	28.0	18	18.0	1	1.0	9	9.0	9	9.0

Note. Total N=209, South Africa N=108, Uganda N=101. Chi-square tests of significance. Percentages may not sum to 100% because of rounding

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p < .05, p < .01, p < .01, p < .001

pared with 19% of those in South Africa) or received this help daily (28%, compared with 20% in South Africa). Similarly in terms of housework or preparing meals, older people with HIV in Uganda were more likely to not receive this type of support or receive it on a daily basis (43% and 40%, respectively) compared to their South African peers (27% and 36%, respectively). Older people with HIV in South Africa were more likely to receive some assistance with getting a ride or being taken somewhere (65% at least monthly) compared to their Ugandan counterparts (41% at least monthly). But in terms of help with mail or other correspondence, it was older people with HIV in South Africa who were more likely not to receive this type of help (54%, compared with 42% of those in Uganda) while also being less likely to receive this help daily (4%, compared with 16% in Uganda). Help with managing money or paying bills was the most infrequent type of assistance provided by family members overall, with 60% of older South Africans and 70% of older Ugandans either never or occasionally receiving this type of assistance.

There were also several significant differences in emotional support provided by family members. Regarding providing advice on a big decision, older people with HIV in South Africa were significantly more likely to receive this type of help monthly compared to those in Uganda (43% and 21%, respectively), while older people with HIV in Uganda were more likely to receive such help several times a month or more often. When asked about having someone to talk to when feeling low and needing cheering up, older people with HIV in South Africa were significantly more likely to report not receiving this support or receiving it only once per month (45% and 30%, respectively) compared to their counterparts in Uganda (31% and 19%, respectively). Older people with HIV in South Africa were also significantly more likely to report not receiving emotional support in terms of talking about personal or private matters (53%) compared to their peers in Uganda (35%).

Help from Friends and Neighbors Compared to instrumental assistance received from family members, older people with HIV at both sites tended to receive lower levels of support from non-kin, although those in Uganda reported more instrumental help from friends and neighbors than did those in South Africa (see Table 8.9). Regarding shopping and running errands, older people with HIV in Uganda were significantly less likely to report not receiving this type of help and significantly more likely to receive help at least several times per week (43% and 24%, respectively) compared to their South African counterparts (60% and 2%, respectively). Only 16% of the older people with HIV in South Africa got at least some help from friends with housework or preparing meals, compared to 34% of those in Uganda. Similarly, just 22% of older people with HIV in South Africa received a ride or an escort from a friend at least once a month, compared to 53% of older Ugandans. Most older people with HIV in Uganda received help with mail or correspondence from their friends at least once a month (59%), with 23% receiving such help at least several times per week; this was much less common among their counterparts in South Africa (13% and 1%, respectively). Friends rarely provided help in managing money or paying bills, but older people with HIV in Uganda were significantly

 $\textbf{Table 8.9} \ \ \text{Assistance from friends and neighbors among older adults with HIV in South Africa and Uganda}$

		Not at a		One per mo		Sev tim per mo		On per wee		Sev tim per wee		Eve	,
Type of assistance		N	%	N	%	N	%	N	%	N	%	N	%
Shop or run	Total	102	51.3	36	18.1	24	12.1	11	5.5	21	10.6	5	2.5
errands***	South Africa	59	59.6	18	18.2	10	10.1	10	10.1	2	2.0	0	0.0
	Uganda	43	43.0	18	18.0	14	14.0	1	1.0	19	19.0	5	5.0
Housework or	Total	149	74.9	26	13.1	8	4.0	8	4.0	4	2.0	4	2.0
prepare meals**	South Africa	83	83.8	7	7.1	4	4.0	5	5.1	0	0.0	0	0.0
	Uganda	66	66.0	19	19.0	4	4.0	3	3.0	4	4.0	4	4.0
Take or drive you	Total	124	62.3	33	16.6	28	14.1	5	2.5	8	4.0	1	0.5
places***	South Africa	77	77.8	16	16.2	3	3.0	2	2.0	1	1.0	0	0.0
	Uganda	47	47.0	17	17.0	25	25.0	3	3.0	7	7.0	1	1.0
Help with mail/	Total	127	63.8	29	14.6	17	8.5	2	1.0	12	6.0	12	6.0
correspondence***	South Africa	86	86.9	10	10.1	1	1.0	1	1.0	1	1.0	0	0.0
	Uganda	41	41.0	19	19.0	16	16.0	1	1.0	11	11.0	12	12.0
Manage money or	Total	167	84.8	15	7.6	5	2.5	4	2.0	5	2.5	1	0.5
pay bills***	South Africa	95	96.9	2	2.0	1	1.0	0	0.0	0	0.0	0	0.0
	Uganda	72	72.7	13	13.1	4	4.0	4	4.0	5	5.1	1	1.0
Give advice on big	Total	96	48.2	60	30.2	27	13.6	1	0.5	11	5.5	4	2.0
decision**	South Africa	51	51.5	37	37.4	10	10.1	0	0.0	1	1.0	0	0.0
	Uganda	45	45.0	23	23.0	17	17.0	1	1.0	10	10.0	4	4.0
Talk when feeling	Total	83	43.9	52	27.5	28	14.8	1	0.5	17	9.0	8	4.2
low***	South Africa	48	48.5	36	36.4	12	12.1	0	0.0	1	1.0	2	2.0
	Uganda	35	38.9	16	17.8	16	17.8	1	1.1	16	17.8	6	6.7
Talk about	Total	105	56.8	42	22.7	18	9.7	4	2.2	10	5.4	6	3.2
personal matters**	South Africa	58	59.8	28	28.9	9	9.3	1	1.0	0	0.0	1	1.0
	Uganda	47	53.4	14	15.9	9	10.2	3	3.4	10	11.4	5	5.7

Note. Total N=209, South Africa N=108, Uganda N=101. Chi-square tests of significance. Percentages may not sum to 100% because of rounding

p < .05, **p < .01, ***p < .001

more likely to receive this type of assistance compared to those in South Africa (27% and 3%, respectively).

Compared to instrumental help, older people with HIV were more likely to report receiving emotional support and advice from friends, but at a lower frequency than they received emotional support from family members. Older people with HIV in South Africa were more likely to report not receiving support in terms of advice on a big decision or receiving such support only monthly (52% and 37%, respectively) compared to those in Uganda (45% and 23%, respectively). A similar pattern was observed with older people with HIV in South Africa not receiving support or receiving it only monthly when they were feeling low and wanted to talk (49% and 36%, respectively) compared to their Ugandan counterparts (39% and 18%, respectively). Fewer than half of older people with HIV received emotional support by discussing personal or private matters with friends, and the proportion who received this type of help more than once a month was significantly lower in South Africa (11%) than in Uganda (31%).

Negative Support from Family and Friends Negative social support from family and friends tended to be low overall, but older people with HIV in South Africa experienced significantly more frequent negative interactions with their social networks in several domains compared to their Ugandan counterparts (see Table 8.10). Only 11% of participants in Uganda reported that family members expressed reluctance to talk to them once per month or more often, compared with 32% of participants in South Africa. Older people with HIV in South Africa were also more likely to say that at least once per month friends were reluctant to talk (21%), compared to 13% of those in Uganda. Older people with HIV in South Africa were twice as likely to report that their family members upset them or hurt their feelings (43%) in comparison to older Ugandans (20%). However, there were no significant differences by research site in the likelihood of friends upsetting the older people with HIV and hurting their feelings on at least a monthly basis (26% overall). There were also no significant differences by research site in the proportions of older people with HIV who said that family members or friends refused to provide help at least once per month or more often (20% and 14%, respectively, for the combined samples).

Levels of Social Support and Perceptions of Support Sufficiency While older people with HIV in Uganda tended to report a greater intensity of social support from family compared to those in South Africa, the two groups did not differ significantly in the number of ways that family provided help and on average received four types of support (see Table 8.11). But in the case of help from friends, older people with HIV in Uganda reported significantly more types of support on average (3.8) compared to those in South Africa (2.2). Older people with HIV in South Africa reported a significantly greater number of types of negative support from family on average (0.9) compared to their Ugandan counterparts (0.5), but the number of types of negative support from friends was not significantly different by site (M = 0.5).

Table 8.10	Negative s	support	from	family	members	and	friends/neighbors	among	older	adults
with HIV in	South Afri	ica and I	Jgand	la						

		NT 1				Sever		Onc	ce	Sever		_	
Tuna of		Not at al occasion		Onc mon	e per	times		per wee	ık	times week		da	ery
Type of assistance		N	%	N	- William	N	_%	N	- K %	N	%	N	y %
Family	Total	160	78.4	24	11.8	13	6.4	1	0.5	3	1.5	3	1.5
railiny reluctant to	South	71	68.3	18	17.3	11	10.6	1	1.0	2	1.9	-	1.0
talk**	Africa	/1	08.3	18	17.3	11	10.6	1	1.0	2	1.9	1	1.0
	Uganda	89	89.0	6	6.0	2	2.0	0	0.0	1	1.0	2	2.0
Friends	Total	164	83.2	17	8.6	10	5.1	0	0.0	6	3.0	0	0.0
reluctant to talk*	South Africa	77	79.4	13	13.4	6	6.2	0	0.0	1	1.0	0	0.0
	Uganda	87	87.0	4	4.0	4	4.0	0	0.0	5	5.0	0	0.0
Family upset	Total	139	68.1	39	19.1	20	9.8	2	1.0	3	1.5	1	0.5
you or hurt your feelings**	South Africa	59	56.7	25	24.0	17	16.3	1	1.0	2	1.9	0	0.0
	Uganda	80	80.0	14	14.0	3	3.0	1	1.0	1	1.0	1	1.0
Friends upset	Total	145	73.6	28	14.2	18	9.1	1	0.5	4	2.0	1	0.5
you or hurt your feelings	South Africa	76	78.4	13	13.4	8	8.2	0	0.0	0	0.0	0	0.0
	Uganda	69	69.0	15	15.0	10	10.0	1	1.0	4	4.0	1	1.0
Family refused	Total	164	80.4	24	11.8	12	5.9	2	1.0	1	0.5	1	0.5
to help when asked	South Africa	80	76.9	11	10.6	10	9.6	2	1.9	1	1.0	0	0.0
	Uganda	84	84.0	13	13.0	2	2.0	0	0.0	0	0.0	1	1.0
Friends	Total	168	85.7	18	9.2	2	1.0	2	1.0	5	2.6	1	0.5
refused to help when asked	South Africa	84	87.5	9	9.4	2	2.1	0	0.0	1	1.0	0	0.0
	Uganda	84	84.0	9	9.0	0	0.0	2	2.0	4	4.0	1	1.0

Note. Total N=209, South Africa N=108, Uganda N=101. Chi-square tests of significance. Percentages may not sum to 100% because of rounding

When asked about perceptions of the availability of instrumental help with tasks of daily living, a majority of older people with HIV in both groups felt such help was available at least some of the time (57%). Nearly one third (29%) reported that instrumental help was not available to them, and there were no significant differences between groups in this regard. However, there were significant group differences in the perceptions of instrumental support adequacy. The proportion of older people with HIV in South Africa who felt they had received all the instrumental help they needed (67%) was more than double the proportion of older Ugandans who felt their needs had been met (32%), and over one third of older people with HIV in Uganda reported needing a lot more instrumental help, compared with only 4% of older South Africans. Older people with HIV in Uganda were significantly more likely to say that emotional support was available to them all or most of the time

p < .05, p < .01, p < .001

Table 8.11 Levels of social support and perceptions of support among older adults with HIV in South Africa and Uganda

	Total		South	South Africa		la
	M	SD	M	SD	M	SD
Number ways family helps	4.44	2.78	4.55	2.73	4.33	2.84
Number ways friends help***	2.93	2.44	2.15	2.13	3.77	2.49
Number family negative support***	0.72	1.06	0.94	1.17	0.47	0.88
Number friend negative support	0.54	0.94	0.49	0.93	0.59	0.94
	N	%	N	%	N	%
Instrumental help available						
All/most of the time	80	38.8	40	38.1	40	39.6
Some of the time	38	18.4	20	19.0	18	17.8
Only occasionally	28	13.6	19	18.1	9	8.9
Not at all	60	29.1	26	24.8	34	33.7
Instrumental help adequacy***	'	'			'	
Got all needed	98	51.0	70	66.7	28	32.2
Need a little more	43	22.4	27	25.7	16	18.4
Need some more	17	8.9	4	3.8	13	14.9
Need a lot more	34	17.7	4	3.8	30	34.5
Emotional support available***		'			'	
All /most of the time	74	35.9	10	9.4	64	64.0
Some of the time	28	13.6	14	13.2	14	14.0
Only occasionally	56	27.2	45	42.5	11	11.0
Not at all	48	23.3	37	34.9	11	11.0
Emotional support adequacy***		'				
Got all needed	114	56.7	71	67.0	43	45.3
Need a little more	40	19.9	24	22.6	16	16.8
Need some more	18	9.0	6	5.7	12	12.6
Need a lot more	29	14.4	5	4.7	24	25.3
	M	SD	M	SD	M	SD
Instrumental support index***	5.77	1.55	6.26	1.25	5.17	1.67
Emotional support index***	5.81	1.32	5.49	1.04	6.16	1.50

Note. Total N = 209, South Africa N = 108, Uganda N = 101. Chi-square tests of significance for categorical variables and one-way ANOVA for continuous variables. Percentages may not sum to 100% because of rounding

(64%) as compared to older South Africans (9%). The majority of older people with HIV in South Africa felt that emotional support was available only occasionally (43%) or not at all (35%), which was significantly higher than among older Ugandans (11% and 11%, respectively). Despite reporting a greater availability of emotional support, older people with HIV in Uganda were significantly more likely to say that they needed some more (13%) or a lot more (25%) emotional support than were their South African peers (6% and 5%, respectively). Looking at overall perceptions of support sufficiency, older South African people with HIV had

p < .05, p < .01, p < .001

significantly higher average scores on the instrumental support index compared to those in Uganda (6.3 and 5.2, respectively). The reverse pattern was observed on the emotional support index, with older Ugandan people with HIV having higher average index scores than their South African counterparts (6.2 and 5.5, respectively).

Regression Analyses of Instrumental and Emotional Support Sufficiency

Following the descriptive comparisons of findings from the two research sites, we performed multiple regression analyses to investigate which combination of factors was associated with perceptions of sufficient instrumental and emotional support given their important role in buffering HIV-related stressors. We retained the following independent variables based on our correlational analysis of factors related to greater perceptions of instrumental and emotional support sufficiency: lives alone, level of education, literacy, access to a telephone, self-rated health, prior AIDS diagnosis, number of comorbid health conditions, CES-D depressive symptoms, having a partner or spouse, number of functional support elements, number of ways that family helps, number of ways that friends help, family negative support, and research site (South Africa = 1, Uganda = 2).

In the regression analysis on instrumental support sufficiency, having a prior AIDS diagnosis had a negative association with this index ($\beta = -0.18$). The number of ways family members provided help was positively associated with higher levels of perceived instrumental support ($\beta = 0.27$). However, the number of ways that friends provided help was negatively associated with perceptions of instrumental support sufficiency ($\beta = -0.17$). Research site was not related to this dependent variable after controlling for other factors (see Table 8.12). This regression model was statistically significant (p < .001) and accounted for 31% of the variance in perceptions of instrumental support.

For the regression analysis of perceptions of emotional support sufficiency, higher levels of depressive symptoms were negatively associated with the availability and adequacy of emotional support ($\beta = -0.18$). Like perceptions of instrumental support, the number of ways family members provided help was positively associated with higher perceptions of emotional support ($\beta = 0.21$). After controlling for the other factors in the equation, research site was positively associated with greater perceptions of emotional support sufficiency ($\beta = 0.47$), indicating that older people with HIV in Uganda tended to evaluate emotional support more positively compared to those in South Africa. The regression model was statistically significant (p < .001) and explained 23% of the variance on emotional support perceptions (see Table 8.13).

Variable В SE 95% CI β t р Lives alone -.088.334 -.021-0.27.791 [-.747, .570] Education .140 -.205-.108 | -1.46 .146 [-.482, .072] Literate .247 -.043 | -0.55 -.135.586 [-.623, .353] Phone .827 .457 .122 | 1.81 .072 [-.075, 1.729] Self-rated health .150 .097 | 1.27 .191 .205 [-.105, .487] AIDS diagnosis -.579.244 $-.178 \mid -2.38$.019 [-1.059, -.098] Number comorbidities -.032.057 $-.060 \mid -0.56$.576 [-.143, .080] CES-D scale -.037.022 -.144 | -1.71 .090 [-.080, .006] .233 Has partner/spouse .129 .039 0.55 .580 [-.331, .589] Number functional supports -.010.091 -.008 | -0.11 .915 [-.190, .170] Number ways family help .158 .274 | 3.35 .001 [.065, .252] .047 Number ways friends help -.108.048 -.170 | -2.27 .024 [-.202, -.014] Family negative support .008 .105 .006 0.08 .938 [-.200, .216] Research site -.300.349 -.097 | -.0.86 .391 [-.989, .388]

Table 8.12 Multiple regression on instrumental support sufficiency index: older adults with HIV in South Africa and Uganda

Note. Listwise N = 182. F(14, 167) = 5.46, p < .001. Model $R^2 = .314$

Table 8.13 Multiple regression on emotional support sufficiency index: older adults with HIV in South Africa and Uganda

Variable	В	SE	β	t	p	95% CI
Lives alone	100	.295	028	338	.736	[681, .482]
Education	.139	.124	.085	1.118	.265	[106, .383]
Literate	155	.219	059	709	.479	[587, .277]
Phone	.630	.358	.129	1.759	.080	[077, 1.337]
Self-rated health	.134	.134	.079	1.001	.318	[130, .397]
AIDS diagnosis	.092	.210	.034	.439	.661	[323, .507]
Number comorbidities	066	.048	150	-1.371	.172	[162, .029]
CES-D scale	039	.019	184	-2.097	.037	[076,002]
Has partner/spouse	.089	.203	.032	.438	.662	[312, .490]
Number functional supports	004	.079	004	049	.961	[159, .152]
Number ways family help	.100	.040	.207	2.490	.014	[.021, .179]
Number ways friends help	031	.042	056	737	.462	[114, .052]
Family negative support	028	.092	023	305	.761	[209, .153]
Research site	1.241	.313	.472	3.958	.000	[.622, 1.859]

Note. Listwise N = 192. F(14, 177) = 3.722, p < .001. Model $R^2 = .227$

Discussion

This study presents an in-depth look at social support among older adults living with HIV in urban or suburban South Africa and in rural Uganda. Our findings indicate that the older people with HIV in these two sites have much in common, but they differ substantially in their social networks, caregiving involvement, and need for and receipt of social support. Specifically, older people with HIV in Uganda had larger families and social networks and tended to receive more emotional support than older people with HIV in South Africa in this sample, yet they also reported needing more emotional and instrumental support than they received. The composition of the two samples undoubtedly affected our findings. While 90% of participants in Uganda lived in rural areas, those in South Africa overwhelmingly lived in periurban or urban areas. Participants in Uganda were 3 years older than those in South Africa, on average, and women made up a substantially greater share of the South Africa group. In both groups, HIV has taken a toll on their health. In South Africa, only one third rated their health excellent or good. The Uganda sample was twice as likely to rate their health excellent or good, but 59% had received a diagnosis of AIDS, and older people with HIV in Uganda had more comorbid conditions and substantially more depressive symptoms on average than their counterparts in South Africa.

Social Networks

Participants in both samples were close to their families. Feelings of closeness to children and grandchildren were strong, and most participants felt very close to siblings and to other family members, as in other research (Moore et al., 2018). However, participants in Uganda had larger families and had social networks about twice the size of older people with HIV in South Africa. The Uganda group had more children and more grandchildren and were about twice as likely to be living with them. In the South Africa sample, older people with HIV were more likely to live alone and never to have been married.

Non-kin networks differed substantially between the two sites. Older people with HIV in South Africa were much less likely to have a friend or a functional friend in their social network or to know a neighbor well compared to their Ugandan peers. While three quarters of participants in Uganda said they had at least one friend, fewer than half of those in South Africa did. Of those who did, in both samples, nearly all had at least weekly in-person contact with a friend. In South Africa where telephone access was more common, older people with HIV had more phone contact with family and friends. The difference in phone contact may be more a function of suburban versus rural residence, as recent research has found much lower frequency of phone/text/email contacts than in-person contacts for older adults in rural South Africa compared to what we observed in the present study (Harling et al., 2020).

Caregiving and Other Support

Older people with HIV are not only recipients but providers of care. Almost half the combined sample provided care for children, reflecting a well-established pattern of caregiving among older adults in sub-Saharan Africa (Schatz et al., 2015). While this proportion may be decreasing as the availability of antiretroviral therapy has greatly reduced the number of deaths from AIDS (Schatz et al., 2015; Mathambo & Gibbs, 2009), it is likely that older people in this region will continue to provide a substantial amount of care for children due to parents' migration for work opportunities. Older people with HIV in Uganda were more than twice as likely as their counterparts in South Africa to say they had primary responsibility for a child, despite the greater proportion of women in the South Africa sample and the strong tendency for women to take on childcare responsibilities (Hatch & Posel, 2018). The reasons for providing care to grandchildren included a parent's death from HIV or another illness—the latter was the most common reason in Uganda—or a parent's need to work. In South Africa, parents' poverty was another common reason. In Uganda, several older people with HIV requested a grandchild as a companion or helper. Such "bidirectional care" has often been reported in sub-Saharan Africa (Small et al., 2019). In addition, almost one third of older people with HIV in Uganda were caring for an adult relative or friend, compared with one tenth in South Africa.

Especially in rural areas, older people with HIV contribute to their communities. Three out of four participants in Uganda said they were "involved in mutual assistance all of the time," compared with one in five in South Africa, though most in South Africa did exchange help with neighbors in emergencies. Ugandans' larger and more active social networks may reflect the greater community interdependence previously found in rural areas (Moore et al., 2018; Tsai et al., 2012), as well as a lack of emergency services (Moore & Prybutok, 2014). Research has also underscored the importance in sub-Saharan Africa of maintaining one's usefulness in the community (Freeman, 2016; Mugisha et al., 2018; Ouedrago et al., 2019).

Social Factors and Social Support

Impact of Apartheid Families and communities in South Africa have had to contend with the serious consequences of apartheid and unemployment concurrent with the HIV epidemic (Schatz et al., 2015). The apartheid system in South Africa upended the traditional household structure, in which adult children would take care of aging parents, by compelling younger generations to migrate for work; after apartheid, high unemployment in rural areas maintained the practice of labor migration (Schatz et al., 2015; Cohen & Menken, 2006). Still, the social expectation that the younger generation would care for the older relatives seems to retain its importance in South Africa (Madhavan et al., 2017).

Economic Development South Africa has more economic development than Uganda, with a less agrarian, more formal labor market, which could be expected to affect the kind of resources available (Hove et al., 2013). Nearly all participants in Uganda continued to work, while in South Africa, half were employed, and one third were retired and/or receiving a pension; one in five was unemployed. Older people with HIV in Uganda were more likely to need financial help because of HIV; most participants in South Africa said they had never needed financial help because of HIV. This does not necessarily mean they did not have financial challenges, especially if they were caring for children or other adults (Small et al., 2019). While pensions are an important source of income, they may be stretched to support other household members (Schatz et al., 2015; Schatz & Ogunmefun, 2007).

Sources of Social Support

In both Uganda and South Africa, older people with HIV received more instrumental and emotional help from family than from friends and neighbors, consistent with previous research (Moore et al., 2018). Older people with HIV in Uganda reported receiving more emotional help than instrumental help from friends and neighbors, but they received more of both types of assistance than from non-kin than did their counterparts in South Africa. When asked specifically about who provided help if needed due to HIV, respondents in Uganda most often named close family (spouse/partner or children). In South Africa, the most cited source of help was distant family members. The reliance on distant family members could be, in part, because adult children have migrated elsewhere or have died from HIV/AIDS or another cause and are not available to provide care, in line with Cantor's Hierarchical Compensatory Model (Cantor, 1979; Harling et al., 2020; Mathambo & Gibbs, 2009; Schatz & Seeley, 2015; Small et al., 2019).

Sufficiency of Support

While the availability of instrumental support was similar across the two sites, perceptions of the adequacy of support differed. In South Africa, older people with HIV were more than twice as likely as those in Uganda to say their instrumental needs were met; more than one third of those in Uganda said they needed a lot more help. This could be related to the poorer health of older people with HIV in Uganda and their high rates of having an AIDS diagnosis; a diagnosis of AIDS was significantly associated with a lower level of instrumental support sufficiency. While the number of ways that family members provided help was positively associated with greater perceived instrumental support sufficiency, greater assistance from friends was *negatively* associated with perceived instrumental support. It may be that older people with HIV were dissatisfied that their family members could not provide all

the help they needed, given cultural expectations that older people should rely on the family for care (Cohen & Menken, 2006; Mathambo & Gibbs, 2009).

Regarding emotional support, older people with HIV in Uganda evaluated their emotional support more positively than those in South Africa. Negative support was not common, but it was notably more common for participants in South Africa, who reported family members who were reluctant to talk or who hurt their feelings. This may reflect their closer relationships with family members (Moore et al., 2018). But paradoxically, despite perceiving emotional support as being more available, older people with HIV in Uganda were much more likely to say they needed more support. Emotional support sufficiency was associated with fewer depressive symptoms. The importance of *perceived* social support for mental health echoes findings outside of Africa. While different cultures may have different expectations of help from family and friends, meeting those expectations remains essential (Cohen & Wills, 1985; McDowell & Serovich, 2007; Ogletree et al., 2019).

Limitations

Due to the cross-sectional nature of these data, we cannot make causal inferences regarding associations of independent factors and the perceptions of social support sufficiency described in this chapter. The samples that provided data for the current analysis represent only two countries in sub-Saharan Africa, and these findings may not be generalizable to all older people with HIV living in this region. In addition, differences noted between Ugandan and South African older people with HIV are at least partially attributable to differences in geographic location (rural, periurban, urban) and/or the level of economic development in these two countries and may not reflect differences due to country and culture as much as may be implied by our analyses. In addition, due to space limitations, we did not examine gender differences in social network composition and dynamics (such as receipt of assistance from family and friends) in our current analyses. Such differences have been highlighted in other research (Harling et al., 2020), and this should be addressed in future work.

Conclusions and Implications

Older adults living with HIV in rural Uganda and suburban South Africa are not isolated. Their family members and, to a lesser degree, friends and neighbors provide a substantial amount of support. But with limited resources and confronted with the challenges of managing HIV and often caring for others, a sizable share of older people with HIV need more help than they currently receive from their informal networks. Trends in both nations toward increasing urbanization and economic development may have the unintended consequences of weakening the social

support networks of older people in sub-Saharan Africa, including those living with HIV. As suggested by Cantor's Hierarchical Compensatory Model (Cantor, 1979), these older people may increasingly need to seek support from government and community-based organizations to meet the challenges of aging. However, for the vast majority of older people in this region, these services are few and far between, despite the development of policy frameworks to address the needs of older individuals. A focused effort is needed to implement those policy frameworks under consideration and to develop sustainable funding streams to support older people living with HIV in sub-Saharan Africa.

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