

# Childhood Physical and Sexual Abuse Experiences Associated with Post-Traumatic Stress Disorder among Pregnant Women

MITERIO PERIN

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# BACKGROUND

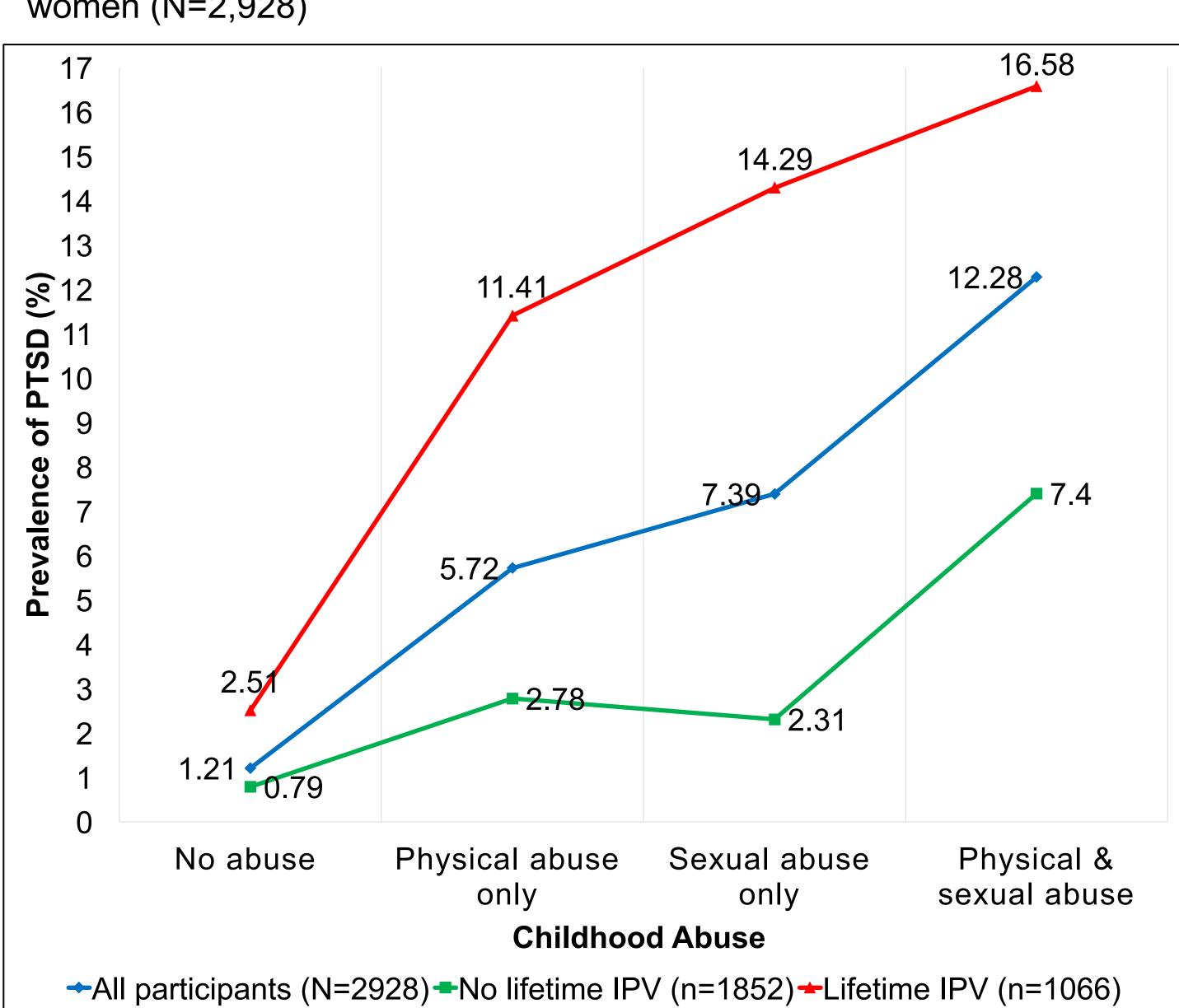
Posttraumatic Stress Disorder (PTSD), a pathological response that occurs following an exposure to extreme traumatic events, is characterized by symptoms of re-experiencing, avoidance and increased arousal. Although several investigators have demonstrated an association between history of childhood abuse and adulthood PTSD in non-pregnant women and men, only a handful of studies have extended this line of investigation to include pregnant women. Although there is substantial evidence of childhood physical and sexual abuse as risk factors for PTSD among men and non-pregnant women, few have examined this relationship among pregnant women and none of the studies included Latin American women. Therefore, to fill this gap, we evaluated the extent to which history of childhood abuse is associated with PTSD symptoms during early pregnancy among Peruvian women. Further, we explored the extent to which an association of childhood abuse with PTSD is mediated through adult experiences of intimate partner violence (IPV).

# METHODS

In-person interviews were conducted to collect information regarding history of childhood abuse and IPV from 2,928 women during early pregnancy. Antepartum PTSD symptoms were assessed using the PTSD Checklist-civilian version (PCL-C). Multivariate logistic regression procedures were used to estimate adjusted odds ratios (aOR) and 95% confidence intervals (CI) of PTSD associated with history of childhood abuse.

### RESULTS

**Figure 1.** Prevalence of PTSD assessed by the PCL-C among pregnant women (N=2,928)



#### Table 1. Characteristics of the Study Population According to Types of Childhood Abuse

RESULTS

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	All participant		No abuse (N = 828)		Physical abuse only (N = 1,137)		Sexual abuse only (N = 230)		Physical and sexual abuse (N = 733)		<i>P</i> -value	
		5										
Characteristics	(N = 2,928)											
	n	%	n	%	n	%	n	%	n	%	P-value	
Age (years) <sup>a</sup>	28.1	± 6.3	27.7 ±	6.1	28.1	± 6.4	28.2	± 6.5	28.7	± 6.3	0.02	
Age (years)												
18-20	160	5.5	39	4.7	67	5.9	15	6.3	39	5.3	0.01	
20-29	1642	56.1	508	61.4	628	55.2	127	53.1	379	51.7		
30-34	601	20.5	154	18.6	233	20.5	39	16.3	175	23.9		
≥35	525	17.9	127	15.3	209	18.4	49	20.5	140	19.1		
Education (years)												
≤6	123	4.2	36	4.3	48	4.2	5	2.1	34	4.6	0.73	
7-12	1600	54.6	462	55.8	617	54.3	124	51.9	397	54.2		
>12	1199	40.9	328	39.6	470	41.3	99	41.4	302	41.2		
Mestizo ethnicity	2199	75.1	633	76.4	846	74.4	179	74.9	541	73.8	0.40	
Married/living with a partner	2365	80.8	685	82.7	921	81.0	177	74.1	582	79.4	0.17	
Employed	1355	46.3	379	45.8	511	44.9	113	47.3	352	48.0	0.48	
Access to basic foods												
Hard	1453	49.6	345	41.7	556	48.9	124	51.9	428	58.4	<0.0001	
Not very hard	1473	50.3	483	58.3	579	50.9	106	44.4	305	41.6		
Nulliparous	1431	48.9	448	54.1	542	47.7	116	48.5	325	44.3	0.001	
Planned pregnancy	1209	41.3	364	44.0	477	42.0	91	38.1	277	37.8	0.10	
Gestational age at interview <sup>a</sup>	9.2	<b>⊢</b> 3.5	9.3 ±	3.4	9.2	± 3.5	9.3	$\pm$ 3.3	9.2	$\pm$ 3.5	0.92	
Early pregnancy BMI (kg/m²)												
<18.5	57	1.9	19	2.3	23	2.0	4	1.7	11	1.5	0.65	
18.5-24.9	1403	47.9	380	45.9	558	49.1	119	49.8	346	47.2		
25-29.9	1079	36.9	321	38.8	410	36.1	77	32.2	271	37.0		
≥30	359	12.3	93	11.2	142	12.5	25	10.5	99	13.5		
Intimate partner violence b	1066	36.4	199	24.0	377	33.2	98	41.0	392	53.5	<0.0001	
Depression (PHQ-9 ≥10)	801	27.4	128	15.6	349	31.0	49	21.7	275	37.9	<0.0001	

PHQ-9-Patient Health Questionnaire- 9; BMI-body mass index; Due to missing data, percentages may not add up to 100%.; a mean ± SD (standard deviation): b Lifetime intimate partner violence. For continuous variables, *P*-value was calculated using the ANOVA; for categorical variables, *P*-value was calculated using the Chi-square test.

**PTSD** 

(N = 182)

Unadjusted OR Adjusted OR

**Table 2.** Association between childhood abuse and PTSD<sup>a</sup> assessed by the PTSD Check List - Civilian Version (PCL-C) during pregnancy

No PTSD

(N = 2,746)

Childhood abuse	n	%	n	%	(95% CI)	(95% CI) <sup>b</sup>	(95% CI) <sup>c</sup>
No abuse	818	29.8	10	5.5	Reference	Reference	Reference
Any abuse	1928	70.2	172	94.5	7.29 (3.84-13.87)	7.21 (3.78-13.74)	5.73 (2.99-10.98)
Types of abuse							
No abuse	818	29.8	10	5.5	Reference	Reference	Reference
Physical abuse only	1072	39.0	65	35.7	4.96 (2.53-9.71)	4.88 (2.49-9.57)	4.31 (2.18-8.49)
Sexual abuse only	213	7.8	17	9.3	6.53 (2.95-14.46)	6.77 (3.04-15.06)	5.33 (2.38-11.98)
Physical & sexual abuse	643	23.4	90	49.5	11.45 (5.91-22.17)	11.32 (5.82-22.00)	8.03 (4.10-15.74)

<sup>a</sup> PTSD is defined as PCL-C score ≥ 44. <sup>b</sup> Adjusted for maternal age (years) at interview and ethnicity (Mestizo vs. other). <sup>c</sup> Further adjusted for lifetime intimate partner violence

# ACKNOWLEDGEMENTS

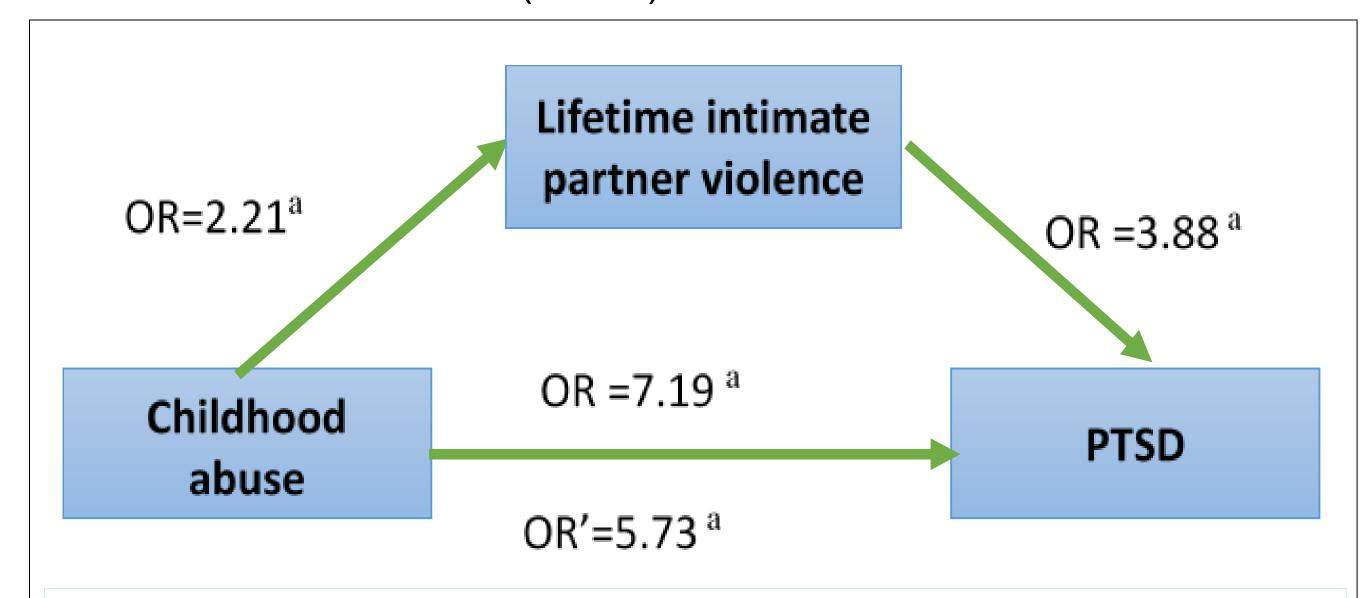
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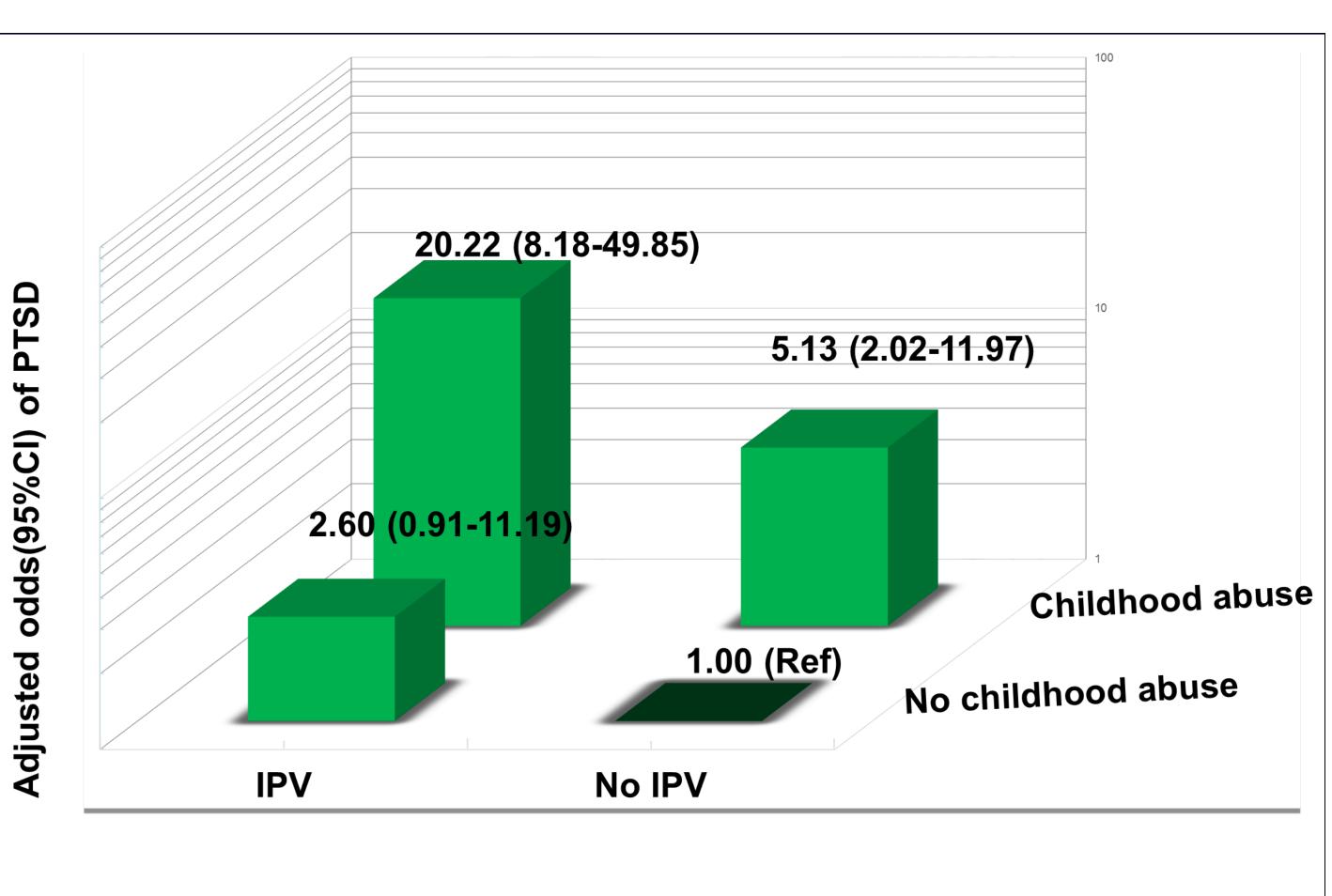
Adjusted OR

**Figure 2a)** Assessing the mediating role of intimate partner violence (IPV) on the association between childhood abuse and post-traumatic stress disorder (PTSD)



OR' represents the OR for the mediated path.; Adjusted for maternal age and ethnicity; a: *P*-value < 0.05; proportion of total effect mediated = 0.14; ratio of indirect to direct effect = 0.16; ratio of total to direct effect = 1.16

**Figure 2b)** Independent and joint effect of childhood abuse and IPV on the odds of PTSD



# DISCUSSION

Childhood abuse is associated with increased odds of PTSD during early pregnancy independent of lifetime IPV experiences. Our results are consistent with previous studies that identified childhood physical and sexual abuse as specific risk factors for PTSD among non-pregnant women and men. In low and middle income countries, 16% of pregnant women and 20% of postpartum women are affected by mental disorders, including anxiety and depression. These disorders are heightened by instances of poverty, low education, gender-based violence, and limited access to reproductive health services and commodities. Efforts should be made to prevent childhood abuse and mitigate its enduring effects on women's mental health.