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Intimate Partner Violence Among Adolescent Mothers Living With and Without HIV: A Pre- and During–COVID-19 South African Cohort Analysis

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A B S T R A C T

Purpose: Adolescent mothers face heightened economic and social vulnerabilities, which can place them at increased risk of intimate partner violence (IPV), prepandemic, and during COVID-19. However, few studies examine this population, and even less disaggregate findings by HIV status.
Methods: We analyzed data from 834 South African adolescent mothers, 35% living with HIV (LHIV), who reported on physical, psychological, and sexual IPV exposure at two interviews: 2018-2019 (prepandemic) and 2021-2022 (during COVID-19). We estimated lifetime prevalence of IPV, disaggregating by HIV status. We used inverse weighted probability multivariate mixed-effects logistic regression to examine changes in IPV between the two periods and if changes in IPV differed by HIV status.
Results: A quarter of adolescent mothers had experienced any IPV during COVID-19, quadruple prepandemic levels (24.7% vs. 6.0%). The increase was driven by surges in physical (+15.7%) and psychological (+11.2%) IPV. In both periods, psychosocial and physical IPV were the most prevalent forms and the most common combination among those who had experienced multiple forms of IPV. Exposure to any IPV was significantly more prevalent among those LHIV compared to those without HIV, prepandemic (9.5% vs. 4.1%, $p = .026$) and during COVID-19 (31.8% vs. 20.6%, $p < .001$). Adjusted models revealed an 18.2% significant increase in the average predicted probability of reporting IPV during COVID-19 compared to prepandemic, with no differential effect by HIV status.
Discussion: Adolescent mothers experienced a significantly higher burden of IPV during COVID-19 than prepandemic, with those LHIV experiencing the highest level. Initiatives to reduce IPV need to reach adolescent mothers, particularly those living with HIV.

IMPLICATIONS AND CONTRIBUTION

The study provides compelling evidence that adolescent mothers, particularly those living with HIV, are at significant risk of intimate partner violence, which heightened during COVID-19. Ensuring continued implementation and access to violence prevention interventions within HIV care, even especially during crises, holds significant importance in ensuring the well-being of this underexamined population.

Conflicts of interest: The authors have no conflicts of interest to disclose.
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Both intimate partner violence (IPV) and HIV pose significant threats to the health and well-being of adolescent girls and young women, females ages 15–24, living in Africa [1]. IPV constitutes physical, sexual, psychological and economic harm experienced in current or former intimate relationships [2]. Among women aged 15 and older, global past-year estimates of combined physical and sexual IPV (16%) are highest among ever-partnered adolescent girls aged 15–24 [3]. These estimates are higher in Africa, with a median prevalence of 25% [4]. In parallel, the risk of HIV acquisition in Africa is highest among this age group, accounting for more than 77% of all new HIV infections in 2022 [5]. Approximately 85% of the global population of adolescents aged 10–19 living with HIV (LHIV) reside in Africa [6]. IPV is associated with a reduced ability to negotiate condom use and increased overlap in sexual relationships, heightening the risk of HIV acquisition. Among those LHIV, exposure to IPV is associated with reduced adherence to antiretroviral therapy and viral load suppression [7]. Thus, the dual burden of IPV and HIV is of concern to many African countries which are experiencing an unprecedented growth in the population size of adolescents.

Research on the intersection of IPV and HIV during adolescence has rarely focused on the unique experiences of adolescent mothers. Yet, compared to never-pregnant adolescent girls, the heightened economic and social vulnerabilities associated with early parenthood may place adolescent mothers at a greater risk of IPV [8–10]. During pregnancy, adolescent girls may be pressured to drop out of school due to stigmatization and unsupportive school policies, negatively impacting their educational and employment prospects [8]. Within the home, the costs associated with antenatal care and childcare may contribute to financial stress, especially in resource-constrained households [9]. In cases of limited alternative economic and social avenues for support, these social and economic stresses may lead to establishing informal and inequitable intimate relationships, heightening the risk of both IPV and HIV acquisition [10].

The few studies that include IPV estimates on adolescent mothers are largely cross-sectional, recruited participants at antenatal care facilities, and have small sample sizes [10,11]. Compared to older females, adolescent girls are less likely to engage in antenatal care due to the stigma associated with teenage pregnancy and lower partner and familial support received during pregnancy [10,12]. Consequently, facility-based sampling may be biased as those at risk of IPV are more likely to be excluded from the study, limiting the external validity of the findings. Adolescent mothers are often a subgroup of the sample, not the focus of the study, resulting in small sample sizes that are underpowered to provide robust estimates on IPV or further disaggregate findings by HIV status [13,14]. For example, evidence from South Africa suggests that IPV among adolescent mothers can vary between 25% (n = 159) before birth to 46% (n = 90) at 6 weeks postpartum [13,15]. Research focused on adolescent mothers and with adequate sample sizes can enhance our understanding of this population's vulnerability to IPV.

The exclusion of adolescent mothers' experiences of IPV extends to the currently available evidence of the impact of the COVID-19 pandemic on IPV. We could not find any published data on the levels of IPV experienced by adolescent mothers in Africa during the COVID-19 pandemic [16]. Most studies provided aggregate estimates among adolescent girls, with conflicting findings [17–20]. For example, a longitudinal cohort study of 1,217 Kenyan adolescent girls aged 15–24 found no difference in the past-year prevalence of combined physical and sexual IPV (17%) prepandemic versus during COVID-19 [21]. In contrast, a cross-sectional study of 756 Kenyan adolescent girls aged 15–24 revealed an increase of 5% in physical, emotional, or sexual IPV during COVID-19 [18]. In South Africa, adolescent girls aged 13–24 (n = 373) reported a 13% increase in the experience of physical, emotional, or sexual IPV, with no observed difference in the proportion reporting IPV by HIV status [20]. While these studies likely include a small proportion of adolescent mothers, findings were not disaggregated by motherhood status.

This analysis examines whether there was an increase in the lifetime prevalence of IPV among adolescent mothers between 2 periods: before COVID-19 (prepandemic) and during the COVID-19 pandemic. We assessed if there were differential changes in the lifetime prevalence of IPV during COVID-19 among those LHIV compared to those without HIV.

Methods

Recruitment and data collection

We used data from a cohort of adolescent mothers living in the Eastern Cape province of South Africa who were recruited through 5 sampling strategies: an existing adolescent cohort study, community-based activities (door-to-door, referrals, schools, malls), and public health-care facilities (maternity and HIV care, schools and participant referrals [22]. Eligible participants were females between ages 10 and 24 who had their first child before age 20. Prepandemic interviews were conducted in person and were 45 minutes long. Participants used audio-enhanced computer-assisted self-interviewing methods with the assistance of a trained same-sex research assistant. During COVID-19, interviews were conducted by telephone with same-sex interviewers and lasted 20 minutes.

Adolescent mothers who completed both interviews form the analytic sample: n = 843, 72.7% of the cohort. Of those excluded, 1.6% (n = 18) were deceased, 3.8% (n = 44) later refused participation, 11% (n = 126) were not reachable via telephone, and 11% (n = 127) had an incomplete follow-up interview.

Study procedures

At both interviews, participants completed questionnaires on their livelihoods, school progression, violence, sexual reproductive health, and familial relationships (https://www.heybaby.org.za/research). Study questionnaires were developed with input from a Teen Advisory Group, piloted with adolescent mothers, translated to the local language, and included introductory text to minimize social desirability and stigmatization [23]. Interviewers completed 1 to 2 months of training on conducting research with vulnerable populations, such as adolescent

mothers and those exposed to multiple vulnerabilities, such as violence and HIV. Additionally, interviewers received training on remote data collection safety protocols, such as obtaining informed consent, assessing safety and availability of private space, managing interruptions, and spotting signs of discomfort in verbal cues. The study team received regular refresher training as scheduled or on request.

Ethics

Ethical approvals were obtained from the Universities of Oxford (R48876/RE001-3, SSD/CUREC2/12–21) and Cape Town (HREC 226/2017, CSSR 2013/4), Eastern Cape Departments of Health and Basic Education, and participating health and educational facilities. Participation in the study was voluntary, and written informed consent was sought from adolescent mothers. If the participant was younger than age 18, consent from the caregiver was also sought. Prepandemic, participants received a certificate of participation, snacks, and a small gift pack, including stationery and toiletries for their participation. During COVID-19, participants received a mobile phone voucher of ZAR30.00/$2.15.

Participants reporting IPV were offered referrals to counseling and social protection services, depending on their needs. Before data collection, the research team mapped referral sites providing violence response services and conducted regular check-ins to confirm the ongoing availability of services. When participants declined a referral, they were encouraged to contact the research team when ready. During COVID-19, the research team included an in-house counselor who provided the initial counseling (3 sessions) and oversaw the timely linkage of participants to local remote counseling and protection services. In addition, a registered child protection social worker held weekly meetings with the study team to review referral management. To support interviewers with vicarious trauma, the research team held weekly debrief sessions and had access to one-on-one counseling services with an external provider.

Study measures

Dependent variable. IPV included measures of psychological, physical, and sexual IPV. Prepandemic levels of IPV were assessed using 6 items from the revised Conflict Tactics Scale, with participants reporting on their lifetime exposure [24]. During COVID-19, past-year exposure to IPV was assessed using 4 items from the WHO Violence Against Women Instrument, which closely captured the same constructs assessed prepandemic [25]. Figure 1 shows the exact wording for the comparable IPV assessments and covariates. The lifetime prevalence of IPV during COVID-19 was estimated as the cumulative affirmative reports of IPV from the prepandemic and COVID-19 interviews. For comparability with existing literature, we computed 2 additional measures of IPV occurrence: physical and/or sexual IPV and exposure to multiple forms of IPV, which could include co-occurrence with psychological IPV.

Independent variable. There are 2 independent variables: *Period and HIV status*. Data collected in 2018–2019 was coded 0 for

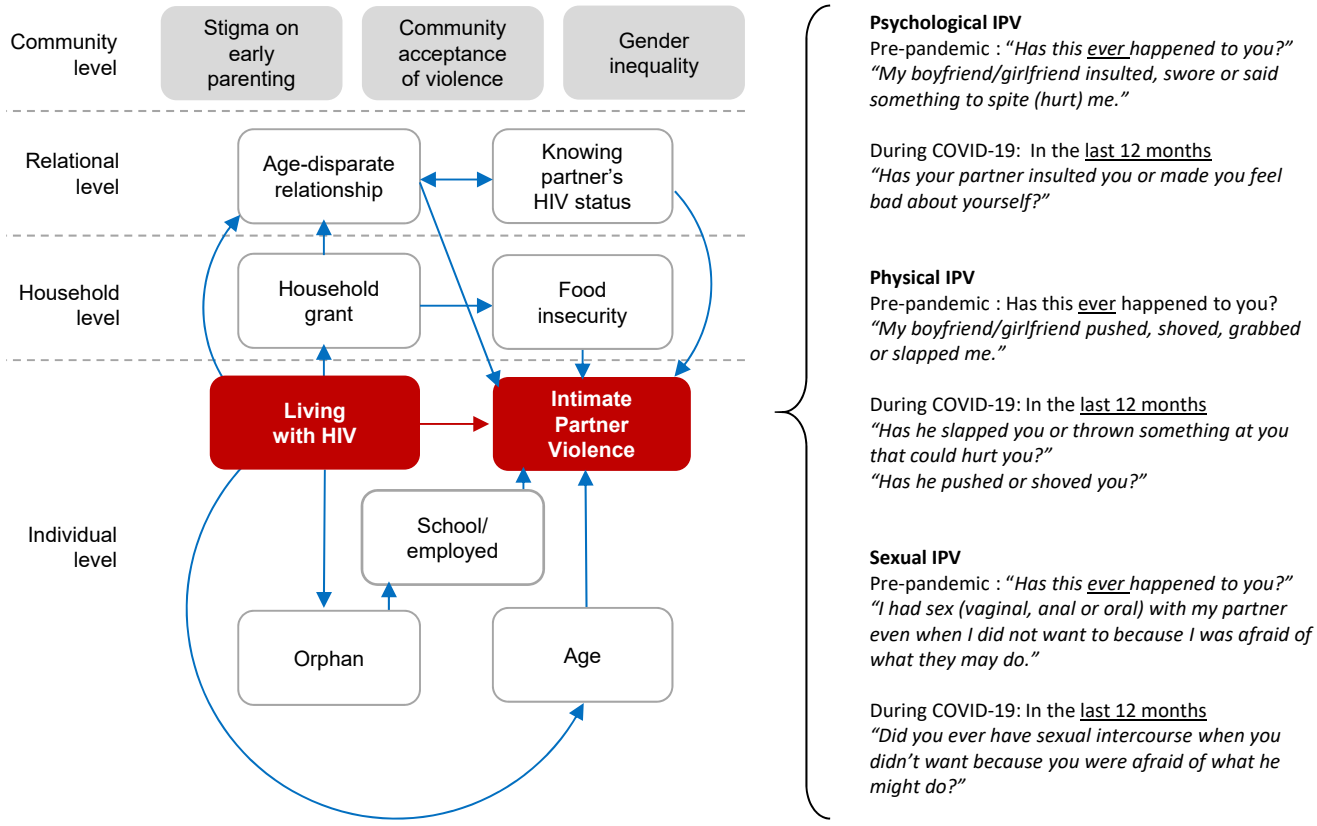

Figure 1. Conceptual framework on the pathways between living with HIV and experiencing IPV, including items used to assess IPV. IPV = intimate partner violence.

prepandemic, and data collected in 2021–2022 were coded one for during COVID-19. HIV status was self-reported at both interviews and validated by the research term through paper-based and electronic reviews of medical records. Those living with HIV were coded 1, and those without HIV were coded 0.

Covariates

We controlled for established risk factors of IPV and COVID-19 stressors associated with IPV, including age housing (formal/informal), orphanhood status (maternal/paternal) and enrollment in education or employment [11]. Relational factors included having an intimate relationship in the preceding 12 months, being ever-engaged in an age-disparate relationship (>5-year age difference) and knowing their partner's HIV status. Grant receipt was household receipt of any government-issued social support grant. Food security was measured as having enough food in the last 7 days, adapted from the South African National Food Consumption Survey [26]. Figure 1 shows the hypothesized relationships between all variables included in the analysis.

Data analysis

We compared the proportion reporting IPV, any and by form, between the 2 periods and by HIV status using a 2-sample t-test, chi-squared test or Fisher's exact test. Bivariate analysis showed an unbalanced distribution of the measured confounders at baseline. Therefore, before applying regression modeling, an inverse probability weighting (IPW) technique was used to improve exchangeability between those living with HIV and those without.

We allocated LHIV as the exposure and calculated exposure weights (w_e) as the inverse probability of being "exposed" (w_e) among those LHIV and the inverse probability of being unexposed among the HIV uninfected. To predict the probability of exposure (LHIV), we ran a logistic regression model based on age, education, past-year relationship status and household grant receipt. We considered food security and relationship status to be in the causal pathway and were excluded in generating weight estimates.

We applied the exposure weights to a multivariate mixed-effects logistic regression to estimate the changes in IPV during COVID-19 among those LHIV and those HIV uninfected. The model included an interaction term to assess if the effect of HIV on IPV changed during COVID-19 (β_3). To aid the interpretation, we estimated average adjusted probabilities using the *margins* command in STATA.

$$\text{logit}\left(\frac{1}{1-p}\right) = \beta_0 + \beta_1 Time_i + \beta_2 HIV_{it} + \beta_3 (Time_i * HIV_{it}) + \beta_k X_{kit} + \alpha \text{i} + \gamma \text{t} + \epsilon \text{it}$$

In a sensitivity analysis, we considered the potential selection bias introduced by missing data of those without an interview during COVID-19. We generated sample weights (w_s) using a logistic regression containing all baseline covariates, including HIV and IPV values. We reran the mixed-effects model weighted using the sample and exposure weights, which were included in the code as a product term (w_s* w_e). In doing so, we further assigned greater weight to participants with characteristics associated with the probability of being lost to follow-up. Lastly, we restricted the analytical sample to those in intimate relationships in the past year and reran the mixed-effects regression model with the appropriate exposure and sample weights. Analysis was conducted in STATA 16.

Results

There was no significant difference in baseline IPV exposure and HIV status between participants who completed both interviews and those who only completed the prepandemic interview. Among the 843 adolescent mothers who completed both interviews, the median age at birth of the first child was 17 (IQR = 16–18), and about one-third (n = 305, 35%) were living with HIV (Table 1). The median age prepandemic and during COVID-19 was 18 and 22, respectively. Between the 2 periods, there was an increase in the proportion of adolescent mothers in school/employed, living in formal housing, in intimate relationships, and knew their partners' HIV status. Levels of food security significantly decreased during COVID-19. Compared to those without HIV, adolescent mothers LHIV were older, more likely to be out of school/unemployed and had an intimate relationship in the past year. Additionally, a substantially lower proportion of adolescent mothers LHIV knew the HIV status of their intimate partner. These differences by HIV status were observed for both periods.

Lifetime prevalence of IPV: prepandemic and during COVID-19

The lifetime prevalence of IPV quadrupled during COVID-19, from 6.0% (95% CI = 4.5–7.9) prepandemic to 24.7% (95% CI = 22–28) during COVID-19 (Figure 2). Increases in IPV during COVID-19 were driven by surges in physical (+15.7%, 95% CI = 14.9–17.9) and psychological (+11.2%, 95% CI = 10.5–13.5) IPV. While few reported sexual IPV prepandemic, this increased to 6.9% (95% CI = 5.2–8.8) during COVID-19. The lifetime prevalence of physical and/or sexual IPV increased 6-fold during COVID-19. Among those who have ever-experienced IPV, there was an increase in the proportion exposed to multiple forms of IPV: more than half (n = 110, 53%) during COVID-19 compared to a third (n = 18, 35%) prepandemic. Psychological and physical IPV were the most prevalent forms and the most common combination among those who had ever-experienced multiple forms of IPV.

Differences in levels of IPV by HIV status at both periods

In both periods, adolescent mothers LHIV experienced significantly higher levels of IPV compared to those without HIV (Figure 2). Prepandemic, the proportion who had ever-experienced IPV was 9.5% among those LHIV compared to 4.1% among those without HIV (p = .026). During COVID-19, levels increased to 31.8% and 20.6% respectively. Differences at both periods were primarily driven by adolescent mothers LHIV being more likely to have ever-experienced psychological IPV than their HIV-negative peers (p value < .001). During COVID-19, adolescent mothers LHIV disproportionally experienced physical and/or sexual IPV, including a heightened co-occurrence of IPV forms.

Table 1
Sociodemographic characteristics of adolescent mothers prepandemic and during COVID-19, stratified by HIV status

	Prepandemic				During COVID-19			
	Total (n = 843)	Living with HIV (n = 305,36%)	Without HIV (n = 538,64%)	*p* value	Total (n = 843)	LHIV (n = 305,36%)	HIV uninfected (n = 538,64%)	*p* value
Age [median, IQR]	18 (17–19)	19 (18–21)	18 (17–19)	<.001	22.2 (21.1–23.5)	23.4 (22.1–25.3)	21.8 (20.7–22.7)	<.001
10–19	657 (79%)	156 (53%)	501 (94%)		42 (5%)	7 (2%)	35 (7%)	
20–24	176 (21%)	142 (47%)	34 (6%)	<.001	630 (75%)	166 (54%)	464 (86%)	<.001
25+	1 (0%)	1 (0%)	0 (0%)		170 (20%)	132 (43%)	38 (7%)	
School/Employed	438 (52%)	102 (33%)	336 (62%)	<.001	590 (70%)	184 (60%)	406 (75%)	<.001
Formal housing	659 (81%)	225 (78%)	434 (82%)	.188	803 (95%)	514 (95%)	289 (95%)	.606
Past-week food security	618 (74%)	213 (71%)	405 (76%)	.158	534 (63%)	187 (62%)	367 (65%)	.388
Household grant	767 (92%)	282 (94%)	485 (91%)	.062	794 (94%)	283 (93%)	513 (95%)	.166
Intimate Relationship (past-year)	554 (67%)	216 (73%)	338 (54%)	.003	668 (79%)	246 (81%)	422 (78%)	.446
Know partner's HIV status	365 (65%)	112 (52%)	251 (74%)	<.001	496 (74%)	165 (67%)	331 (78%)	.001
Age-disparate relationship (ever)	189 (23%)	86 (29%)	103 (19%)	.002	221 (26%)	98 (32%)	123 (23%)	.003

Average adjusted predicted probabilities of IPV prepandemic and during COVID-19

In a multivariate IPW_e mixed-effects model adjusting for measured covariates, the average predicted probability of experiencing IPV during COVID-19 increased by 18.2% during COVID-19 (Figure 3 and Table 2). The model showed no differential effect in the increased average adjusted predicted probability of IPV during COVID-19 based on the adolescent mothers' HIV status; confidence intervals of point estimates intersect.

Sensitivity analyses

Findings persisted in 2 sensitivity analyses, as shown in Table 2. Those who were retained were more likely to be either in school or employed, living in formal housing, and less likely to have experienced orphanhood. In exposure and sample-weighted analyses, effect estimates did not significantly differ from those estimated using the analytical sample. However, the error terms were slightly wider. The same was observed in the restricted analysis of those in intimate relationships in the past year.

Discussion

Our findings confirm that adolescent mothers experienced a significantly higher burden of IPV during COVID-19 compared to the prepandemic period. One in four (24.6%) compared to one in 16 (6.0%). While IPV was heightened at both periods among adolescent mothers LHIV compared to those without HIV, the effect of HIV on the probability of ever experiencing IPV did not change during COVID-19, suggesting adolescent mothers, regardless of HIV status, were equally vulnerable to COVID-19 stressors that increased the likelihood of IPV. Our analysis is among the first to provide rigorous empirical evidence on IPV levels among a uniquely vulnerable yet underexamined population in Africa: adolescent mothers.

The study findings contribute to the research on IPV and HIV in 5 important ways. First, this research adds to the limited empirical body of evidence confirming anecdotal concerns of increased violence against women during COVID-19. In particular, a longitudinal design involving the same participants established temporality and controlled for time-invariant confounders, such as early childhood exposure to violence, that could affect the observed relationship between COVID-19 and IPV. However, the robustness of the estimates is threatened by the differences in the measures used to assess IPV at the 2 periods. IPV measures during COVID-19 included fewer behaviors that constitute psychological IPV, which could result in the underestimation. The physical IPV act of being grabbed was replaced with having something thrown at you at COVID-19 interviews. Taken together, the variation in the assessment of IPV most likely resulted in the underestimation of IPV during COVID-19, providing conservative estimates. Nonetheless, the lack of comparative studies focused on IPV among adolescent mothers living in Africa highlights the need for future research to understand the vulnerability of this population better.

Second, our study unpacks how different forms of IPV may have increased during COVID-19. While the prevalence of psychological and physical IPV was similar during the prepandemic period, we observed higher rates of physical IPV than psychological IPV during COVID-19. This included acts of being pushed, shoved, grabbed, or slapped by an intimate partner. As adolescent mothers grow older, they are more likely to cohabit with their intimate partner. Thus, stay-at-home restrictions would have inadvertently increased the chances of their partner perpetrating physical IPV. Additionally, experiences of anxiety and uncertainty associated with COVID-19 may have resulted in greater negativity and hostility toward others, including intimate partners [27,28]. This may explain why psychological IPV acts such as being insulted or sworn at by an intimate partner increased more than sexual IPV.

Third, our findings draw attention to the compounding effect of HIV on the vulnerability to IPV. At both periods, IPV levels were significantly higher among adolescent mothers LHIV than those without HIV. Compared to those without HIV, we observed higher out-of-school or unemployment rates among those LHIV; a higher proportion had engaged in age-disparate relationships, and a lower proportion knew their partners' HIV status. These relationship factors have been shown to increase the risk of IPV [29]. Our study with adolescents recruited in community settings provides essential and missing information to the latest meta-analyses of prepandemic estimates of IPV by HIV status among adult African women [30]. Our findings suggest there may be

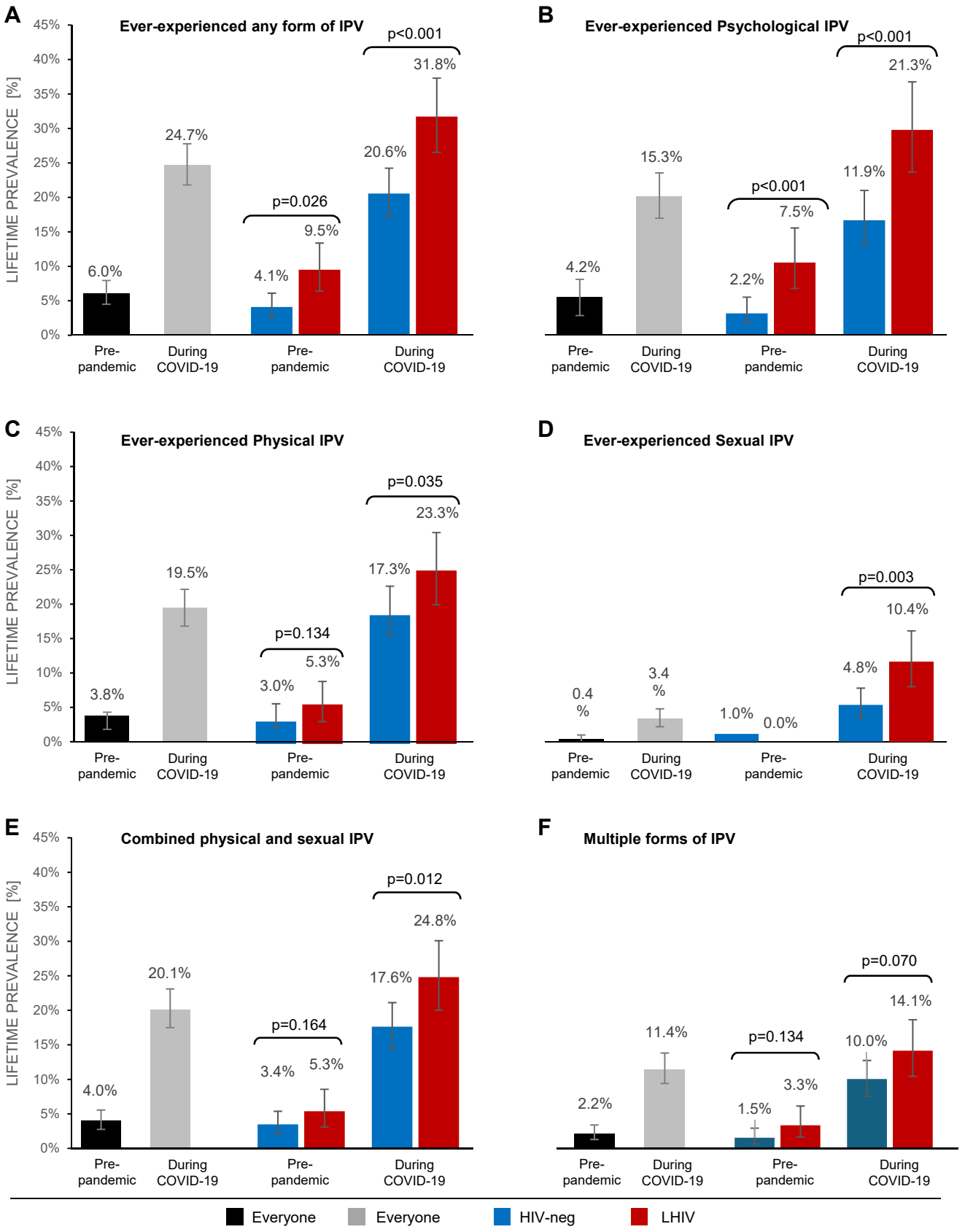

Figure 2. Lifetime prevalence of IPV among adolescent mothers living in South Africa, prepandemic and during the COVID-19 period, and stratified by HIV status (A–F).

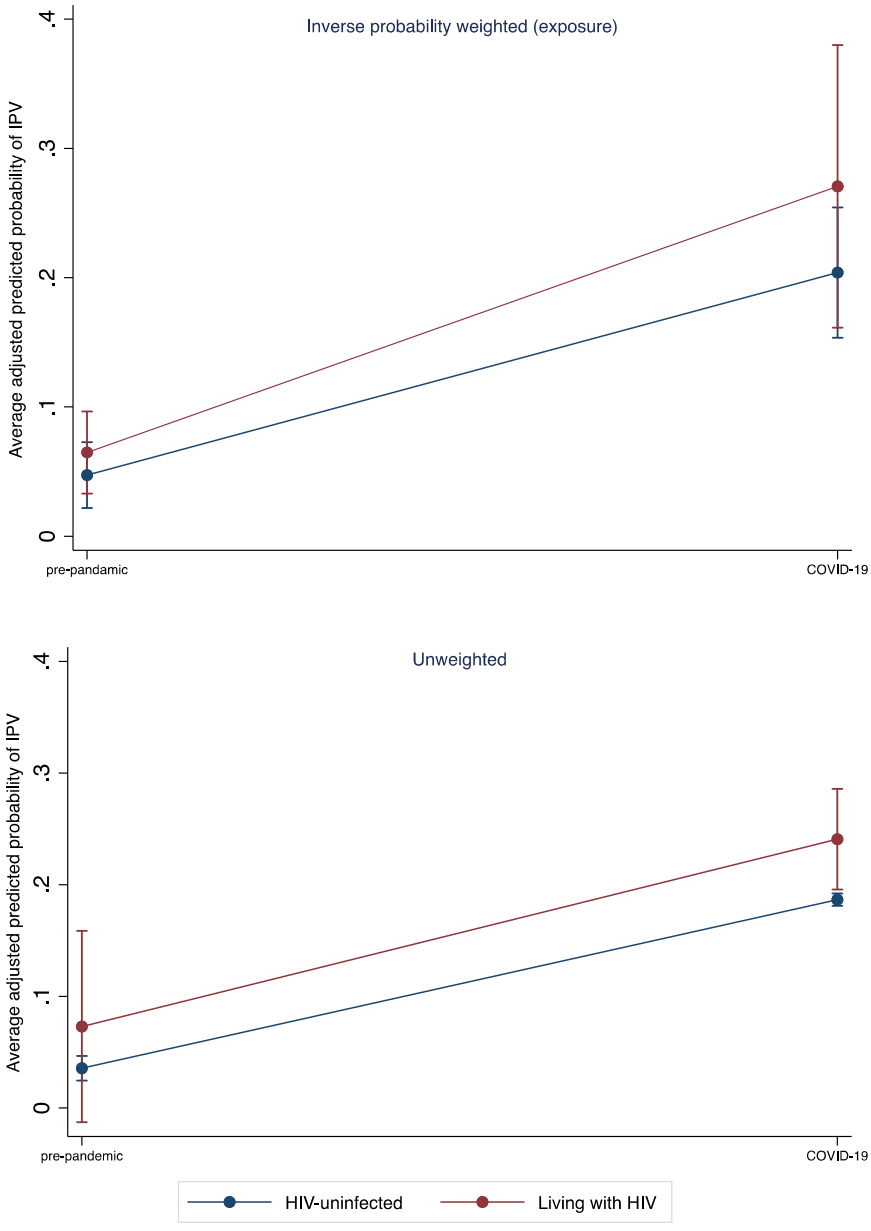

Figure 3. Exposure inverse probability weighted and nonweighted average adjusted probability estimate of IPV by HIV status between the 2 periods: prepandemic and during COVID-19. IPV = intimate partner violence.

variability in experiences of IPV among women, with specific subgroups, such as adolescent mothers, facing differential risk of IPV based on their HIV status, which may not exist in adult women [30].

Fourth, our analysis contributes to the understanding of how COVID-19 affected existing inequalities by illustrating that the pandemic did not exacerbate HIV's effect on IPV occurrence among adolescent mothers. While we did not investigate which COVID-19 stressors were associated with increased IPV, several theoretical, empirical, and qualitative literature have illustrated how financial stress and prolonged isolation experienced during COVID-19 could heighten the risk of IPV [31]. Specific to South Africa, qualitative interviews with adult women suggested that vulnerability to IPV during COVID-19 was potentially amplified by the limited access to social support from friends, family, and social services during lockdown periods [32].

Fifth, our hypothesis of IPV among adolescent mothers is higher than among adolescents who are nonmothers is not supported by prepandemic estimate. We observed a lower lifetime IPV prevalence of 6.0% prepandemic compared to global (24%), regional (Africa, 15.8%), and local (South Africa, 13.1%) estimates for aggregated adolescent girls ages 15–24, mostly nonmothers [3,4,13]. The comparison studies used at least 8 items from the 13-item WHO Violence Against Women instrument, whereas our study used 6 items from the revised Conflict Tactics Scale items. While both scales have been validated in South Africa, using fewer scale items with differing acts of IPV assessed may have resulted in underestimating our sample's prepandemic lifetime

Table 2
Average adjusted predicted probabilities of IPV and 95% confidence intervals based on mixed-effects models under multiple conditions

	Exposure weighted	Exposure and sample weighted	In a relationship: Exposure weighted
Period			
Prepandemic	0.056 (0.033–0.080)	0.0668 (0.039–0.094)	0.094 (0.053–0.135)
During COVID-19	0.238 (0.164–0.312)	0.263 (0.184–0.342)	0.280 (0.190–0.369)
HIV status			
Without HIV	0.134 (0.109–0.159)	0.147 (0.120–0.173)	0.180 (0.143–0.216)
Living with HIV	0.177 (0.133–0.221)	0.201 (0.1545–0.247)	0 0.223 (0.165–0.281)
Differential effect			
Prepandemic*without HIV	0.047 (0.022 -0.073)	0.052 (0.024–0.081)	0.081 (0.034–0.128)
Prepandemic*living with HIV	0.065 (0.033–0.100)	0.077 (0.041–0.114)	0.103 (0.0525–0.154)
During COVID-19*without HIV	0.2039617 (0.154–0.254)	0.2183535 (0.166–0.271)	0.2467831 (0.183–0.311)
During COVID-19*living with HIV	0.271 (0.161–0.380)	0.298 (0.187–0.410)	0.306 (0.179–0.432)

Models were adjusted for the following covariates: age, housing, school/employment, past-week food security, grant receipt, past-year relationship, and age-disparate relationship. In the analysis restricted to those with intimate partners in the last year, adjusted covariates also included knowing your partner's HIV status. Asterisk denotes interaction.
IPV = intimate partner violence.

prevalence of IPV. Another plausible explanation involves social desirability bias, where due to fear of stigma and blame related to early parenthood, adolescent mothers are less willing and able to disclose their experience of IPV [33].

There are limitations to this analysis. Unsuccessfully traced participants, who account for 27% of the cohort, had baseline factors associated with an increased risk of IPV; thus, even though we employed IPW methods, the study may underestimate IPV levels during COVID-19. Transitioning to telephonic interviews from self-administered interviews could contribute to underreporting IPV during COVID-19. Self-administered violence measures are less prone to social desirability bias than estimates from interviewer-led assessments [11]. There may have been cases where participants did not have complete privacy and thus could not share sensitive information over the phone. On the other hand, participants may have disclosed higher levels of IPV exposure during COVID-19 interviews due to increased trust in the research team during the second interview. The net effect of these methodological limitations is inconclusive. Regardless, these methodological constraints cannot wholly account for the observed increased IPV levels during COVID-19.

Notwithstanding these limitations, the data presented here are unique in investigating IPV exposure among adolescent mothers and the effect of COVID-19 on IPV levels in South Africa, a country heavily burdened by both IPV and HIV. Community-based recruitment of study participants strengthens the external validity of our findings, particularly for periurban settings in Africa that are characterized by high levels of poverty and economic insecurity. Assessment of IPV during COVID-19 using past-year recall provides a broader understanding of the dynamics in IPV experiences during COVID-19, compared to 3–6 months of recall time used in most studies [18].

Moreover, the data presented here offers critical implications for policy and practice. There is a need for tailored IPV support services for adolescent mothers living with HIV that can be provided at both the community level and at service entry points such as antenatal care clinics and child well-being health facilities. This includes strengthening linkage and referral pathways through peer supporters who promote adolescent uptake of services as they act as affirming role models who share similar experiences with young mothers [34]. Programs need to tackle harmful social norms and gender inequality [35]. Adaptation of successful school-based and community-led intervention programs involving both boys and girls, such as SASA! from Uganda and PREPARE from South Africa, can support relationship skills building, including conflict resolution skills, which have been shown to decrease all 3 forms of IPV [36,37]. Early intervention can include evidence-based parenting programs and social protection packages such as government cash transfers, which are effective in preventing violence exposure among adolescents [16]. To end violence against women, governments and communities must invest in understanding the impact of COVID-19 to support pandemic preparedness and response.

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Author Contributions: Nontokozo Langwenya: Conceptualization, Data Collection, Study Design, Data Analyses, Writing original draft. Elona Toska: Data Collection, Study Design, Referrals. Lucie Cluver: Data Collection, Study Design, Referrals. Heidi Stöckl: Expert knowledge, Result framing and interpretation.

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Supplementary Data

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