

The Health Impact of Intimate Partner Violence

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ABSTRACT

Research suggests that between 960,000 to 4 million individuals are victims of intimate partner violence (IPV) each year and of these about 85 percent are women. In a recent survey conducted by the Commonwealth Fund, it was estimated that approximately one-third of American women will become a victim of IPV at some point in their life. The literature reports 36 percent to 95 percent of battered women suffer injuries to the face, neck or head. Women who have been abused by a partner report significantly lower self assessments of health, increased disabilities and increased chronic health conditions than non-abused women. When direct costs to the health care system are combined with indirect costs to society, total health care costs of IPV can escalate into the billions. Intimate partner violence erodes the health of patients, consumes healthcare dollars, compromises the health and safety of children and communities, and represents a liability exposure for the healthcare clinician who turns their head. Healthcare providers, especially dental professionals, must gain experience in the diagnosis and management of IPV so that identification occurs earlier and intervention follows established protocols.

Intimate partner violence is defined by the Centers for Disease Control as physical, sexual violence or threats of physical and sexual violence, psychological/emotional abuse including coercive tactics that adults or adolescent use against current or former intimate partners.¹ The terms intimate partner violence and domestic violence are used interchangeably here.

Prior research suggests that between 960,000 to 4 million individuals are victims of intimate partner violence (IPV) each year and of these about 85 percent are women.²⁻⁴ In a recent survey conducted by the Commonwealth Fund, it was estimated that approximately one-third of American women will become a victim of IPV at some point in their life.⁵ While men are more likely than women to become a victim of violence,



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women are three to five times more likely than men to be victimized by an intimate partner.⁵⁻⁷ The literature reports, 36 percent to 95 percent of battered women are suffering injuries to the face, neck or head.⁴⁴

Prior research on domestic violence using hospital data has generally focused on patients in emergency departments (ED).⁷⁻¹³ In 1994, it was estimated that 34 percent of women who sought treatment for violent injuries in ED's were victims of domestic violence.⁷ Furthermore, it is estimated that 24 percent to 54 percent of all women seen in the ED have a lifetime history of intimate partner violence.¹²⁻¹⁴ In the clinic setting, 5.5 percent of women presenting to an ambulatory setting reported physical violence by an intimate partner within the last year.¹⁵ Data further reports that between 20 percent to 40 percent of IPV victims seek repeated care for abuse.^{12,16} Domestic violence victims usually suffer minor physical injuries and they self treat in private but they also present with serious non-fatal and fatal injuries.^{10,16-19}

Identification and diagnosis of intimate partner violence relies on patient disclosure that is either patient initiated or as a result of appropriate inquiry. Clinicians also identify domestic violence through pattern recognition of key historical or physical findings that appear consistent with domestic violence. Identification itself has a treatment effect given the powerful negative stigma associated with victimization. Typical domestic violence injuries that may be detected by a dentist, registered dental hygienist, or registered dental assistant⁴³ are:

- Intraoral bruises from slaps, hits and soft tissue pressed on hard structures like teeth and bones.

- Soft and hard palate bruises and abrasions from implements of penetration could indicate force from a sexual act.

- Fractured teeth, nose, mandible and/or maxilla. Signs of healing fractures may be detected in panoramic

radiographs.

- Abscessed teeth could be from tooth fractures or repeated hitting to one area of the face.

- Torn frenum from assault or forced trauma to the mouth.

- Hair loss from pulling, black eyes, ear bruises, other trauma and lacerations to the head.

- Attempted strangulation marks on the neck.

Depression, anxiety, suicide and suicide ideation have been linked to intimate partner violence.

Depression, anxiety, suicide and suicide ideation have been linked to intimate partner violence. In one study, 81 percent of women with a history of suicide attempt also reported a history of abuse.¹² Women who report any type of violence are significantly more likely than women who did not to have been diagnosed with depression or anxiety, to have depression symptoms and for women sexually assaulted by an intimate, to be currently taking medication for depression or anxiety.²⁰ Women who are diagnosed with persistent forms of mental illness appear to be more vulnerable to becoming victims of domestic violence.^{16,21} For example, one study found that 64 percent of female psychiatric patients had a history of domestic violence.²²

Women who have been abused by a partner report significantly lower self assessments of health, increased disabilities and increased chronic health conditions than non-abused women.²⁰ Other health concerns that have been associated with IPV include functional gastroin-

testinal disorders, chronic abdominal pain,²³ chronic headaches,²⁴ and alcohol and drug addiction.²⁵ A few studies have established links between sexually transmitted diseases including HIV as women report they cannot negotiate for condom use with their abusive partners.^{26,27}

IPV in pregnancy results in increased morbidity and perhaps mortality. Studies suggest that women who are pregnant are at a higher risk of becoming victims of IPV.^{18,28} Between 4 percent to 16 percent of all women who are pregnant are battered during pregnancy,^{25,29-32} 10 percent to 32 percent of women seeking prenatal care have a history of domestic violence,^{25,32,33} and 40 percent to 60 percent of battered women report being a victim of domestic violence during their pregnancy.^{18,28} The prevalence of abuse in pregnant adolescents appears even greater than that for adult women.^{28,34} Poor outcomes associated with IPV in pregnancy include premature onset of labor, increased antenatal hospitalizations, and low birth weight infants. Maternal rates of depression, suicide attempts, tobacco, alcohol and illicit drug use are higher in abused than non-abused women.³⁵ A recent study of death certificates in Maryland revealed that the primary cause of maternal mortality was homicide.³⁶

IPV patients not only generate significant healthcare costs for the direct and indirect consequences of the abuse, but the costs of care of the IPV patient may exceed the costs of care for a comparable non-IPV patient. Survey data on the cost of IPV suggest that the health care systems expend \$857.3 million annually for the care of IPV patients.³⁷ When direct costs to the health care system are combined with indirect costs to society, total health care costs of IPV can escalate into the billions.³⁸ A recent study focusing on inpatient victims of IPV noted the average cost per episode of care is \$8,159.81 with an average length of stay of 5.6 days.³⁹ This study further noted the average cost per day for IPV trauma victims is

\$3,592.75.⁴⁰ A recent study comparing costs for IPV and non-IPV patients concluded that the average cost of care annually for IPV victims is approximately \$1,776.00 more than for non-IPV patients.⁴¹ This study further found that the mental health care costs were 800 percent higher among identified victims and the out-of-plan referrals were also significantly higher. Women who experienced intimate sexual violence were more likely than other women to have had eight or more doctor visits during the past year.²⁰

Domestic violence victims often have co-morbid health problems that complicate their medical care and may have socioeconomic or legal problems that further burden the victim's recovery. Children and other dependents in IPV homes may themselves be victims of abuse, neglect or negative outcomes associated with witnessing violence. Perpetrators have increased health problems too but their abusive nature is rarely recognized by health care providers prior to criminal justice involvement. An interdisciplinary coordinated response is usually necessary and case managers become a valuable asset in the process. Community domestic violence agencies generally provide a variety of victim services, both crises and supportive, and can be an invaluable resource for the clinician. Outcome studies are identifying interventions for perpetrators and for victims that appear to reduce the repeat violence and help victims feel safer and healthier, but much more research is needed.

Intimate partner violence erodes the health of patients, consumes healthcare dollars, compromises the health and safety of children and communities, and represents a liability exposure for the healthcare clinician who turns their head. Healthcare providers, especially dental professionals, must gain experience in the diagnosis and management of IPV so that identification occurs earlier and intervention follows established protocols. **CDA**

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References / 1. Saltzman LE, Intimate Partner Violence Surveillance, Centers for Disease Control and Prevention, 1999.

2. DOJ, Violence by Intimates: Analysis of Data on Crimes by Current or Former Spouses, Boyfriends and Girlfriends. US Department of Justice, 1997.

3. Fund TC, First Comprehensive National Health Survey of American Women, The Commonwealth Fund, 1993.

4. Greenfeld LA, Rand MR, et al., Violence by Intimates: Analysis of Data on Crimes by Current or Former Spouses, Boyfriends, and Girlfriends. US Department of Justice, Office of Justice Programs, *Bur Justice Stat Spec Rep No. 167237*; 1-46, 1998.

5. Fund TC, Health Concerns Across a Woman's Lifespan: The Commonwealth Fund Survey of Women's Health. The Commonwealth Fund, 1999.

6. Bachman R, Saltzman LE, Violence against Women: Estimates from the Redesigned Survey, US Department of Justice Office of Justice Programs, 1995.

7. Rand M, Strom K, Violence-Related Injuries Treated in Hospital Emergency Departments. *Bur Justice Stat Spec Rep 1-11*, 1997.

8. Roberts GL, Raphael B, et al, Prevalence Study of Domestic Violence Victims in an Emergency Department, *Ann Emerg Med 27(6):747-53*, 1996.

9. Roberts GL, Domestic Violence victims in a hospital emergency department. *Med J Australia 159(5):307-10*, 1993.

10. Ernst AA, Nick TG, Weiss SJ, Houry D, Mills T, Domestic Violence in an Inner-City ED. *Ann Emerg Med 30(2):190-7*, 1997.

11. McLeer S, Anwar R, A Study of Battered Women Presenting in an Emergency Department. *Am J Public Health 79(1):65-6*.

12. Abbott J, Johnson R, Koziol-McLain J, Lowenstein SR, Domestic Violence Against Women Incidence and Prevalence in an Emergency Department Population. *JAMA 273(22):1763-67*, 1995.

13. Goldberg WG, Tomlanovich M, Domestic Violence Victims in the Emergency Department New Findings, *JAMA 251(24):3259-64*, 1984.

14. Dearwater SR, Coben JH, Campbell JC, et al., Prevalence of Intimate Partner Abuse in Women Treated at Community Hospital Emergency Department. *JAMA 280(5):433-8*.

15. McCauley J, Kern D, Kolodner K, et al., Battering Syndrome: Prevalence and Clinical Characteristics of Domestic Violence in Primary Care Internal Medicine Practices. *Ann Intern Med 123(10):737-46*, 1995.

16. Berios DC, Domestic Violence: Risk factors and outcomes. *Western J Med 155(2)*, 1991.

17. Ganley AL, Understanding Domestic Violence in Improving the Healthcare Response to Domestic Violence: A Resource Manual for Health Care Providers, Family Violence Prevention Fund, 1-14, 1996.

18. Rynerson BC, Violence Against Women in Maternity and Women's Health Care, Mosby Press, 1220-41, 1997.

19. Sable PR, What do we know about domestic violence? The Physicians Guide to Domestic Violence, Volcano Press, 1995.

20. Plichta SB, Prevalence of Violence and Its Implications for Women's Health. *Womens Health Issues 11(3):244-58*, 2001.

21. Bohn D, Sequelae of abuse: Health effects of childhood sexual abuse, domestic battering, and rape. *J Nurse Midwifery 6(6):442-56*, 1991.

22. Jacobson A, Assault experiences of 100 psychiatric inpatients: Evidence of the need for routine inquiry. *Am J Psychiatry 144(7):908-12*, 1987.

23. Drossman DA, Talley NJ, Leserman J, et al., Sexual and Physical Abuse and Gastrointestinal Illness. *Ann Intern Med 123(10):782-94*, 1995.

24. Domino JF, Prior physical and sexual abuse in women with chronic headache: Clinical disorders. *Headache 27(6):310-4*.

25. Amaro H, Violence during pregnancy and substance abuse. *Am J Public Health 80(5): 575-9*, 1990.

26. Eby KK, Campbell JC, Sullivan CM, et al., 2nd., Health effects of experiences of sexual violence for women with abusive partners. *Health Care Women Int 16(6):563-76*, 1995.

27. Wingood GM, DiClemente RJ, The effects of an abusive primary partner on the condom use and sexual negotiation practices of African-American women. *Am J Public Health 87(6):1016-8*, 1997.

28. Parker B, Physical and emotional abuse in pregnancy: A comparison of adults and teenage women. *Nurs Res 42(3):173-8*, 1993.

29. McFarlane J, Physical and emotional abuse during pregnancy: A comparison of adults and teenage women. *Nurs Res 42(3):173-8*, 1993.

30. Campbell JC, Empowering Survivors of Abuse: Health Care for Battered Women and Their Children, 1:332, 1998.

31. Moore ML, Attitudes and practices of registered nurses toward women who have experienced abuse/domestic violence. *J Obstet Gynecol Neonatal Nurs 27(2):175-82*, 1998.

32. Stewart DE, Cecutti A, Physical abuse during pregnancy. *CMAJ 149(9):1257-63*, 1993.

33. Campbell JC, Correlates of battering during pregnancy. *Res Nurs Health 15(3):219-26*.

34. Berenson AB, San Miguel VV, Wilkinson GS, Prevalence of Physical and Sexual Assault in Pregnant Adolescents. *J Adolesc Health 13(6):466-9*, 1992.

35. McFarlane J, Parker B, Soeken K, Physical abuse, smoking, and substance use during pregnancy: prevalence, interrelationships, and effects on birth weight. *J Obstet Gynecol Neonatal Nurs 25(4):313-20*, 1996.

36. Horon IL, Cheng D, Enhanced Surveillance for Pregnancy-Associated Mortality, Maryland, 1993-1998. *JAMA 285(11):1455-9*, 2001.

37. Meyer H, The Billion-Dollar Epidemic: A Compendium from JAMA, American Medical News, and the specialty journals of the American Medical Association, 1992.

38. Friedman LN, The cost of domestic violence: Executive Summary. Institute of Women's Policy Research, Washington, DC, 1997.

39. Rudman W, Davey D, Identifying Domestic Violence with Inpatient Hospital Admissions Using Medical Records. *Women Health 30(4):1-13*, 2000.

40. Rudman W, Don't ask don't tell. Family Violence Prevention Fund, 2000.

41. Wisner CL, Gilmer TP, Saltzman LE, et al., Intimate Partner Violence Against Women: Do Victims Cost Health Plans More? *J Fam Pract 48(6):439-43*, 1999.

43. Shanel-Hogan KA, Jarrett, JA, Dentistry as a collaborative partner in domestic violence recognition, *Home Front*, California District Attorneys Association newsletter, Winter 2000.

44. Ochs HA, Neuenschwander MC, Dodson TB, Are head, neck and facial injuries markers of domestic violence? *J Am Dent Assoc 127(6):757-61*, 1996; Family Dentistry, www.cincytoothdoc.com; Sweet D, Recognizing and Intervening in domestic violence: Proactive role for dentistry. *Medscape General Med 1(1)*, 1999.