

The International Sexual Health And Reproductive Health Survey (I-SHARE-1): A Multi-Country Analysis of Adults from 30 Countries Prior to and During the Initial COVID-19 Wave

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Summary: The I-SHARE-1 study was convened across 30 countries to assess sexual and reproductive health outcomes among adults. During COVID-19 measures, 32.3% of people needing HIV/STI testing had hindered access, 4.4% experienced partner violence, and 5.8% decreased casual partner condom use.

Abstract

Background: There is limited evidence to date about changes to sexual and reproductive health (SRH) during the initial wave of COVID-19 disease. To address this gap, our team organized a multi-country, cross-sectional online survey as part of a global consortium.

Methods: Consortium research teams conducted online surveys in 30 countries. Sampling methods included convenience, online panels, and population-representative. Primary outcomes included sexual behaviors, partner violence, and SRH service utilization, and we compared three months prior to and during policy measures to mitigate COVID-19. We conducted meta-analyses for primary outcomes and graded the certainty of the evidence using Cochrane methods.

Results: Among 4546 respondents with casual partners, condom use stayed the same for 3374 (74.4%) people and 640 (14.1%) people reported a decline. Fewer respondents reported physical or sexual partner violence during COVID-19 measures (1063/15144, 7.0%) compared to the period before COVID-19 measures (1469/15887, 9.3%). COVID-19 measures impeded access to condoms (933/10790, 8.7%), contraceptives (610/8175, 7.5%), and HIV/STI testing (750/1965, 30.7%). Pooled estimates from meta-analysis indicate during COVID-19 measures, 32.3% (95% CI 23.9-42.1) of people needing HIV/STI testing had hindered access, 4.4% (95% CI 3.4-5.4) experienced partner violence, and 5.8% (95% CI 5.4-8.2) decreased casual partner condom use (moderate certainty of evidence for each outcome). Meta-analysis findings were robust in sensitivity analyses that examined country income level, sample size, and sampling strategy.

Conclusions: Open science methods are feasible to organize research studies as part of emergency responses. The initial COVID-19 wave impacted SRH behaviors and access to services across diverse global settings.

Keywords: HIV; Sexually Transmitted Infections; Sexual Behavior; Sexual violence; Condom Use

Introduction

The COVID-19 pandemic has profoundly disrupted social relationships and health services that are fundamental to sexual and reproductive health.¹ The initial wave of SARS-CoV-2 infections (COVID-19 disease) forced billions of people worldwide to shelter in place, transforming social and sexual relationships. Entrenched gender inequalities that existed prior to COVID-19 may have been exacerbated during the emergency response,² placing people at increased risk for intimate partner violence (IPV). At the same time, a wide range of essential sexual and reproductive health services were stopped or re-oriented because of the pandemic.³ These trends suggest an important question: How have COVID-19 measures impacted sexual and reproductive health outcomes in different settings? Here we define COVID-19 measures as responses to slow COVID-19 transmission, including movement restrictions, testing programs, and stay at home orders.⁴

Although social lives during the COVID-19 pandemic have been altered, there has been substantial variation in COVID-19 disease incidence and responses at the national level. Some countries have imposed less stringent lockdown measures, allowing greater movement between and within cities, while others have instituted more unyielding measures.⁵ Several countries already had infrastructure in place for decentralized sexual and reproductive health services (e.g., HIV self-testing, telemedicine abortion) which compensated for pandemic-related closures of facility-based services during COVID-19.⁶ However, in most countries, COVID-19 further undermined already fragile health infrastructure and health service provision.⁷

Despite the importance of sexual and reproductive health during the initial wave of the COVID-19 pandemic, research in this area is limited.^{8,9} Modeling and other research studies have noted the lack of detailed information about COVID-19 sexual and reproductive health.^{10,11} The lack of standardized survey instruments makes cross-country comparisons more difficult. Most of the sexual and reproductive health research on initial COVID-19 waves has focused on high-income countries,⁸ rather than examining broader regional and global trends. Few studies to date have included low and

middle-income countries.⁹ At the same time, the global pandemic has accelerated open science and new forms of collaboration.

Our team organized a cross-sectional multi-country study called “International Sexual Health And REproductive Health during COVID-19” (I-SHARE-1).¹² The I-SHARE project convened a group of sexual and reproductive health researchers to administer a common online survey instrument in respective countries.¹³ Teams were identified through an earlier WHO crowdsourcing open call¹² and an ANSER open call. The purpose of this multi-country study was to better understand sexual and reproductive health prior to and during the first wave of the COVID-19 pandemic in respective countries.

Methods

A more detailed description of survey methods can be found in the protocol.¹² Data were collected from 20th July 2020 to 15th February 2021. The primary aims of the study were to examine changes in sexual behaviors (sex frequency and condomless sex), intimate partner violence, and utilization of sexual and reproductive health services during COVID-19 measures using a cross-sectional survey. Secondary study aims were to examine changes in HIV/STI testing, harmful cultural practices, mental health, and food security. Each country adjusted the questionnaire based on country-level priorities, opportunities, and needs. The consortium recommended a sample size of at least 200, but precise sample size calculations were made by each country’s research team. We used an open science approach in organizing this study and welcomed all interested researchers to join the consortium. This approach included allowing any interested research team to join the project, facilitating collaboration between sites, leveraging open-access software, and prioritizing open access outputs.

Recruitment and Participants

Participants were recruited through an online survey link that was distributed through local, regional, and national networks. Recruitment used social media (26 studies), partner organizations (20 studies), paid social media advertising (11 studies), university websites (10 studies), telephone interviews (4 studies), television or newspapers (3 studies). Thirty countries implemented the study, including Argentina, Australia, Botswana, Canada, China, Colombia, Czech Republic, Denmark, Egypt, France, Germany, Italy, Kenya, Latvia, Lebanon, Luxembourg, Malaysia, Mexico, Moldova, Mozambique, Nigeria, Panama, Portugal, Singapore, South Africa, Sweden, Spain, Uganda, United States, and Uruguay (Supplemental Table 1). A total of twenty-three studies used convenience sampling (Australia, Canada, Colombia, China, Czech Republic, Egypt, France, Germany, Italy, Latvia, Panama, Portugal, Luxembourg, Mexico, Malaysia, Moldova, Mozambique, Nigeria, Singapore, South Africa, Spain, Uruguay, USA), six studies used online panels (Sweden, Botswana, Uganda, Lebanon, Kenya, Argentina), and two used population-based methods (Czech Republic, Denmark). Consortium members in the Czech Republic conducted two separate studies (one using a convenience sample and one using a population-based sample), and thus a total of 31 studies among 30 countries were reported. Eligible participants were age 18 years or older (or younger if the country's Institutional Review Board and ethical regulation permitted it and the in-country lead ensured appropriate procedures), resided in the respective participating country, were capable of reading and understanding the survey language, could access an online survey, and were willing to provide informed consent.

Survey development

The partners collaboratively developed the survey instrument based on existing items from a recent WHO survey instrument intended for global use,¹⁴ other existing tools, and items adapted for COVID-19. The survey included the following sections: sociodemographic characteristics; compliance with COVID-19 measures; couple and family relationships; sexual behavior; contraceptive use and barriers

to access; access to reproductive healthcare; abortion; sexual violence and IPV; HIV/STI testing and treatment; female genital mutilation/cutting and early/forced marriage (optional); mental health (optional); and food insecurity (optional) (Supplemental Tables 2 and 3). The time periods for pre-COVID-19 and during initial COVID-19 measures were decided by the in-country team. We focused on an interval of three months before the COVID-19 measures because of harmonization with other SRH indicators and less recall bias compared to longer periods.¹⁵

The lead organization in each country selected networks to disseminate the survey link, and it was primarily distributed through email lists, local partner organizations affiliated with ANSER, other sexual and reproductive health networks, and social media links. The survey took most participants 20-30 minutes to complete (Supplemental Table 3).

Data analysis

Multi-country analysis was undertaken for countries that met specific pre-specified criteria. Each country was required to have obtained Institutional Review Board approval from a local ethics authority, locally translated and field-tested the instrument, described the sampling methodology, and obtained responses from at least 200 participants. A minimum threshold of 200 participants was used because small samples may be more likely to be biased and have higher heterogeneity.¹⁶ We examined the effect of including all data empirically using a sensitivity analysis. We did not weight our estimates because most countries did not use a probability sample. We conducted descriptive meta-analysis to assess the effect of study characteristics and setting and more accurately estimate the prevalence of our primary outcomes across countries.

First, we ran descriptive statistics on using the main data set of 25 countries to assess patterns in respondent sociodemographic characteristics and to assess the primary outcomes prior to and during

COVID-19 measures. We used the Oxford indices to assess the stringency of COVID-19 measures in each country, based on the mean value across the days when the survey was open. We used the Appraisal Tool for Cross-Sectional Studies (AXIS) to assess risk of bias.¹⁷ Second, we conducted a meta-analysis for all 30 countries on the prevalence of reported hindered access to HIV/STI testing, IPV during COVID-19 measures, and decreased condom use with casual partners. We used meta-analysis because this provided a mechanism to assess risk of bias of individual studies and consider the strength of the evidence. Tests for heterogeneity were applied using I^2 statistics.¹⁸ We used the GRADE framework to rate the quality of evidence presented in our meta-analysis.¹⁹ Furthermore, we conducted sensitivity analyses that separated primary outcomes based on country income level (low and middle-income countries compared to high-income countries), sample size (less than 200 or more), and sampling strategy (convenience compared to online panel or population-representative). All analyses were carried out using Stata version 14, and missing data were treated by pairwise deletion (available-case analysis).

Results

Results of descriptive analysis

Twenty-five of the 30 countries that joined the I-SHARE study (Figure 1) met all study criteria, including recruiting a minimum of 200 participants. Five countries (Mozambique, Canada, Egypt, Lebanon, and South Africa) had fewer than 200 participants and were excluded from descriptive analyses. The majority of countries across all four geographic regions implemented all survey components, except FGM and early marriage (Supplemental Table 2). Abortion and mental health components were excluded in 2 and 3 countries, respectively.

Among the 25 included countries, 14 were high-income countries, eight were upper-middle-income, two were lower-middle-income, and one was low-income (see Supplemental Table 1). There was a wide geographic distribution, with eleven countries in Europe, six in the Americas, four in Asia and Oceania, and four in Africa.

As shown in Table 1, over two-thirds (68.5%) of participants were women, and over 9 in 10 participants (95.6%) were cis-gender. About 78% of participants were heterosexual. Most participants (44.6%) were 18-29 years old, followed by those 30-39 (26.9%) and 40-49 (14.4%) years old. Few participants (2.9%) were 70 years or older. More than half (55.9%) of participants reported having completed a college degree. There was diversity in reported socioeconomic position of the household relative to others in their country, with most participants (38.4%) indicating that their household was in the 5th or 6th highest income group out of 10 in their country.

The lower panel of Table 1 presents relationship status and sexual frequency, and sexual satisfaction in the three months before and during COVID-19 measures. There were a variety of relationship types reported, with 43.4% in a cohabiting relationship. Among those with a steady partner, 37.6% reported having sex with that partner 2-4 times a month, and another 29.9% reported 2-3 times a week. Among those with a casual partner, the most commonly reported frequency of sex with that partner was monthly or less (15.4%). Most participants (75.6%) reported being somewhat satisfied or very satisfied with their sex life before COVID-19, but this proportion had fallen (to 59.4%) during COVID-19 in the same participants.

In terms of compliance with COVID-19 measures (Supplemental Table 4), 58.9% of participants reported they had followed measures a lot. The majority (76.6%) had never been in isolation due to their own symptoms or close contact with someone with COVID-19. Although 62.2% of participants said that their household socioeconomic status stayed the same during the COVID-19 pandemic, about one-third (32.0%) reported their household economic situation worsened.

Table 2 shows our key study outcomes before and during COVID-19. Condom use “always” or “most of the time” with steady partners (62.3%) and with casual partners (64.6%) was relatively high prior to COVID-19 measures. Although most participants perceived their condom use stayed the same during COVID-19 measures (74.4% with casual partners and 86.9% with steady partners), 14.1% of participants with casual partners (and 10.4% of those with steady partners) reported their condom use with those types of partners decreased during COVID-19 measures. Regarding physical or sexual violence, 9.3% reported experiencing one or more types of violence prior to COVID-19, and a slightly lower proportion (7.0%) reported experiencing these types of violence during COVID-19 measures.

For sexual and reproductive health care access, we first examined condom access. About 9% of participants indicated that COVID-19 measures made it more difficult to access condoms. A slightly smaller proportion (7.5%) reported that COVID-19 measures hindered contraceptive access. Nearly one-third (30.7%) of participants who reported needing abortion services during COVID-19 reported that COVID-19 measures hindered them from obtaining this service. In addition, 38.2% of participants that needed HIV/STI testing reported that COVID-19 measures hindered them from accessing HIV/STI testing.

Results of meta-analyses

Meta-analyses using data from all 30 countries indicated substantial heterogeneity at the country level for all outcomes, including hindered access to HIV/STI testing ($P=.000$, $I^2=89.9\%$), IPV experienced during COVID-19 measures ($P=.000$, $I^2=95.5\%$), and condom use during COVID-19 measures ($P=.000$, $I^2=95.5\%$). Pooled estimates suggest that 32.3% (95% CI 23.9 – 42.1%) of people needing HIV/STI testing had hindered access to HIV/STI testing (Supplemental Figures 1-3). Approximately 4.4% (95% CI 3.4 - 5.4%) of people experienced physical or sexual violence (Supplemental Figures 4-6) during COVID-19 measures. Finally, 5.8% (95% CI 5.4 – 8.2%) of people reported a decrease in condom use with sexual partners during COVID-19 measures (Supplemental Figures 7-9).

Risk of bias assessment for the studies in I-SHARE indicated that, in general, study procedures of all studies were largely justified, appropriate, and adequately described (Supplemental Table 5). The convenience sampling methods used by most countries introduced bias. In addition, response rates raised concerns about non-response bias and information about non-responders was not available.

Based on the GRADE framework, each of the three main findings was associated with a moderate certainty of evidence (Supplemental Table 6). Observational studies in general begin at a low quality of evidence; while there were risks of bias due to convenience sampling, we rated the quality of our evidence upwards due to the large effect size for the outcome of hindered access to HIV/STI testing, and the large sample size of the study across all outcomes.

Discussion

Our study findings provide important insights into sexual and reproductive health during the initial COVID-19 wave in diverse global settings. Our data suggest that condomless sex with casual partners did not substantially change with the introduction of COVID-19 measures. Experiences of intimate partner violence may have decreased during COVID-19 measures compared to prior to the pandemic. Among the health services we examined, there were marked decreases in access to HIV/STI testing and abortion services.

We found that condomless sex was similar during COVID-19 measures compared to the pre-COVID-19 period for many respondents. Approximately 74-87% of people reported that condom use with a steady and/or casual partner stayed the same during these two periods. Maintenance of pre-COVID-19 condom use behavior is consistent with observational studies from sex workers and ethnic and racial

minority groups.^{20,21} Given that COVID-19 introduced new disease risks, some individuals may have been less likely to engage in risky sexual behaviors.²² Only 8.7% of the sample noted problems accessing condoms. The COVID-19 environment did not appear to substantially alter individual decisions about whether to use a condom.

Our results suggest a modest decrease in sexual and physical partner violence during COVID-19 measures compared to the pre-COVID period. Although there was concern about COVID-19 exacerbating intimate partner violence,² data on IPV during the pandemic have been mixed. Some studies suggest increased intimate partner violence during COVID-19 measures,^{23,24} while others found decreases.²⁵ Other research has shown that IPV may increase after a natural disaster,^{26,27} indicating a need for follow up studies to see if IPV worsened as the COVID-19 pandemic continued beyond the initial wave that we examined in this study.

Our study also indicates that COVID-19 measures interrupted access to HIV/STI testing and abortion services. This finding is consistent with other studies observing interruptions in HIV/STI testing^{28,29} and abortion services.³⁰ Decentralized testing approaches using STI self-collection and HIV self-testing³¹ have alleviated some of the gaps in diagnostic service provision during COVID-19.

However, despite strong evidence that telemedicine is safe and effective for providing medical abortion services,³² several countries further restricted abortion services during the initial wave of the COVID-19 pandemic.³³ More research and advocacy are needed to support abortion services during pandemics and similar circumstances.

Our study has several limitations. First, this was an online survey organized during COVID-19 measures, introducing risk for selection bias. Although there is no guideline for conducting online surveys, we used several strategies to limit bias, including the use of online panels, partnerships with

organizations for sample recruitment, review of analytics, and prespecified analysis plans.¹³ Second, although we were able to capture data from different times during the COVID-19 epidemic, this was a series of retrospective cross-sectional studies, and we did not capture how sexual behaviors and access evolved over the course of the pandemic. Third, our sample included more women, people with higher education, and people living in high-income countries compared to populations in respective countries. At the same time, data from one of the convenience samples included in this analysis suggested that the convenience sample included similar proportions of adults within subnational geographic areas compared to census data.³⁴ Fourth, our study had fewer studies from low-income countries which may have been due to later COVID-19 initial waves and less capacity for research alongside the pandemic. At the same time, our main findings were robust when stratifying based on country income level. Fifth, our meta-analyses revealed substantial heterogeneity. However, the common survey instrument, shared protocol, and similar online recruitment methods provide a strong rationale for making these comparisons. In addition, our sensitivity analyses suggested that main findings were robust across country income level, sample size, and sampling strategy. Sixth, our data relied on self-reported data and did not capture STI/HIV transmission.

Although COVID-19 measures made it more difficult to obtain population-representative samples, we organized a multi-country analysis of data from 30 countries. Several studies have noted that online surveys may be particularly useful for collecting information about sensitive sexual behaviors compared to in-person survey methods.^{13,3,35,36} Strengths of this study include the inclusive open science approach, the harmonization of key sexual health variables across countries, and the geographic diversity.

This study has implications for research and policy. From a research perspective, this underscores the need for sexual behavior, IPV, and reproductive health service access research in emergency settings. Given the heterogeneity in study outcomes, multi-national studies should consider using methods that

account for clustering (e.g., multilevel modeling). From a policy perspective, our data suggest the need for expanded use of decentralized sexual and reproductive health interventions that could be implemented in emergency settings (e.g., self-testing, self-collection, telemedicine abortion). The results from country-level data have already helped to inform COVID-19 related sexual and reproductive health policies in several countries, including Latvia, Czech Republic, Panama, Singapore, Uruguay, and Portugal.

Finally, the open science methods used in this study point towards new frameworks for global health collaboration. We organized a survey in thirty diverse settings during a pandemic, despite not having a central funding source or a COVID-19-specific organizational remit. This suggests the feasibility of grounds-up organized multi-country studies focused on sexual and reproductive health.

NOTES

Author Contributions

RT, JTE, KM, and JT developed the initial idea. RT and JTE led the data analysis with the data analysis subgroup who included AA, AL, MU, KM, EW, TH, SS, MM, JT, WHZ, AM and JF. TH, PK, SS, LC, EB, LR were part of the digital working group that programmed surveys. KK, KM, AG, SB, DH, SS, JS, TE, CM, SE, WL, LP, GL, AO, and CM were all country leads on surveys and led field testing, translation, ethical review applications, and survey implementation at the country level. KM and JT were coordinators for multi-country analysis. All authors read and approved the final version that was submitted.

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Declarations of Interest

Adesola Olumide: In last 36 months received grants/contracts from the Consortium for Advanced Research Training In Africa (CARTA), consulting fees from the Population Council, FP CAPE, Measurement Learning and Evaluation, Family Health International, Federal Ministry of Health/WHO, and PATHS 2, payments/honoraria from the West Africa College of Physicians and CARTA, support for attending meetings and/or travel from CARTA, Stroke and Cardiovascular Research Training (S-CaRT) Institute Programme (NIH Fogarty) and the WHO-HRP, stock or stock options from the First Bank Nigeria PLC and Cadbury Nigeria PLC, and served in a leadership or fiduciary role at the Society for Adolescent and Young People's Health in Nigeria and Society for Public Health Professionals of Nigeria.

Amanda Gabster: In last 36 months served in a leadership or fiduciary role at the Community Development Network of the Americas.

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Devon Hensel: In the last 36 months received consulting fees from OMGYes.com, Journal of Sex Research and Journal of Adolescent Health, and served in a leadership or fiduciary role for several national committees for the Society for Adolescent Health and Medicine.

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Table 1. Sociodemographic characteristics of participants in the I-SHARE multi-country survey, 2020-2021 (n = 22,724).¹

<i>Variable</i>	<i>Level</i>	n	%
<i>Sex assigned at birth</i>	Female	13450	68.5
	Male	6169	31.4
	Another sex ²	28	0.1
	Total	19,647	100
<i>Gender</i>	Cisgender	18512	95.6
	Non-cisgender	777	4.0
	Another gender	86	0.4
	Total	19,375	100
<i>Sexual Orientation</i>	Heterosexual	16592	77.9
	Bisexual	1823	8.6
	Gay	818	3.8
	Asexual	629	3.0
	Questioning or unsure	446	2.1
	Other	351	1.7
	Lesbian	315	1.5
	Pansexual	315	1.5
	Total	21289	100
	<i>Age group in years</i>	18-29	10135
30-39		6109	26.9
40-49		3268	14.4
50-59		1644	7.2
60-69		916	4.0
70+		652	2.9
Total		22724	100
<i>Education</i>	No formal education	102	0.5

	Some or completed primary school	944	4.2
	Some or completed secondary school	4717	20.8
	Some college or university	3457	15.3
	Completed college or university	12619	55.7
	Other	803	3.6
	Total	22,642	100
<i>Relative household socioeconomic position (1-10)^{3,4}</i>	Lower position (1-2)	2227	11.1
	3-4	4319	21.5
	5-6	7712	38.4
	7-8	4327	21.6
	Higher position (9-10)	1486	7.4
	Total	20071	100
<i>Urban/Rural</i>	Urban or semi-urban	15722	74.0
	Rural or semi-rural	4710	22.2
	Other	809	3.8
	Total	21241	100
<i>Relationship Status⁴</i>	Single, never had partner	2113	9.3
	Single, ever had partner	4268	18.8
	In a relationship, not cohabiting	4354	19.2
	Not married, cohabiting	4349	19.1
	Legally married, cohabiting	5753	25.3
	Legally married, not cohabiting	1083	4.8
	Separated or divorced	894	3.9
	Widowed	178	0.8
	Other	285	1.3
	Total	22724	100
<i>Current pregnancy situation</i>	Currently pregnant	514	3.7
	Currently trying to become pregnant	835	6.1

	Recently had a baby	432	3.1
	Not trying	10377	75.2
	Cannot have children	1584	11.5
	Other	60	0.4
	Total	13802	100
<i>Sexual Activity Frequency (Steady Partner)</i>	Never	811	5.3
	Monthly or less	2366	15.4
	2-4 times a month	5758	37.6
	2-3 times a week	4583	29.9
	4 or more times a week	1802	11.8
	Total	15320	100
<i>Sexual Activity Frequency (Casual Partner)</i>	Never	15655	75.9
	Monthly or less	3181	15.4
	2-4 times a month	1375	6.7
	2-3 times a week	316	1.5
	4 or more times a week	96	0.5
	Total	20623	100
<i>Sex Life Satisfaction (Before COVID-19)</i>	Very satisfied	7535	36.6
	Somewhat satisfied	8026	39.0
	Neutral	216	1.1
	Not very satisfied	3431	16.7
	Not at all satisfied	1382	6.7
	Total	20590	100
<i>Sex Life Satisfaction (During COVID-19)</i>	Very satisfied	5484	26.7
	Somewhat satisfied	6738	32.8
	Neutral	202	1.0
	Not very satisfied	4788	23.3

	Not at all satisfied	3353	16.3
	Total	20565	100

¹We have not included comparative population-based data for the entire sample since there were different sampling methods (convenience, online panel, population-representative) used. ²This included individuals whose sex at birth was not a male or female. ³ This item assessed relative household economic position as compared to other people in the same country, ranging from 1-10. 1 denotes a lower position and 10 a higher economic position. ⁴Household socioeconomic status and relationship status were not mutually exclusive and participants could choose more than one.

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Table 2. Key outcomes 3 months before and during COVID-19 social distancing measures in the 25 I-SHARE countries with ≥ 200 respondents, 2020

		N	%	95% CI
Condom Use with Steady Partners (Before)		N=3,281		
	Always or Most of the Time	2,045	62.33	(60.64-63.99)
	Sometimes/Rarely/Never	1,236	37.67	(36.01-39.36)
Condom Use with Casual Partners (Before)		N=4,357		
	Always or Most of the Time	2,816	64.63	(63.19-66.05)
	Sometimes/Rarely/Never	1,541	35.37	(33.95-36.81)
Perceived Changes to Condom Use with Steady Partners (During)		N=12,183		
	Decreased	1,262	10.36	(9.82-10.91)
	Stayed the same	10,588	86.91	(86.29-87.50)
	Increased	333	2.73	(2.45-3.04)
Perceived Changes to Condom Use with Casual Partners (During)		N=4,546		
	Decreased	640	14.08	(13.08-15.12)
	Stayed the same	3,374	74.22	(72.92-75.49)
	Increased	532	11.70	(10.78-12.67)
Any Physical or Sexual Violence from Partner (Before)		N=15,887		
	No	14,418	90.75	(90.29-91.20)
	Yes	1,469	9.25	(8.80-9.71)
Any Physical or Sexual Violence from Partner (During)		N=15,144		
	No	14,081	92.98	(92.56-93.38)

	Yes	1,063	7.02	(6.62-7.44)
Among those reporting no prior physical or sexual violence from a partner, 1.4% reported experiencing violence during COVID-19 measures. Among those who did report prior physical or sexual violence from a partner, 67.9% reported also experiencing violence during COVID-19 measures.				
COVID-19 measures made it more difficult to access condoms		N=10,790		
	No	9,857	91.35	(90.80-91.87)
	Yes	933	8.65	(8.12-9.19)
COVID-19 measures stopped or hindered you from seeking contraceptives		N=8,175		
	No	7,565	92.54	(91.95-93.10)
	Yes	610	7.46	(6.90-8.05)
COVID-19 measures stopped or hindered you from seeking or obtaining an abortion*		N=150		
* among those reporting being in need of abortion during COVID-19				
	No	104	69.33	(61.29-76.59)
	Yes	46	30.67	(23.41-38.71)
COVID-19 measures stopped or hindered you from accessing a test for HIV or STIs*		N=1,965		
* among those reporting wanting an HIV or STI test				
	No	1,215	61.83	(59.64-63.99)
	Yes	750	38.17	(36.01-40.35)

