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Household decision-making power and the mental health and well-being of women initiating antiretroviral treatment in Oromia, Ethiopia

Angela M. Parcesepe^a, Olga Tymejczyk^{b,c}, Robert Remien^a, Tsigereda Gadisa^d, Sarah Gorrell Kulkarni^b, Susie Hoffman^{a,e}, Zenebe Melaku^d, Batya Elul^e, and Denis Nash^{b,c}

^aHIV Center for Clinical and Behavioral Studies, Columbia University and New York State Psychiatric Institute, New York, NY, USA

^bInstitute for Implementation Science in Population Health, City University of New York, New York, NY, USA

^cGraduate School of Public Health and Health Policy, City University of New York, New York, NY, USA

^dICAP, Columbia University, Ethiopia

^eDepartment of Epidemiology, Columbia University, New York, NY, USA

Abstract

Low decision-making power (DMP) has been associated with HIV seropositivity among women in sub-Saharan Africa. As treatment accessibility and life expectancy for HIV-positive individuals increase, greater attention to the mental health and well-being of HIV-positive women is needed. This study examined whether low DMP was associated with psychological distress, social support or health-related quality of life (HRQoL) among women initiating ART. The sample included 722 women aged 18 or older initiating ART during 2012–2013 at six HIV clinics in Oromia, Ethiopia. DMP was assessed with five questions about household resource control and decision-making. Psychological distress was assessed with the Kessler Psychological Distress Scale (K10). HRQoL was assessed with the overall subscale of the HIV/AIDS-Targeted Quality of Life instrument. Multivariable logistic regression analyses controlled for age, education, and location (urban/rural). Most respondents (63%) reported high DMP, followed by medium (27%) and low (10%) DMP. More than half (57%) reported psychological distress. Compared to medium DMP, low DMP among married or cohabitating women was associated with greater odds of low social support (aOR: 1.9 [1.3, 2.9]; high DMP among women not in a relationship was associated with greater odds of low social support (aOR: 4.4 [2.4, 8.1]) and psychological distress (aOR: 1.7 [1.1, 2.6]). Interventions to reduce psychological distress among women initiating ART should consider the familial context, as high DMP among women not in a relationship was associated with psychological distress. High DMP may indicate weak social ties and fewer material resources, particularly among women not in a relationship.

CONTACT Angela Parcesepe, ap3471@cumc.columbia.edu.

Disclosure statement

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Keywords

HIV; ART; mental health; quality of life; decision-making power; Ethiopia; diagnosis; treatment

Introduction

Half of those living with HIV throughout the world are women (UNAIDS, 2014). HIV remains the leading cause of death globally among women of reproductive age (World Health Organization, 2013).

Gender inequality has been identified as a key structural determinant of HIV vulnerability among women and has been associated with inconsistent condom use, transactional sex, and sexually transmitted infections (Agrawal, Bloom, Suchindran, Curtis, & Angeles, 2014; Amin, 2015; Bloom, Agrawal, Singh, & Suchindran, 2015). Gender inequality can take many forms including unequal household decision-making power, unequal access to economic, household or educational resources, and discriminatory laws and policies. Among women in South Africa, low sexual relationship power, one form of gender inequality, has been associated with higher likelihood of HIV seropositivity (Dunkle et al., 2004). An ecological analysis of 133 countries found that greater gender inequality was associated with having a primarily heterosexual HIV epidemic, suggesting that structural inequalities drive women's health at individual and population levels (Richardson et al., 2014). Among men in Ethiopia, gender-equitable attitudes were associated with condom use (Pulerwitz, Michaelis, Verma, & Weiss, 2010).

Among women living with HIV, gender inequality has been associated with sexual risk and worse physical health outcomes. Among young HIV-positive women in South Africa, more equitable gender norms were associated with condom use (Fladseth, Gafos, Newell, & McGrath, 2015). Among HIV-positive women in Uganda, low sexual relationship power was associated with malnutrition (Siedner et al., 2012). Less is known about how gender inequality affects the mental health and well-being of HIV-infected women in low-resource settings. Among HIV-positive women in Uganda, low sexual relationship power was associated with greater depression severity (Hatcher et al., 2012).

Mental illness is among the most prevalent comorbidities among people living with HIV (PLWH) and more prevalent among PLWH than the general population (Brandt, 2009; Ciesla & Roberts, 2001). Poor mental health is associated with suboptimal HIV treatment outcomes, including late initiation of antiretroviral therapy (ART), poor ART adherence, attrition from care, lack of timely viral suppression, and increased AIDS-related mortality (Krumme et al., 2015; Mayston, Kinyanda, Chishinga, Prince, & Patel, 2012; Uthman, Magidson, Safren, & Nachega, 2014). An analysis of 23 studies from sub-Saharan Africa found depressive symptoms significantly associated with poor ART adherence (Nakimuli-Mpungu et al., 2012).

As access to ART and life expectancy of PLWH increases, greater understanding of the well-being of PLWH can inform their long-term treatment. Social support and quality of life are components of well-being positively associated with HIV treatment outcomes, including

earlier HIV diagnosis, timely linkage to care, and ART adherence (Kelly, Hartman, Graham, Kallen, & Giordano, 2014; Mwesigire, Wu, Martin, Katamba, & Seeley, 2015). Little is known about the relationship between gender inequality and well-being among women living with HIV. This analysis examines one aspect of gender inequality – household decision-making power (DMP) – and its relationship to mental health (e.g., psychological distress) and well-being (e.g., social support, and health-related quality of life [HRQoL]) among women initiating ART in Oromia, Ethiopia and tests the hypothesis that low DMP is associated with psychological distress, low social support and worse HRQoL. Greater understanding of the relationship between DMP and the mental health and well-being of HIV-positive women can inform the development of appropriate and effective interventions to improve the mental health and well-being of women living with HIV and has the potential to improve treatment outcomes for HIV as well as for other communicable and non-communicable diseases in which poor mental health has been associated with suboptimal treatment outcomes. Findings can also inform the development of dyadic interventions and interventions with male partners focused on more equitable decision-making.

Setting

Ethiopia has an estimated adult HIV prevalence of 1.2% (UNAIDS, 2013). Approximately 60% of adults living with HIV in Ethiopia are female (UNAIDS, 2014). HIV prevalence in Ethiopia is significantly higher among women than men and among married or cohabitating women as compared to never married women (De Coninck, Feyissa, Ekstrom, & Marrone, 2014).

Cultural norms common in Ethiopia including early marriage, age disparities between spouses, and inequitable gender norms likely influence DMP of women in Ethiopia. The median age of marriage among Ethiopian women is 16 years, with 40% of women in their 20s marrying before the age of 18 (Marshall et al., 2016). Age disparities between women and their partners are greater among women who marry early as compared to women who marry later and may result in power imbalances (Erulkar, 2013; Glynn et al., 2001). Inequitable gender norms also likely influence women's DMP. Half (53%) of married women in Ethiopia reported that they could refuse sex with their husband and 35% reported that they could ask their husband to use a condom during sex (De Coninck et al., 2014).

Methods

Sample

This analysis is based on the Multilevel Determinants of Starting ART Late (LSTART) study, a prospective cohort of patients initiating ART at HIV clinics in the Oromia region of Ethiopia (Nash et al., 2016). Participants were recruited from six HIV clinics that received support from ICAP at Columbia University through funding from President's Emergency Plan for AIDS Relief (PEPFAR). Individuals were eligible for study enrollment if they were at least 18 years of age, initiated ART between June 2012 and April 2013, and spoke Amharic or Oromo. The current sample is comprised of the 722 females enrolled in the study.

Data collection

Medical providers referred patients to study staff who obtained informed consent. Additional details on recruitment have been previously published (Nash et al., 2016). Data collection consisted of a structured interview which included questions on sociodemographics, DMP, psychological distress, social support, and HRQoL. The study was approved by the Institutional Review Boards of the Oromia Regional Health Bureau, Columbia University Medical Center, and the City University of New York.

Measures

Outcome variables

Social support: Social support was assessed using a scale developed by Wortman, et al. for the Coping and Change Study, a psychosocial supplement to the Chicago site of the Multicenter AIDS Cohort Study (Drummond, 1989; Kessler, Price, & Wortman, 1985). Social support was assessed with nine questions concerning whether the participant has someone to provide social support in various settings (i.e., to talk to if upset or depressed, to borrow money for a medical emergency). Response options for each item ranged from never to all the time. Scores were summed and categorized into quartiles.

Health-related quality of life: HRQoL was assessed using the HIV/AIDS-Targeted Quality of Life (HAT-QoL) instrument. The HAT-QoL has demonstrated reliability and validity among PLWH and in resource-poor settings (Phaladze et al., 2005; Taylor, Dolezal, Tross, & Holmes, 2009). This analysis includes one sub-scale of the HAT-QoL – overall function (Cronbach's $\alpha = 0.96$). Response options ranged from none of the time to all of the time. Scores were summed and categorized into quartiles.

Psychological distress: Psychological distress was assessed using the Kessler Psychological Distress Scale (K10), which has been previously validated in Ethiopia (Kessler et al., 2002; Tesfaye, Hanlon, Wondimagegn, & Alem, 2010). Scores between 10 and 19 were categorized as no or low psychological distress, scores between 20 and 29 were categorized as moderate psychological distress, and scores between 30 and 50 were categorized as high psychological distress.

Covariates

Decision-making power: DMP was assessed with five questions (Cronbach's $\alpha = 0.93$) about: (1) Who has the ultimate control over household resources and assets; and Who makes decisions about: (2) major household purchases, (3) purchases for daily needs, (4) when a household member should receive health care and (5) when a participant goes to the clinic for HIV care. Response options included: participant; spouse or partner; both participant and spouse or partner; family member; employer; or other. Informed by previous research examining DMP, a three-level measure of DMP was constructed (low, medium, high) (Singh, Bloom, & Brodish, 2015; Singh, Luseno, & Haney, 2013). Women who reported that they did not contribute to decision-making (alone or with her partner) in any of the five domains were categorized as having low DMP; women who reported that they contributed to decision-making (alone or with her partner) in at least one, but not all five

domains were categorized as having medium DMP; (3) women who reported that they contributed to decision-making (alone or with a partner) in all five domains were categorized as having high DMP. Because the relationship between DMP and outcomes of interest (i.e., social support, HRQoL, psychological distress) may vary by relationship status, multivariable analyses examined the relationship between outcomes measures and low and high DMP separately by relationship status.

Sociodemographic and household characteristics: Sociodemographic variables included age, education, religion, relationship status, number of children, living environment, and employment status. Household characteristics included head of household and number of adults in household.

Analysis

Univariate analyses were conducted to assess the prevalence of levels of DMP. Analyses between key characteristics and DMP were conducted using Pearson chi-squared tests. Logistic regression was conducted to assess the relationship between DMP and outcome variables. Separate models were run for each outcome. In multivariable analyses, low social support was defined as being in the lowest social support quartile as compared to the top three quartiles; poor HRQoL was defined as being in the lowest HRQoL quartile as compared to the top three quartiles, and psychological distress was defined as screening positive for moderate or high psychological distress as compared to no or low psychological distress. Adjusted analyses controlled for age, education, and living environment. Previous analyses found that psychological distress was significantly associated with the overall function subscale of HRQoL (Vo et al., 2016). However, social support was not significantly associated with HRQoL (Vo et al., 2016). Psychological distress was also associated with social support (data not shown). Based on the directed acyclic graph (DAG) that informed our analyses, we did not control for social support, HRQoL, or psychological distress as potential confounders in multivariable analyses. All models accounted for clustering by health facility. Because some DMP questions focused on decisions about household resources and purchases, multivariable analyses were limited to women who were not in a relationship or were married or cohabitating. Women who reported that they were in a relationship, but not married or living together ($n = 25$) were excluded from multivariable analyses.

Results

As seen in Table 1, 89.7% of participants reported participation in household decision-making (medium or high DMP). High DMP was prevalent among this sample population with 62.7% of participants reporting high DMP. As seen in Table 2, participants were most likely to report contributing to decision-making in relation to purchases for daily household need. Table 3 reviews associations between sociodemographic and household characteristics and DMP.

DMP was significantly associated with all outcomes assessed (See Table 4). However, not all associations were in the same direction. Women with high DMP reported lower levels of social support. Approximately one-third (32.5%) of women with high DMP were in the

lowest quartile of social support, compared to 14.9% and 15.4% of those with low or medium DMP, respectively. In contrast, women with low or medium DMP reported higher levels of social support.

DMP was significantly associated with psychological distress, though the directionality differed from that observed with social support. Women with low DMP reported the highest prevalence of psychological distress. High psychological distress was reported by 41.1% of women with low DMP, compared to 22.1% and 29.3% of women with medium and high DMP, respectively. Women with medium DMP reported the lowest levels of psychological distress.

DMP was also associated with HRQoL. Women with low DMP reported lower HRQoL compared to women with medium or high DMP. Women with medium DMP reported the highest level of HRQoL.

In adjusted analyses, DMP was significantly associated with social support and psychological distress (See Table 5). Specifically, women with low DMP who were married or cohabitating had significantly greater odds of low social support compared to women with medium DMP. Women with high DMP who were not in a relationship had significantly greater odds of low social support and psychological distress compared to women with medium DMP. The relationship between high DMP and psychological distress trended towards significance among women who were married or cohabitating. Findings were similar in unadjusted analyses (see Table 6). There was no significant relationship between DMP and HRQoL in unadjusted or adjusted analyses.

Discussion

Ninety percent of women reporting participation in household decision-making. This is similar to previous research with women in Ethiopia that found that 81% of women sampled reported participation in household decision-making (Yigzaw, Yibric, & Kebede, 2004).

Psychological distress was also common. More than half (57.6%) of respondents reported psychological distress (moderate or high). Previous research found the prevalence of generalized psychological distress among women initiating ART in Ethiopia to be 13.1% (Tefaye & Bune, 2014). The prevalence of psychological distress in the current study is more similar to the prevalence of psychological distress (48.0%) reported among HIV-positive women in Ethiopia and the prevalence of psychological distress (67.6%) among women initiating tuberculosis treatment in Ethiopia (Deribew et al., 2010; Tola et al., 2015).

DMP was associated with low social support and psychological distress, though not always in the direction hypothesized. Women who reported low DMP and were married or cohabitating had significantly increased odds of low social support compared to women with medium DMP. It is possible that women with low DMP, particularly in the context of marriage or cohabitation, have fewer opportunities to maintain relationships with friends and neighbors, resulting in weaker social networks and less social support. A similar relationship between low DMP and social support was not found among women who were not in a relationship. On average, women with low DMP who were not in a relationship lived in

larger households and households headed by a family member. It is possible that by being embedded in larger families, women with low DMP who were not in a relationship received greater social support than women with low DMP who were married or cohabitating who were more likely to live in smaller families in which their partner was the head of the household. Additional information on the composition of women's families and social networks is needed to more fully understand the relationship between DMP and social support.

Compared to medium DMP, high DMP among those not in a relationship was associated with low social support and psychological distress. Compared to women with low or medium DMP, women with high DMP who were not in a relationship were more likely to be widowed and to be the only adult in their household. Rather than a marker of increased gender equality, high DMP among women not in a relationship may indicate weak social ties or social isolation.

The relationship between high DMP and psychological distress trended towards significance among women who were married or cohabitating. It is possible that high DMP in the context of marriage or cohabitation creates additional burdens and stress for such women. Post-hoc analyses of differences between shared and sole DMP were conducted. Among married or cohabitating women with high DMP, there was no significant difference in prevalence of psychological distress among those who reported sole versus shared DMP. Alternately, it is possible that married or cohabitating women with high DMP were more likely to have partners who were ill or unemployed, creating additional stress. Fourteen participants reported that their partner was not working, nine of whom reported high DMP. The sample of women with unemployed partners is too small to draw a meaningful conclusion. However, it is possible that for some married or cohabitating women, high DMP indicates economic disadvantage or family hardship which may contribute to psychological distress. The context that gives rise to high DMP among married or cohabitating women warrants further investigation. Qualitative research may be particularly suitable for gaining greater understanding into the ways in which DMP operates in the lives of women living with HIV.

Surprisingly, women with medium DMP reported the best mental health and well-being among groups compared. Women with medium DMP reported high levels of social support and HRQoL and the lowest prevalence of psychological distress. The overwhelming majority (84.6%) of women with medium DMP were in a relationship and reported that their partner was the head of the household (70.8%). Medium levels of DMP may indicate more equitable relationships in which women meaningfully share power with their partners. Additional research to understand the protective role of medium DMP is necessary.

Research on DMP has focused largely on married women. Our findings demonstrate that women not in a relationship also experience variability in levels of DMP which warrants investigation. Women not in a relationship may be constrained in their DMP by male relatives such as fathers or brothers as well as female relatives, including mothers and grandmothers. DMP must be understood within one's social and familial context. Particular attention should be given to women with low and high DMP as they endorsed worse outcomes. Additional research that examines the relationship of women's mental health and

well-being with other components of gender equality, such as sexual relationship power and gender norms, is also needed.

This study has limitations worth noting. Data were cross-sectional. Temporal relationships between DMP and outcome measures cannot be ascertained. Data were self-reported and subject to social desirability bias. Data are from HIV clinics in Oromia, Ethiopia and may not be representative of women initiating ART at participating clinics or in other regions of Ethiopia. DMP questions were not based on a validated instrument. However, the composite DMP measure had high reliability.

Greater attention is needed to the role of gender equality in the health and well-being of women living with HIV. More complicated measures of DMP and gender equality are needed. Such measures should be adapted to the cultural context in which they are used. Interventions to reduce psychological distress and improve the well-being of women initiating ART should consider the familial context, particularly among women with high DMP not in a relationship as they had increased odds of psychological distress. Interventions, including dyadic interventions and interventions with male partners, should consider fostering shared decision-making as this may promote improved mental health and well-being of women living with HIV.

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Table 1

Household decision-making power among HIV-positive women initiating ART in Ethiopia.

Decision-making power	<i>N</i> = 722 <i>n</i> (%)
Low	74 (10.2)
Medium	195 (27.0)
High	453 (62.7)

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Table 2

Decision-making power by scenario among HIV-positive women initiating ART in Ethiopia

	Total sample (<i>n</i> = 722)	
	Participant doesn't contribute to decision-making <i>n</i> (%)	Participant contributes to decision-making (alone or with spouse/partner) <i>n</i> (%)
Control over household resources	225 (31.2)	497 (68.8)
Major household purchases	221 (30.6)	501 (69.4)
Daily household needs	112 (15.5)	610 (84.5)
When household member receives health care	146 (20.2)	576 (79.8)
When participant goes to clinic for HIV care	119 (16.5)	603 (83.5)

Table 3

Sociodemographic and household characteristics by level of decision-making power.

	Decision making power				<i>p</i> -value
	Total (<i>n</i> = 722) <i>n</i> (%)	Low decision-making power (<i>n</i> = 74) <i>n</i> (%)	Medium decision-making power (<i>n</i> = 195) <i>n</i> (%)	High decision-making power (<i>n</i> = 453) <i>n</i> (%)	
<i>Age</i>					<0.0001
18–29	296 (41.0)	36 (48.7)	106 (54.4)	154 (34.0)	
30–39	277 (38.4)	25 (33.8)	60 (30.8)	192 (42.4)	
40+	149 (20.6)	13 (17.6)	29 (14.9)	107 (23.6)	
<i>Ever attended school^a</i>					
Yes	439 (60.9)	44 (59.5)	111 (56.9)	284 (62.8)	0.3556
No	282 (39.1)	30 (40.5)	84 (43.1)	168 (37.2)	
<i>Religion^a</i>					
Ethiopian Orthodox	501 (69.5)	45 (60.8)	128 (66.0)	328 (72.4)	0.0221
Protestant	154 (21.4)	19 (25.7)	40 (20.6)	95 (21.0)	
Muslim/None/Other	66 (9.2)	10 (13.5)	26 (12.4)	30 (6.6)	
<i>Currently in relationship</i>					<0.0001
Yes	364 (50.4)	31 (41.9)	165 (84.6)	168 (37.1)	
No	358 (49.6)	43 (58.1)	30 (15.4)	285 (62.9)	
<i>Ever widowed^a</i>					
Yes	218 (30.5)	18 (24.3)	21 (10.9)	179 (40.0)	<0.0001
No	497 (69.5)	56 (75.7)	172 (89.1)	269 (60.0)	
<i>Number of children</i>					
0	141 (19.5)	20 (27.0)	46 (23.6)	75 (16.6)	0.0992
1–2	338 (46.8)	34 (46.0)	87 (44.6)	217 (47.9)	
3+	243 (33.7)	20 (27.0)	62 (31.8)	161 (35.5)	
<i>Type of living environment</i>					
Rural	137 (19.0)	20 (27.0)	52 (26.7)	65 (14.4)	0.0002
Urban	585 (81.0)	54 (73.0)	143 (73.3)	388 (85.7)	
<i>Currently working^a</i>					

	Decision making power				p-value
	Total (n = 722) n (%)	Low decision-making power (n = 74) n (%)	Medium decision-making power (n = 195) n (%)	High decision-making power (n = 453) n (%)	
Working for cash or in-kind	485 (67.4)	34 (46.0)	107 (54.9)	344 (76.3)	<0.0001
Not working for cash or in-kind	235 (32.6)	40 (54.1)	88 (45.1)	107 (23.7)	
# adults in household (besides respondent)					<0.0001
0	149 (20.6)	0	2 (1.0)	147 (32.5)	
1	267 (37.0)	20 (27.0)	104 (53.3)	143 (31.6)	
2-3	214 (29.6)	34 (46.0)	62 (31.8)	118 (26.1)	
4+	92 (12.7)	20 (27.0)	27 (13.9)	45 (9.9)	<0.0001
Head of household					
Participant	350 (48.5)	3 (4.1)	9 (4.6)	338 (74.6)	
Spouse/partner	223 (30.9)	26 (35.1)	138 (70.8)	59 (12.1)	
Participant and spouse/partner	71 (9.8)	1 (1.4)	15 (7.7)	55 (12.1)	
Family member/Other	78 (10.8)	44 (55.9)	33 (17.0)	1 (0.2)	

^aNumber missing by variable: Education n = 1; Religion n = 1; Ever widowed n = 7; Currently working n = 2.

Table 4
Decision-making power and the mental health and well-being of women initiating ART in Ethiopia.

	Decision making power				<i>p</i> -value
	Total sample (<i>n</i> = 722)	Low decision-making power (<i>n</i> = 74)	Medium decision-making power (<i>n</i> = 195)	High decision-making power (<i>n</i> = 453)	
<i>Social support</i>					<0.0001
Lowest	188 (26.0)	11 (14.9)	30 (15.4)	147 (32.5)	
Low-middle	166 (23.0)	16 (21.6)	42 (21.5)	108 (23.8)	
High-middle	164 (22.7)	18 (24.3)	55 (28.2)	91 (20.1)	
Highest	204 (28.3)	29 (39.2)	68 (34.9)	107 (23.6)	0.0026
<i>Psychological distress^a</i>					
None/low	305 (42.5)	24 (32.9)	103 (52.8)	178 (39.5)	
Moderate	208 (29.0)	19 (26.0)	49 (25.1)	140 (31.1)	
High	205 (28.6)	30 (41.1)	43 (22.1)	132 (29.3)	0.0002
<i>Health-related quality of life (overall function)</i>					
Lowest 25%	166 (23.0)	26 (35.1)	38 (19.5)	102 (22.5)	
Low-middle 25%	154 (21.3)	20 (27.0)	30 (15.4)	104 (23.0)	
High-middle 25%	216 (39.9)	18 (24.3)	56 (28.7)	142 (31.4)	
Highest 25%	186 (25.8)	10 (13.5)	71 (36.4)	105 (23.2)	

^aMissing by variable: Psychiatric distress *n* = 4.

Table 5

Adjusted multivariable analyses of decision-making power and the mental health and well-being of women initiating ART in Ethiopia.

	Low social support OR (95% CI)	Poor health-related quality of life (overall function) OR (95% CI)	Psychological distress OR (95% CI)
<i>Independent variables</i>			
Decision-making power			
Low, married or cohabitating	1.89 (1.25, 2.85) *	3.74 (0.83, 16.89)	2.55 (0.62, 10.49)
Low, not in relationship	0.76 (0.18, 3.23)	1.58 (0.22, 11.43)	2.08 (0.89, 4.78)
Medium	1.00	1.00	1.00
High, married or cohabitating	1.04 (0.58, 1.86)	0.98 (0.32, 2.94)	1.52 (0.98, 2.35) †
High, not in relationship	4.44 (2.43, 8.11) **	1.20 (0.48, 3.01)	1.70 (1.11, 2.62) *
<i>Age</i>			
18–29	1.00	1.00	1.00
30	0.69 (0.46, 1.03)	1.38 (0.86, 2.20)	1.28 (1.05, 1.56) *
<i>Education</i>			
Attended school	1.00	1.00	1.00
Never attended school	1.81 (1.01, 3.24) *	0.74 (0.56, 1.00) *	0.91 (0.51, 1.62)
<i>Living environment</i>			
Rural	1.00	1.00	1.00
Urban	2.42 (1.33, 4.40) *	0.94 (0.41, 2.16)	0.87 (0.74, 1.03)

* $p < 0.05$;

** $p < 0.0001$;

† $p = 0.06$.

Table 6

Unadjusted multivariable analyses of decision-making power and the mental health and well-being of women initiating ART in Ethiopia.

Independent variables	Low social support OR (95% CI)	Poor health-related quality of life (overall function) OR (95% CI)	Psychological distress OR (95% CI)
Decision-making power			
Low, married or cohabitating	1.58 (1.09, 2.29) *	3.86 (0.83, 17.94)	2.61 (0.58, 11.73)
Low, not in relationship	0.79 (0.22, 2.84)	1.60 (0.23, 11.39)	2.09 (0.91, 4.80)
Medium	1.00	1.00	1.00
High, married or cohabitating	1.04 (0.61, 1.76)	1.03 (0.30, 3.57)	1.55 (0.99, 2.43) †
High, not in relationship	4.14 (2.34, 7.33) **	1.30 (0.44, 3.85)	1.80 (1.15, 2.82) **

*
 $p < 0.05$;

**
 $p < 0.0001$;

†
 $p = 0.055$.