

Supplementary material

S1: Recruitment methods of the survey

Data were collected from a cross-sectional survey conducted in collaboration with community-based organisations in Nigeria between June and October 2021 during the second and third waves of COVID-19 in Nigeria. The survey covered the six geopolitical zones with participants from Adamawa, Akwa Ibom, Anambra, Benue, Enugu Gombe Kaduna, Lagos State, Nassarawa and Niger State. Participants living with or at risk of HIV were recruited voluntarily using a combination of venue-based and snowball sampling.

The survey captured different macrosocial categories of HIV vulnerability, such as women living with disability, those who engaged in sex work, who used psychoactive substances, who engaged in transactional sex, or who were on the move. More details of the study methodology have been reported in prior studies(1-3).

Participants

The sample size for the primary study was set at 60 valid respondents per target study population group in each of the six states. The study took into consideration the realities on the ground at the time of the survey, such as the resurgence of the COVID-19 pandemic due to the Delta variant, the containment measures such as transport limitation and the possibility of missing responses in the absence of guidance, support and motivation for survey response. The proposed sample size for people on the move was increased by 10% to 1188 (4). From the statistical modelling perspective, we tried to have a minimum of 10 participants with complete responses per each of the ten dependent variables for the study, enabling us to perform regression analyses with a minimum probability level of 0.05.(5)

The final sample for this study consists of 3,442 participants, including 700 women and girls on the move. We define people on the move as migrants, refugees, asylum-seekers, returning migrants and internally displaced people based on acknowledged definitions(6-8).

Sampling and recruitment process

The Jami Al Hakeem Foundation, a community-based organisation working with migrants and refugees in Nigeria, identified the community entry leads for migrants and refugees. The leadership of the community-based organisation reviewed and suggested revisions to the study protocol, made the decisions on the States for the data collection, conducted community entry programs and supported the participants' recruitment process using the venue-based sampling technique.

Trained field workers collected the participants' informed consent and provided them with a web link to the survey questionnaire. The personal electronic device used by respondents for the survey could only be used once, thereby limiting multiple survey responses by a respondent. The questionnaires were filled out independently by participants using a phone or tablet. When participants had literacy challenges, the interviewer offered computer-assisted personal interviewing. Interested study participants who came to the study venues without electronic devices could access the survey questionnaire using the field worker's electronic device.

Physical distancing was observed at the data collection venues. During the data collection, respondents were provided with a face mask and hand sanitiser. Respondents who participated in the study were given airtime vouchers for data/internet usage valued at \$1.70 (N1000).

Study instrument

The questionnaire for the survey contained validated instruments for collecting survey data among women and key populations. The questionnaire went through three steps of internal and external validation: it was first reviewed and revised by a multidisciplinary team of scientists, with particular attention given to the elaboration of questions, the selection of validated instruments and their relevance to the survey's objectives. The revised questionnaire was then reviewed by 18 field workers and 36 community representatives. We pretested the final version of the questionnaire with 18 community members. Finally, we harmonised the questionnaire's content with standard indicators and protocol checklists used in behavioural surveillance.

The data were collected using a web-based survey platform, LimeSurvey™. Data were stored encrypted on the European server, compliant with EU Regulation 2016/679 on the General Data Protection Regulation. The survey was made available in English. Keywords in the questionnaires were translated into Yoruba, Igbo and Hausa and to specific dialects or local languages that were predominant in the States identified for the study. Translation into local dialects and keywords/phrases was done in consultation with community leaders participating in the project. A similar approach was successfully implemented in the 2005 and 2007 National HIV/AIDS and Reproductive Health Survey, as well as the 2008 and 2010 Integrated Biological and Behavioural Surveillance Surveys conducted in Nigeria.

Dependent measure

We considered women and girls living with HIV in Nigeria. We created a dichotomic variable for people on the move that included migrants, refugees, asylum-seekers, internally displaced people (IDPs), and returning migrants.

The self-reported HIV status corresponds to the participant's answer to the question "Do you know your HIV status?" The response options were 'I am HIV-positive', 'I am HIV-negative', 'I do not know my HIV status' and 'I cannot or do not want to answer this question'. Considering that people do not test for the same reason they do not disclose their HIV status(9-11), the "I don't know" and "I do not want to answer this question" were combined into a single response.

We focused our analysis on the participants living with HIV and explored how selected dimensions of inequalities affect differently the HIV-positive adolescent girls and women who are on the move.

Independent measures

We included two sociodemographic covariates: Age was categorised into three age groups: adolescent girls and young women (15-24 years), adults (25-44 years) and older adults (≥ 45 years). The educational achievement was categorised into three groups: primary, secondary, and post-secondary.

The different variables and measures were selected following three broad steps: We started from the research question and the literature review to identify the potential measures and corresponding variables that could proxy the situation or the behaviours associated with the research question. We searched PubMed and Google Scholar, combining terms such as migrants, IDP, refugees, asylum-seekers, Nigeria, Africa, combined with the following terms: survey, questionnaire, instruments, mental health, PHQ-4, gender-based violence, HIV, stigma, discrimination, homophobia, sex work, transactional sex, alcohol, inequality, economic status, COVID-19, disability, health, and other terms specific to the survey.

Following this step, we assembled a long list of measures that we tested for their association with being a woman on the move living with HIV (the dependent variable). We then checked for collinearity and endogeneity before ending with a short list of relevant variables. Finally, we limited the number

of measures to what was strictly necessary, applying the principle of parsimony(12, 13) to not overfit the model and provide a better experience for the readers.

Health inequity:

Access to HIV services: Respondents were asked if the COVID-19 pandemic impacted their attendance at the health facilities for HIV prevention, treatment, and care-related services, hereby referred to as HIV services. Respondents had the option of ticking 'yes', 'no' or 'not needed'. The responses were dichotomised into 'yes' and 'no/not needed'. A 'yes' answer was coded as impacted access to services. The question was adapted from the questionnaire developed by the United Nations(14).

Access to sexual and reproductive health services was a composite score derived from indications of access to at least one of the following services: abortion, family planning, sexually transmitted infection treatment, and gender-based violence services. Respondents were asked if the COVID-19 pandemic impacted their attendance at health facilities for any sexual and reproductive health services when needed. Respondents had the option of ticking 'yes', 'no' or 'not needed'. An indication of the inability to access any of these services indicated the respondent's inability to access a sexual and reproductive health service. The responses were dichotomised into 'yes' and 'no/not needed'. A 'yes' response indicated disrupted access to services. The questions were adapted from the United Nations Population Fund questionnaire(14).

Mental health: This was measured using the Patient Health Questionnaire-4 (PHQ-4), a 4-item Likert-type scale instrument to screen for depression and anxiety(15). The tool had been validated for brief screening of self-reported depression and anxiety and was used for assessing psychological distress during the COVID-19 pandemic in Nigeria(16). For each patient, the mental health score is the sum of the four measures, a continuous variable (0 to 48, mean 4.70, SD 3.52). For this study, the Cronbach alpha was 0.88.

HIV stigma score: We used the validated 12-item short version of the Berger HIV stigma score(17, 18) used in other surveys (19). The twelve 4-point Likert questions cover four dimensions: personalised stigma, disclosure concerns, concerns about public attitudes, and negative self-image. The HIV stigma score is the sum of the twelve questions, treated as a continuous variable (4 to 48, mean 32.53, SD 8.11). For this study, the Cronbach alpha was 0.92.

Socioeconomic inequality

Subjective social standing was assessed using the McArthur scale(20) with the following question: "Now, think of a ladder representing where people stand in your local community. Where would you place yourself on this ladder at this moment?" Possible answers were a 10-item Likert scale ranging from "1: lowest standing in my community" to "10: highest standing in my community". The participants' responses were grouped per tercile.

Economic precarity was proxied with the current main source of income. Possible answers were: I have paid work; I am self-employed/ have my own business (example: hairdresser or sex worker); I am a daily wage earner (example: domestic workers); Petty trade; From agriculture; Assistance from the Government (social grants or the COVID-19 grant); Pension for me or a family member; I do not have any source of income; Assistance from NGOs or charitable organisations; I am engaging in transactional sex, or I have a sugar daddy; Money sent by family members (inside or outside of Nigeria); I am in survival mode (example: recycling and selling in slums, begging). Participants choosing any of the last five sources of income were categorised as facing economic precarity.

Food insecurity is a self-reported response to the question: "Since the COVID-19 crisis began, do you eat less or skip meals because there was not enough money for food?". The answer was either "yes" or "no". The question was adapted from the questionnaire by Santos and colleagues(21).

Macrosocial markers of vulnerability

Survivor of gender-based violence was measured using the participants' experience of gender-based violence during the COVID-19 crisis. The possible answers to the question "Do you feel that you are currently experiencing" were: "More violence than before the COVID-19 crisis", "The same level of violence as before the COVID-19 crisis", "Less violence than before the COVID-19 crisis", "I am not experiencing any violence", "I cannot or do not wish to answer this question".

We considered two *macrosocial categories of vulnerability*: those who engaged in sex work and those who engaged in transactional sex. These categories are not mutually exclusive. Participants can identify themselves with more than one category. We adjusted the model to account for the interaction between the two categories.

Statistical methods

We first performed a bivariate analysis to study the associations between the independent variables and people on the move per self-declared HIV status. We used Pearson's chi-squared test of association (See the results section in the main document and supplement S2).

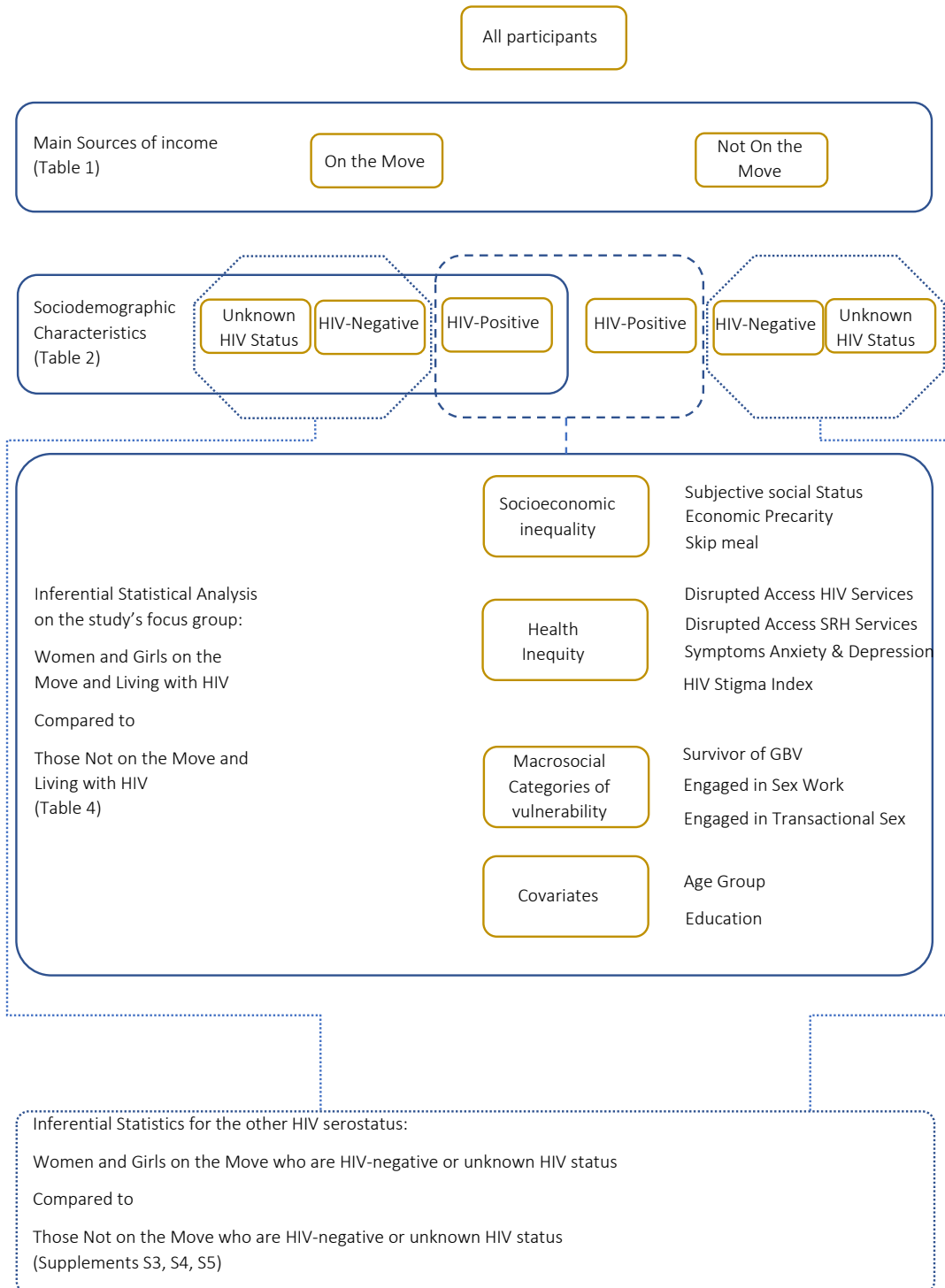
We controlled for confounders by performing separate regressions without (A) and with (B) potential confounders and compared the coefficients of each group $((B-A)/A=C)$. Confounders were suspected if $C > 10\%$. We did not identify confounding variables in the regression model.

We subsequently developed the inferential statistical analysis with a logistic regression model per HIV status. We focused on HIV-positive women and girls on the move compared to other vulnerable women and girls living with HIV but not on the move.

Based on the experience of the partnering community-based organisations, the literature review and the examination of the dataset, we anticipated that some variables might interact with each other, as can happen in reality. We enabled the interactions between the fact of engaging in sex work and engaging in transactional sex. Other interactions were included as some measures of variables might be closely related. It is the case, for example, with the variables "current main source of income" and "food insecurity".

We conducted post-estimation tests, including likelihood ratio chi-square, and controlled for the hypothesis of a null value for the independent variables for each model. In addition, we performed additional analyses of variance, margins, collinearity, and goodness-of-fit. Finally, we controlled for specification errors and tested whether or not the interactions between potentially related variables such as living in precarity and food insecurity. We similarly controlled for interaction between sex work and transactional sex. We considered statistical significance at a p-value < 0.05 and reported the strength of association and effect size confidence intervals accordingly(22). All statistical analyses were performed using STATA 16.

S2: Conceptual framework of the current study



S3: Categories of people on the move, per HIV status

	Total		Self-reported HIV-		self-reported HIV+		Don't know	
	n = (3442)		n = (1402)		n = (1613)		n = (427)	
	%	(n)	%	(n)	%	(n)	%	(n)
	Pearson chi2(12) = 126.2211 Pr = 0.000							
Participants Not on the move	76,6%	2637	80,1%	1123	75,5%	1218	69,3%	296
People on the move categories								
Migrants	1,3%	46	0,8%	11	1,9%	31	0,9%	4
Refugee	2,4%	82	3,9%	55	0,2%	3	5,6%	24
Asylum seeker	0,1%	3	0,1%	1	0,1%	2	0,0%	0
Returning migrant	4,0%	139	3,1%	43	5,5%	89	1,6%	7
Internally displaced people (IDP)	12,5%	430	10,1%	142	13,0%	209	18,5%	79
Don't know or don't wish to answer	3,1%	105	1,9%	27	3,8%	61	4,0%	17

S4: Sociodemographic characteristics of the participants

	Total		Adolescent girls and women on the move						Adolescent girls and women NOT on the move					
	(N=3337)		HIV-negative (N= 252)		HIV-positive (N= 334)		Unknown/undeclared (N= 114)		HIV-negative (N= 1123)		HIV-positive (N= 1218)		Unknown/undeclared (N=296)	
	%	(n)	%	(n)	%	(n)	%	(n)	%	(n)	%	(n)	%	(n)
Age groups			Pearson chi2(4) = 31.1479 Pr = 0.000						Pearson chi2(4) = 53.4218 Pr = 0.000					
Adolescent girls & young women (15-24)	34.9%	1166	23.0%	58	24.9%	83	46.5%	53	33.1%	372	35.7%	435	55.7%	165
Adults (25-44)	55.1%	1840	59.9%	151	56.3%	188	31.6%	36	58.9%	661	56.8%	692	37.8%	112
Older adults (45+)	9.9%	331	17.1%	43	18.9%	63	21.9%	25	8.0%	90	7.5%	91	6.4%	19
Education (highest degree completed)			Pearson chi2(4) = 12.5913 Pr = 0.013						Pearson chi2(4) = 18.3786 Pr = 0.001					
From none to primary education	36.6%	1223	59.5%	150	61.1%	204	72.8%	83	27.8%	312	29.6%	360	38.5%	114
Secondary education	44.0%	1469	29.8%	75	32.6%	109	25.4%	29	47.1%	529	49.4%	602	42.2%	125
Post-secondary or University degree	19.1%	636	10.3%	26	6.3%	21	1.8%	2	24.9%	280	20.6%	251	18.9%	56
Missing	0.3%	9	0.4%	1	0.0%	0	0.0%	0	0.2%	2	0.4%	5	0.3%	1
Geopolitical Zones			Pearson chi2(10) = 322.3023 Pr = 0.000						Pearson chi2(10) = 253.4577 Pr = 0.000					
1 North Central	25.8%	860	6.7%	17	54.2%	181	7.0%	8	12.9%	145	35.9%	437	24.3%	72
2 North East	18.2%	608	30.2%	76	2.1%	7	30.7%	35	23.4%	263	12.9%	157	23.6%	70
3 North West	11.6%	387	4.0%	10	2.7%	9	7.0%	8	16.9%	190	10.3%	126	14.9%	44
4 South East	21.0%	701	24.2%	61	24.9%	83	29.8%	34	19.4%	218	20.4%	249	18.9%	56
5 South South	14.1%	472	28.6%	72	0.6%	2	20.2%	23	20.4%	229	9.2%	112	11.5%	34
6 South West	9.1%	302	6.3%	16	15.6%	52	4.4%	5	6.5%	73	11.2%	137	6.4%	19
Missing	0.2%	7	0.0%	0	0.0%	0	0.9%	1	0.4%	5	0.0%	0	0.3%	1
Health inequity														
Mental health (sympt. anxiety & depression)			Pearson chi2(6) = 12.4130 Pr = 0.053						Pearson chi2(6) = 25.8122 Pr = 0.000					
None	24.9%	832	25.8%	65	30.8%	103	40.4%	46	27.9%	313	18.5%	225	27.0%	80
Mild symptoms	28.9%	966	28.2%	71	26.3%	88	23.7%	27	29.0%	326	30.1%	367	29.4%	87
Moderate symptoms	23.9%	797	30.6%	77	20.4%	68	20.2%	23	23.7%	266	24.5%	298	22.0%	65
Severe symptoms	13.8%	461	12.7%	32	9.9%	33	14.0%	16	14.2%	160	15.4%	188	10.8%	32
Missing	8.4%	281	2.8%	7	12.6%	42	1.8%	2	5.2%	58	11.5%	140	10.8%	32
Disrupted access to HIV services			Pearson chi2(2) = 109.0852 Pr = 0.000						Pearson chi2(2) = 357.4721 Pr = 0.000					
No	57.4%	1914	81.3%	205	50.0%	167	87.7%	100	70.4%	791	34.6%	421	77.7%	230
Yes	39.1%	1304	11.1%	28	42.5%	142	4.4%	5	28.7%	322	61.4%	748	19.9%	59

	Missing	3.6%	119	7.5%	19	7.5%	25	7.9%	9	0.9%	10	4.0%	49	2.4%	7
	Disrupted access to SRH services			Pearson chi2(2) = 15.2330 Pr = 0.000					Pearson chi2(2) = 69.4531 Pr = 0.000						
	No	68.6%	2288	85.3%	215	74.3%	248	80.7%	92	72.7%	816	56.2%	684	78.7%	233
	Yes	27.2%	908	7.1%	18	17.7%	59	10.5%	12	26.4%	296	38.0%	463	20.3%	60
	Missing	4.2%	141	7.5%	19	8.1%	27	8.8%	10	1.0%	11	5.8%	71	1.0%	3
	HIV stigma	Mean	SD			Mean	SD			Mean	SD				
	HIV stigma score	32.53	8.11			32.12	7.52			32.61	8.21				
	Sub-component personalised stigma	7.68	2.53			8.07	2.39			7.61	2.54				
	Sub-component disclosure concerns	9.38	2.21			9.20	2.03			9.41	2.24				
	Sub-component concerns about public attitudes	8.10	2.40			7.90	2.44			8.13	2.39				
	Sub-component negative self-image	7.34	2.54			7.37	2.50			7.33	2.54				
	Economic inequalities														
	Access to COVID-19 support measures			Pearson chi2(12) = 102.4880 Pr = 0.000					Pearson chi2(12) = 54.4098 Pr = 0.000						
	I did not know there was a special relief measure for me	47.2%	1576	70.2%	177	48.8%	163	76.3%	87	44.8%	503	39.2%	477	57.1%	169
	These measures are not applicable to me	3.7%	123	7.5%	19	0.6%	2	9.6%	11	4.4%	49	2.8%	34	2.7%	8
	I have been denied access	18.5%	618	7.9%	20	25.4%	85	4.4%	5	21.0%	236	18.4%	224	16.2%	48
	I can access these support measures if I want, but I don't	3.3%	110	1.6%	4	1.8%	6	0.0%	0	4.9%	55	3.5%	43	0.7%	2
	Yes I applied, and I am waiting for the support measure	15.3%	512	6.0%	15	7.2%	24	3.5%	4	15.8%	177	20.1%	245	15.9%	47
	Yes I applied, and I received these support measures	7.7%	257	4.0%	10	13.8%	46	4.4%	5	6.5%	73	8.8%	107	5.4%	16
	I cannot or do not wish to answer	2.3%	78	1.6%	4	1.5%	5	0.0%	0	2.2%	25	3.3%	40	1.4%	4
	Missing	1.9%	63	1.2%	3	0.9%	3	1.8%	2	0.4%	5	3.9%	48	0.7%	2
	Subjective socioeconomic status (SES)			Pearson chi2(4) = 23.4354 Pr = 0.000					Pearson chi2(4) = 6.0284 Pr = 0.197						
	Lower tercile	36.3%	1211	39.3%	99	53.0%	177	51.8%	59	31.3%	351	34.9%	425	33.8%	100
	Middle tercile	44.1%	1473	50.0%	126	31.1%	104	38.6%	44	48.2%	541	43.2%	526	44.6%	132
	Higher tercile	18.2%	607	10.7%	27	15.6%	52	8.8%	10	20.0%	225	18.9%	230	21.3%	63
	Missing	1.4%	46	0.0%	0	0.3%	1	0.9%	1	0.5%	6	3.0%	37	0.3%	1
	Subjective social standing status (SSS)			Pearson chi2(4) = 23.5919 Pr = 0.000					Pearson chi2(4) = 6.6856 Pr = 0.153						
	Lower tercile	47.9%	1599	47.2%	119	62.6%	209	64.9%	74	46.5%	522	44.8%	546	43.6%	129
	Middle tercile	29.3%	979	33.3%	84	20.1%	67	27.2%	31	28.9%	325	31.6%	385	29.4%	87
	Higher tercile	21.5%	719	19.4%	49	17.4%	58	7.9%	9	24.1%	271	20.8%	253	26.7%	79
	Missing	1.2%	40	0.0%	0	0.0%	0	0.0%	0	0.4%	5	2.8%	34	0.3%	1

	Skip meals because not enough money			Pearson chi2(2) = 8.7438 Pr = 0.013						Pearson chi2(2) = 16.9486 Pr = 0.000					
	No	20.9%	699	21.0%	53	13.8%	46	23.7%	27	25.6%	287	19.7%	240	15.5%	46
	Yes	76.1%	2540	73.8%	186	85.0%	284	76.3%	87	73.0%	820	75.5%	919	82.4%	244
	Missing	2.9%	98	5.2%	13	1.2%	4	0.0%	0	1.4%	16	4.8%	59	2.0%	6
	Current main source of income			Pearson chi2(12) = 47.3186 Pr = 0.000						Pearson chi2(12) = 50.9921 Pr = 0.000					
	No income/survival mode	18.8%	629	20.2%	51	24.6%	82	38.6%	44	16.2%	182	17.2%	210	20.3%	60
	Transactional sex	15.0%	499	8.3%	21	17.7%	59	9.6%	11	18.2%	204	14.9%	181	7.8%	23
	Social transfer, including pension	1.3%	42	0.4%	1	1.5%	5	0.0%	0	1.0%	11	1.4%	17	2.7%	8
	Remittances or charity	10.4%	347	5.2%	13	9.0%	30	11.4%	13	9.5%	107	10.5%	128	18.9%	56
	Agriculture	11.3%	376	25.0%	63	21.0%	70	21.1%	24	8.0%	90	8.9%	109	6.8%	20
	self-employed, petty trade	37.0%	1235	38.1%	96	23.1%	77	17.5%	20	42.1%	473	37.4%	455	38.5%	114
	Paid work	4.6%	154	2.8%	7	2.4%	8	1.8%	2	4.5%	51	6.1%	74	4.1%	12
	Missing	1.6%	55	0.0%	0	0.9%	3	0.0%	0	0.4%	5	3.6%	44	1.0%	3
	Macrosocial markers of vulnerability														
	Survivor of gender-based violence			Pearson chi2(6) = 24.6323 Pr = 0.000						Pearson chi2(6) = 24.6260 Pr = 0.000					
	I am not experiencing any violence	69.5%	2319	74.6%	188	56.3%	188	66.7%	76	73.6%	827	66.1%	805	79.4%	235
	Less violence than before COVID-19	6.7%	222	4.4%	11	4.8%	16	2.6%	3	5.4%	61	8.5%	104	9.1%	27
	The same level of violence as before COVID-19	9.2%	306	9.9%	25	20.4%	68	13.2%	15	7.7%	86	7.9%	96	5.4%	16
	More violence than violence than before COVID-19	9.4%	313	7.5%	19	14.1%	47	13.2%	15	9.6%	108	9.1%	111	4.4%	13
	Missing	5.3%	177	3.6%	9	4.5%	15	4.4%	5	3.7%	41	8.4%	102	1.7%	5
	Engaged in transactional sex			Pearson chi2(2) = 11.9471 Pr = 0.003						Pearson chi2(2) = 106.6086 Pr = 0.000					
	No	50.2%	1675	74.6%	188	61.4%	205	75.4%	86	48.3%	542	36.8%	448	69.6%	206
	Yes	43.2%	1440	21.8%	55	30.5%	102	17.5%	20	48.1%	540	53.8%	655	23.0%	68
	Missing	6.7%	222	3.6%	9	8.1%	27	7.0%	8	3.7%	41	9.4%	115	7.4%	22
	Engaged in sex work			Pearson chi2(2) = 6.6533 Pr = 0.036						Pearson chi2(2) = 78.3291 Pr = 0.000					
	No	55.6%	1856	76.6%	193	70.4%	235	76.3%	87	52.4%	588	43.8%	534	74.0%	219
	Yes	38.0%	1267	19.0%	48	24.0%	80	12.3%	14	43.1%	484	47.4%	577	21.6%	64
	Missing	6.4%	214	4.4%	11	5.7%	19	11.4%	13	4.5%	51	8.8%	107	4.4%	13

S5: Change in incomes and main current sources of income among vulnerable women and girls in Nigeria**Table S5.1: Change in incomes and main current sources of income among vulnerable women and girls in Nigeria**

	n=700	Lost all their income	Reduced by more than half	Reduced by about half	Reduced by less than half	No change	Increase	Missing
No income	177	13.6%	5.6%	6.8%	2.8%	64.4%	2.3%	4.5%
Transactional sex	91	2.2%	29.7%	11.0%	5.5%	34.1%	15.4%	2.2%
Social transfer	6	-	33.3%	-	33.3%	16.7%	-	16.7%
Remittances	56	12.5%	21.4%	26.8%	14.3%	21.4%	1.8%	1.8%
Agriculture	157	4.5%	42.0%	22.9%	12.1%	16.6%	1.3%	0.6%
Self-employed	193	10.4%	28.0%	26.4%	14.0%	18.7%	1.6%	1.0%
Paid work	17	5.9%	-	11.8%	-	82.4%	-	-
Missing	3	-	-	-	-	33.3%	-	66.7%

Pearson $\chi^2(42) = 317.6328$ Pr = 0.000 Cramér's V = 0.2750

S5: Health Inequities, per population groups

Table S5.2: Health inequities among all participants, per categories

All Sample	Disrupted access to HIV services N = (2571)	Disrupted access to SRH services N = (2552)	Symptoms of anxiety and depression N = (2407)
	Pearson chi2(6) = 71.5390 Pr = 0.000	Pearson chi2(6) = 103.3465 Pr = 0.000	Pearson chi2(6) = 15.5767 Pr = 0.016
NOT on the move (n = 2637)	43.9%	32.1%	41.9%
Women and girls on the move (n = 700)			
Migrants (n = 46)	45.5%	38.6%	23.8%
Refugee (n = 82)	19.5%	9.8%	25.9%
Asylum seeker (n = 3)	0.0%	33.3%	0.0%
Returning migrant (n = 139)	30.7%	19.3%	45.0%
Internally displaced people (n = 430)	25.7%	10.2%	40.6%
Missing or did not know (n = 195)	44.6%	31.0%	45.3%

Table S5.3: Health inequities among participants living with HIV, per categories

Only among those HIV+	Disrupted access HIV services N = (1169)	Disrupted access SRH services N = (1147)	Symptoms of anxiety and depression N = (1078)
	Pearson chi2(6) = 45.5110 Pr = 0.000	Pearson chi2(6) = 73.6066 Pr = 0.000	Pearson chi2(6) = 15.5767 Pr = 0.016
NOT on the move (n = 1218)	64.0%	40.4%	45.1%
Women and girls on the move (n = 334)			
Migrants (n = 31)	69.0%	58.6%	25.9%
Refugee (n = 3)	66.7%	-	-
Asylum seeker (n = 2)	-	50.0%	-
Returning migrant (n = 89)	38.2%	22.1%	50.8%
Internally displaced people (n = 209)	45.4%	12.7%	31.2%
Missing or did not know (n = 111)	69.0%	44.8%	58.9%

S6: Logistic regression People on the move, per HIV status

People on the move		HIV-negative			HIV-positive			I don't know or don't want to answer					
		aOR	p-value	95% CI	aOR	p-value	95% CI	aOR	p-value	95% CI			
Age groups													
	Adolescent girls & young women (15-24)	0.758	0.209	0.493	1.167	0.601	0.013	0.402	0.898	0.899	0.773	0.434	1.859
	Adults (25-44)	base				base				base			
	Older adults (45+)	0.888	0.633	0.544	1.448	1.041	0.873	0.635	1.707	3.539	0.008	1.388	9.021
Education level													
	From none to primary education	2.888	0.000	1.963	4.251	3.375	0.000	2.355	4.837	3.063	0.001	1.562	6.007
	Secondary education	base				base				base			
	Post-secondary or University degree	0.597	0.065	0.346	1.032	0.596	0.092	0.326	1.088	0.235	0.095	0.043	1.288
Health inequity													
	Disrupted access to HIV services	1.188	0.206	0.910	1.552	1.426	0.033	1.029	1.977	2.794	0.000	1.631	4.786
	Disrupted access to SRH services	0.400	0.006	0.208	0.769	0.503	0.003	0.322	0.787	4.705	0.018	1.308	16.931
Symptoms of anxiety and depression													
Economic inequality													
	Subjective social standing status												
	Lower tercile	0.811	0.285	0.552	1.191	2.336	0.000	1.537	3.552	1.838	0.069	0.953	3.543
	Middle tercile	base				base				base			
	Higher tercile	1.014	0.953	0.635	1.619	1.571	0.102	0.915	2.697	0.371	0.048	0.138	0.993
	Economic precarity	0.735	0.396	0.361	1.496	6.437	0.000	2.419	17.129	0.423	0.218	0.108	1.663
	Skip meals	1.120	0.657	0.681	1.841	4.891	0.000	2.064	11.589	0.255	0.029	0.075	0.868
Macrosocial categories of vulnerability													
Survivor or gender-based violence													
	Not experiencing any violence	base				base				base			
	Less violence than before the COVID-19 crisis	1.426	0.368	0.658	3.089	1.532	0.244	0.747	3.140	0.665	0.591	0.150	2.954
	The same level of violence as before the COVID-19 crisis	1.702	0.067	0.963	3.009	5.499	0.000	3.326	9.093	2.980	0.040	1.049	8.465
	More violence than before the COVID-19 crisis	0.227	0.015	0.069	0.748	4.770	0.000	2.704	8.416	2.255	0.372	0.378	13.443
	Engaged in sex work	0.687	0.647	0.138	3.431	0.132	0.017	0.025	0.698	13.140	0.111	0.551	313.167
	Engaged in transactional sex	0.469	0.099	0.191	1.152	0.796	0.446	0.442	1.433	1.006	0.996	0.113	8.967
	Interaction precarious#skipmeals	1.004	0.992	0.446	2.259	0.164	0.001	0.058	0.467	4.036	0.067	0.908	17.933
	Interaction sexwork#transasex	1.251	0.814	0.193	8.084	2.645	0.281	0.451	15.491	0.037	0.100	0.001	1.884

Constant	0.177	0.000	0.072	0.435	0.028	0.000	0.009	0.083	0.045	0.002	0.006	0.337
N	1162				1141				320			
Log-likelihood	-452.60				-443.52				-143.98			
LR chi2(18)	165.18				307.68				95.98			
prob> chi2	0.000				0.000				0.000			

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