

Title: Risk Beyond Relationships: Intimate Partner Violence and Rates of Sexually Transmitted Infections in Adolescents

Background

Intimate partner violence (IPV)—aggression or abuse within a romantic relationship—is common in adolescents and young adults, with nearly 41% of women and 26% of men experiencing it in their lifetime. While prior research demonstrates that adults who experience IPV have higher rates of sexually transmitted infections (STIs), including HIV, this association is poorly studied in adolescents. We sought to explore the associations between IPV and STIs in adolescents and young adults aged 11 to 25 years using a large, multi-institutional dataset.

Methods

We conducted a retrospective cross-sectional analysis using the Epic Cosmos electronic health record database. We identified patients (aged 11–25) with documented screening for IPV (emotional, fear, physical, or sexual) between August 2020 and July 2025. Patients were grouped by exposure status: IPV+ (reported experiencing IPV) and IPV– (reported no IPV exposure). Outcome measures included diagnoses of gonorrhea, chlamydia, trichomoniasis, syphilis, and HIV. We calculated odds ratios (ORs) to assess the likelihood of STI diagnosis in the IPV+ group compared to the IPV– group.

Results

A total of 1,266,479 patients had documented IPV screening, with 41,416 (3.3%) reporting at least one type of IPV exposure. We found significant odds ratios for the association between each category of IPV (emotional, fear, physical, and sexual) and each STI outcome. Across all models, IPV exposure was associated with significantly higher odds of STI diagnosis (e.g., ORs ranged from 2.01 to 4.19).

Conclusion

In this large cohort of adolescents and young adults, all categories of IPV were significantly associated with increased odds of STIs compared to those who had not experienced IPV. These findings underscore the importance of routine IPV screening in adolescent care and the need for integrating targeted STI prevention and treatment strategies for at-risk adolescents and young adults.

Table 1: Demographic Data

Number of Patients	# IPV+	% IPV+	# IPV-	% IPV-
Race (if disclosed, more than one may be selected)				
White	28886	69.7	812506	66.3
Black or African American	9771	24.0	251223	20.5
Other	6469	15.6	211026	17.2
Asian	1029	2.5	45508	3.7
American Indian	906	2.2	16598	1.4
Native Hawaiian	301	0.7	7819	0.6
None of the Above	1287	3.1	54158	4.4
Ethnicity (if reported)				
Not Hispanic or Latino	32009	77.3	879,766	71.8

Hispanic or Latino	6367	15.3	264,733	21.6
Not disclosed	3040	7.3	80564	6.6
Gender				
Female	15482	37.4	378798	30.9
Male	3192	7.7	136809	11.1
Transgender male	335	0.8	4567	3.7
Transgender female	231	0.6	2550	0.2
Non-Binary	66	0.2	653	0.05
Not Disclosed	22110	53.4	701686	57.3

Table 2: Likelihood of Sexually Transmitted Infection

	Odds Ratio	99% CI	P-value
(vs. – Emotional IPV)			
+ Emotional IPV/+Gonorrhea	2.59	2.37 – 2.83	<0.01
+ Emotional IPV/+Chlamydia	2.16	2.05 – 2.27	<0.01
+ Emotional IPV/+Trichomoniasis	2.58	2.06 – 3.24	<0.01
+ Emotional IPV/+Syphilis	2.43	2.04 – 2.89	<0.01
+ Emotional IPV/+HIV	2.30	1.86 – 2.83	<0.01
(vs. – Fear IPV)			
+ Fear IPV/+Gonorrhea	2.68	2.41 – 2.97	<0.01
+ Fear IPV/+Chlamydia	2.10	1.97 – 2.23	<0.01
+ Fear IPV/+Trichomoniasis	2.99	2.32 – 3.87	<0.01
+ Fear IPV/+Syphilis	2.61	2.13 – 3.19	<0.01
+ Fear IPV/+HIV	2.42	1.89 – 3.09	<0.01
(vs. – Physical IPV)			
+ Physical IPV/+Gonorrhea	3.72	3.34 – 3.35	<0.01
+ Physical IPV/+Chlamydia	2.72	2.54 – 2.90	<0.01
+ Physical IPV/+Trichomoniasis	4.19	3.22 – 5.45	<0.01

+ Physical IPV/+Syphilis	3.63	2.95 – 4.47	<0.01
+ Physical IPV/+HIV	2.95	2.26 – 3.87	<0.01
(vs. – Sexual IPV)			
+ Sexual IPV/+Gonorrhea	2.16	1.80 – 2.59	<0.01
+ Sexual IPV/+Chlamydia	2.01	1.82 – 2.22	<0.01
+ Sexual IPV/+Trichomoniasis	2.45	1.66 – 3.95	<0.01
+ Sexual IPV/+Syphilis	2.93	2.17 – 3.96	<0.01
+ Sexual IPV/+HIV	2.75	1.91 – 3.96	<0.01
(vs. – Any IPV)			
+ Any IPV/+Gonorrhea	2.56	2.36 – 2.77	<0.01
+ Any IPV/+Chlamydia	2.10	2.01 – 2.20	<0.01
+ Any IPV/+Trichomoniasis	2.58	2.11 – 3.17	<0.01
+ Any IPV/+Syphilis	2.46	2.11 – 2.87	<0.01
+ Any IPV/+HIV	2.16	1.78 – 2.62	<0.01