

# The Intergenerational Transmission of Witnessing Intimate Partner Violence

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**Objective:** To explore the association between women's self-reports of having witnessed intimate partner violence (IPV) as a child and their children witnessing IPV.

**Design:** Retrospective cohort study. Data were collected by telephone survey from December 2003 to August 2005.

**Setting:** Group Health Cooperative, Seattle, Washington, a health maintenance organization.

**Participants:** English-speaking women (N=1288) aged 18 to 64 years enrolled at Group Health Cooperative for at least 3 years.

**Measures:** Abused women with children were asked about their history of having witnessed IPV as a child

(1 question). Abused women were identified using 5 questions from the Behavioral Risk Factor Surveillance System Survey and using 10 items from the Women's Experience With Battering Scale. Abused women were asked if their children had ever witnessed IPV.

**Results:** Adjusting for mothers' race/ethnicity and education level, children of women who had witnessed IPV during childhood had 1.29 times higher odds of witnessing IPV than children of women who did not witness IPV during childhood.

**Conclusion:** Children of women who had witnessed IPV during childhood are more likely to witness IPV than children of women who did not witness IPV.

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**S**HORT- AND LONG-TERM NEGATIVE consequences follow witnessing intimate partner violence (IPV) during childhood. Bogat et al<sup>1</sup> found that witnessing severe IPV was associated with trauma symptoms in infants. Kernic et al<sup>2</sup> found that children exposed to maternal IPV were more likely to have borderline or clinical-level scores on externalizing and total behavioral problems. Furthermore, Dube et al<sup>3</sup> found that the risks for self-reported alcoholism, illicit drug use, intravenous drug use, and depressed affect among adults increased as the frequency of witnessing IPV during childhood increased.

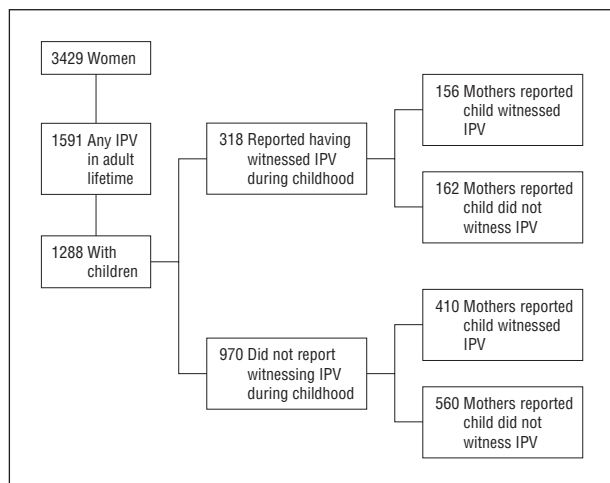
Witnessing IPV in childhood is also associated with IPV perpetration and victimization in adulthood.<sup>4,5</sup> Social learning theory<sup>6</sup> is accepted as an explanation for the intergenerational transmission of IPV,<sup>4,7-11</sup> whereby a child who witnesses IPV learns to have positive outcome expectations associated with the use of violence to resolve conflict and may perpetrate or be the victim of violence in subsequent relationships. The offspring of these IPV perpetrators and victims (who had witnessed IPV as children) may also witness IPV, and the cycle of violence and its ensuing detrimental effects may then be perpetuated among the next generation.<sup>4,5,12</sup>

Although the intergenerational transmission of IPV is well noted in the literature,<sup>4,9,11,13-15</sup> we propose a related phenomenon that, to our knowledge, has not been reported, namely, the intergenerational transmission of witnessing IPV. Perpetrators and victims of IPV who witnessed abuse between their parents may view IPV as normative; hence, it may be more likely to occur in front of their children.<sup>12</sup> With the goal of strengthening primary and secondary prevention efforts, the present study explored the association between women's self-reports of having witnessed IPV as a child and their children witnessing IPV among women who met criteria for current or past IPV and who had at least 1 child.

## METHODS

Women aged 18 to 64 years were randomly sampled from Group Health Cooperative, a large health plan in the Pacific Northwest. Data were collected by telephone survey from December 2003 to August 2005. The study was approved by the institutional review board of Group Health Cooperative, Seattle, Washington (the health plan in which data collection occurred). Women were asked about physical, sexual, and psychological IPV victimization using 5 questions from the Behavioral Risk Factor Surveillance System (BRFSS) Survey<sup>16</sup>

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**Figure.** Narrowing of the original sample to form the analytic sample. IPV, intimate partner violence.

**Table 1. Demographic Characteristics of Study Respondents**

Characteristic	Value
Age, y	
Mean (SD)	48.3 (9.8)
Median (range)	50 (18-64)
Annual household income, \$, No. (%) (n=1265)	
<25 000	156 (12.3)
25 000-49 999	384 (30.4)
50 000-74 999	333 (26.3)
≥75 000	392 (31.0)
Employed at least part-time, No. (%)	1056 (82.1)
Educational level, No. (%) (N=1288)	
≤High school graduate	179 (13.9)
≥Some college	1109 (86.1)
Race/ethnicity, No. (%) (n=1286)	
White	1069 (83.1)
African American	42 (3.3)
Asian	42 (3.3)
American Indian	53 (4.1)
Multiracial	44 (3.4)
Other	36 (2.8)
Hispanic, No. (%) (n=1286)	54 (4.2)
No. in household	
Mean (SD)	2.9 (1.5)
Median (range)	3 (1-11)
Children in home for whom respondent is guardian, No.	
Mean (SD)	0.7 (1.0)
Median (range)	0 (0-6)

and about battering in their last 3 relationships using the Women's Experience With Battering (WEB) Scale.<sup>17</sup> The BRFSS Survey questions probed exposure to physical abuse such as hitting, kicking, and slapping (1 question), forced intercourse (1 question), forced sexual contact that did not result in intercourse (1 question), fear due to a partner's anger or threats (1 question), and put-downs, name-calling, and controlling behavior (1 question). All BRFSS Survey questions were answered yes or no or "I don't know."

The WEB Scale assesses a woman's fear and perceived loss of power and control associated with abuse.<sup>17-19</sup> For example, items ask women to rate the degree to which they agree with statements like "I try not to rock the boat because I am afraid of what my partner might do," or "My partner has a look that goes straight

**Table 2. Cross-Tabulation of Mother Having Witnessed Intimate Partner Violence (IPV) During Childhood and Child Witnessing IPV<sup>a</sup>**

Mother Reported She Had Witnessed IPV During Childhood	No. (%)		
	Mother Reported Her Child Witnessed IPV		
	No	Yes	Total
No	560 (57.7)	410 (42.3)	970 (100.0)
Yes	162 (50.9)	156 (49.1)	318 (100.0)
Total	722 (56.1)	566 (43.9)	1288 (100.0)

<sup>a</sup>Adjusted odds ratio, 1.29; 95% confidence interval, 1.00-1.68.

through me and terrifies me." These items are rated on a 6-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). Women who said they experienced any type of abuse according to the BRFSS Survey questions or whose WEB Scale score was at least 20 (score range, 10-60) were considered abused.

Women were also asked to recall whether they had ever witnessed IPV between their parents ("As a child, did you ever see or hear one of your parents or guardians being hit, slapped, punched, shoved, kicked, or otherwise physically hurt by their spouse or partner?") and if their children had ever witnessed IPV between themselves and an intimate partner ("Were children present in the house, or did they overhear abusive behavior of any sort?"). These latter 2 questions were answered yes or no, "I don't have children," or "I don't remember."

The analytic sample comprised women who experienced IPV in their adult lifetime according to the BRFSS Survey or WEB Scale questions and who had at least 1 child (**Figure**). The mean age of women was 48.3 years, and 83.1% were of white race/ethnicity (**Table 1**). About 86.1% of women had at least some post-high school education, and 82.1% were employed at least part-time.

Logistic regression analysis was used to estimate the magnitude of the association between having witnessed IPV as a child and one's children witnessing IPV. We adjusted for race/ethnicity and education in the logistic regression analysis, 2 factors that could influence the association between having witnessed IPV and one's children witnessing IPV. Violence and the unfolding of violence in front of children may be more "normative" within some ethnic/racial or cultural groups. We adjusted for education level for the same reason.

## RESULTS

Almost 50% of children whose mothers had witnessed IPV during childhood witnessed IPV compared with 42% of children whose mothers did not witness IPV ( $P < .05$ ,  $\chi^2$  test) (**Table 2**). Adjusting for mothers' race/ethnicity and education level, children of women who had witnessed IPV during childhood had 1.29 higher odds of witnessing IPV than children of women who did not witness IPV during childhood.

## COMMENT

Children whose mothers had witnessed IPV during childhood were more likely to witness IPV than children whose mothers did not witness IPV, although the association was modest. In support of social learning theory,<sup>6</sup> it is pos-

sible that mothers who had witnessed IPV during childhood view violence as normative; therefore, violence may be more likely to occur in front of their children.

However, among mothers in our study (who met criteria for lifetime IPV), 75.3% (970 of 1288) reported that they did not witness IPV as children; of 970 mothers who had witnessed IPV in childhood, 42.3% (n=410) reported that their children witnessed IPV. Therefore, our hypothesis that mothers who view violence as normative (based on having witnessed IPV during childhood) may be more likely to have children who witness IPV is not fully supported. It is possible that mothers who reported they did not witness IPV were aware of the violence occurring in their families of origin but did not witness it firsthand as children. Our survey questions were unable to decipher whether respondents saw the violence, heard the violence, or simply had knowledge of the violence.

More than half (56.1% [722 of 1288]) of abused mothers reported that their children did not witness IPV. It is possible that mothers are assuming their children did not witness IPV firsthand, but this does not preclude the child's awareness of the violence, although he or she did not witness it. Our survey was limited to women's reports of their children's exposure to IPV; it is possible that children were aware of the violence even if their mothers reported that they did not witness it.

Data were collected by self-report. Shared method variance, which refers to the association between measures that is solely caused by the data collection methods used, may have contributed to the study findings. Also, our effect size was small and should be interpreted with caution; the social learning hypothesis was only modestly supported. Moreover, there was limited ethnic/racial diversity in our sample, which constrains the generalizability of the results of the study. Our analysis should be repeated with larger and more racially/ethnically diverse samples.

Notwithstanding these limitations, and in light of numerous negative outcomes associated with witnessing IPV during childhood,<sup>2,3</sup> our findings underscore the need for primary and secondary prevention of IPV. Primary prevention efforts include parent training and family conflict management training,<sup>20</sup> conflict resolution training in schools, and relationship skills training and education about healthy intimate relationships in schools.<sup>21</sup> For children who have witnessed IPV, target interventions should be enacted to build skills that will reverse detrimental learned behaviors.<sup>21</sup> Secondary prevention includes routine screening for IPV in adult and pediatric health care settings.<sup>3,22</sup> These prevention strategies may help curb the damaging and cyclical effects of witnessing IPV during childhood.

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**Author Contributions:** Mss Cannon and Anderson and Dr Bonomi had full access to all the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. *Study concept and design:* Bonomi, Anderson, and Rivara. *Acquisition of data:* Bonomi and Rivara. *Analysis and interpretation of data:* Cannon, Bonomi,

Anderson, and Rivara. *Drafting of the manuscript:* Cannon and Bonomi. *Critical revision of the manuscript for important intellectual content:* Cannon, Bonomi, Anderson, and Rivara. *Statistical analysis:* Bonomi and Anderson. *Obtained funding:* Rivara. *Administrative, technical, and material support:* Cannon and Rivara. *Study supervision:* Bonomi. **Financial Disclosure:** None reported.

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## REFERENCES

1. Bogat GA, DeJonghe E, Levendosky AA, Davidson WS, von Eye A. Trauma symptoms among infants exposed to intimate partner violence. *Child Abuse Negl.* 2006; 30(2):109-125.
2. Kernic MA, Wolf ME, Holt VL, McKnight B, Huebner CE, Rivara FP. Behavioral problems among children whose mothers are abused by an intimate partner. *Child Abuse Negl.* 2003;27(11):1231-1246.
3. Dube SR, Anda RF, Felitti VJ, Edwards VJ, Williamson DF. Exposure to abuse, neglect, and household dysfunction among adults who witnessed intimate partner violence as children: implications for health and social services. *Violence Vict.* 2002;17(1):3-17.
4. Ehrensaft MK, Cohen P, Brown J, Smailes E, Chen H, Johnson JG. Intergenerational transmission of partner violence: a 20-year prospective study. *J Consult Clin Psychol.* 2003;71(4):741-753.
5. Renner LM, Slack KS. Intimate partner violence and child maltreatment: understanding intra- and intergenerational connections. *Child Abuse Negl.* 2006; 30(6):599-617.
6. Bandura A. *Aggression: A Social Learning Theory Analysis.* Englewood Cliffs, NJ: Prentice-Hall; 1973.
7. Avakame EF. Intergenerational transmission of violence, self-control, and conjugal violence: a comparative analysis of physical violence and psychological aggression. *Violence Vict.* 1998;13(3):301-316.
8. Kitzmann KM, Gaylord NK, Holt AR, Kenny ED. Child witnesses to domestic violence: a meta-analytic review. *J Consult Clin Psychol.* 2003;71(2):339-352.
9. Kwong MJ, Bartholomew K, Henderson AJ, Trinke SJ. The intergenerational transmission of relationship violence. *J Fam Psychol.* 2003;17(3):288-301.
10. Mihalic SW, Elliott D. A social learning theory model of marital violence. *J Fam Violence.* 1997;12(1):21-47.
11. Stith SM, Rosen KH, Middleton KA, Busch AL, Lundeberg K, Carlton RP. The intergenerational transmission of spouse abuse: a meta-analysis. *J Marriage Fam.* 2000;62(3):640-654.
12. Thompson RS, Bonomi AE, Anderson M, et al. Intimate partner violence: prevalence, types, and chronicity in adult women. *Am J Prev Med.* 2006;30(6):447-457.
13. Avakame EF. Intergenerational transmission of violence and psychological aggression against wives. *Can J Behav Sci.* 1998;30(3):193-202.
14. Fergusson DM, Boden JM, Horwood LJ. Examining the intergenerational transmission of violence in a New Zealand birth cohort. *Child Abuse Negl.* 2006; 30(2):89-108.
15. Hines DA, Saudino KJ. Intergenerational transmission of intimate partner violence: a behavioral genetic perspective. *Trauma Violence Abuse.* 2002;3(3): 210-225.
16. Centers for Disease Control and Prevention. *Behavioral Risk Factor Surveillance System Survey Questionnaire.* Atlanta, GA: US Dept of Health and Human Services, Centers for Disease Control and Prevention; 2004.
17. Smith PH, Earp JA, DeVellis R. Measuring battering: development of the Women's Experience with Battering (WEB) Scale. *Women's Health.* 1995;1(4):273-288.
18. Coker AL, Smith PH, Bethea L, King MR, McKeown RE. Physical health consequences of physical and psychological intimate partner violence. *Arch Fam Med.* 2000;9(5):451-457.
19. Smith PH, Smith JB, Earp JA. Beyond the measurement trap: a reconstructed conceptualization and measurement of woman battering. *Psychol Women Q.* 1999; 23(1):177-193.
20. Schwartz JP, Hage SM, Bush I, Burns LK. Unhealthy parenting and potential mediators as contributing factors to future intimate violence. *Trauma Violence Abuse.* 2006;7(3):206-221.
21. Coker AL. Primary prevention of intimate partner violence for women's health: a response to Plichta. *J Interpers Violence.* 2004;19(11):1324-1334.
22. Bonomi AE, Thompson RS, Anderson ML, et al. Intimate partner violence and women's physical, mental, and social functioning. *Am J Prev Med.* 2006;30 (6):458-466.