

---

# How Much Health Promotion and Disease Prevention Is Enough?

## Should Chiropractic Colleges Focus on Efficacy Training in Screening for Family Violence?

---

**Lisa Terre**, PhD, University of Missouri–Kansas City, **Gary Globe**, DC, MBA, PhD, Cleveland Chiropractic College, Los Angeles, and **Mark T. Pfefer**, RN, MS, DC, Cleveland Chiropractic College, Kansas City

**Introduction:** Although family violence has been identified as a major public health issue, it has received little attention in the chiropractic literature. Accordingly, this article provides a conceptual overview on family violence, discusses the role of chiropractors in its detection, and raises several issues germane to chiropractic education that deserve further attention in future chiropractic publications. **Methods:** A selective review of the empirical literature on family violence was conducted with a focus on issues relevant to chiropractic training and professional identity. **Results:** Extrapolating from the research, several models for medical training and continuing education have been proposed that emphasize a multidisciplinary, developmental approach to infusing knowledge, skill building, and mentored practice experiences into professional education experiences. **Conclusion:** As chiropractors become more mainstream portal-of-entry providers, there is a clear need to translate the didactics of family violence into the clinical setting. Clinical education may provide students the opportunity to master basic competencies for managing challenging family violence problems. The clinical environment may be appropriate for inculcating skills commensurate with those of other primary care providers. Yet, the extent to which training priorities and approaches extrapolated from other health care disciplines should be accepted wholesale by the chiropractic profession merits further discussion, including issues around the professional identity of chiropractic, the impact of accreditation standards and practice guidelines on actual professional practice behaviors, and the possible limits and unintended consequences associated with expanding the traditional chiropractic scope of practice from a specialty to a primary care profession. (*The Journal of Chiropractic Education* 20(2): 128–137, 2006)

**Key Indexing Terms:** child abuse; chiropractic; domestic violence; education; elder abuse; spouse abuse

### INTRODUCTION

Family violence (including domestic/intimate partner violence, child abuse, and elder mistreatment) has been identified as a major public health concern.<sup>1–12</sup> However, the precise epidemiology of family violence has been complex to establish due, in part, to patient underreporting and inconsistent detection efforts by health professionals.<sup>13,14</sup> For instance, despite the general consensus that family

violence disproportionately impacts women,<sup>2,11,15</sup> it is acknowledged that the calculation of male prevalence rates may be hindered by many men's disinclination to report victimization experiences.<sup>16</sup> Moreover, estimates on the epidemiology of family violence are complicated by the comorbidity among different subtypes, such as the noted relationship between intimate partner violence and child abuse.<sup>17,18</sup> Nevertheless, prevalence estimates suggest, for example, that 25–30% of women have been physically victimized by an intimate partner,<sup>11,19,20</sup> that nearly 20% of men seeking emergency medical services in urban areas are intimate/family violence victims,<sup>21</sup> that about 1 million child abuse cases are identified annually,<sup>20</sup> and that more than 1.5 million

---

**The Journal of Chiropractic Education**  
Copyright © 2006 the Association of Chiropractic Colleges  
Vol. 20, No. 2. Printed in U.S.A.  
1042-5055/\$22.00

elders are mistreated annually,<sup>22</sup> with a predicted upsurge in rates as “baby boomers” age.<sup>23–25</sup>

In addition to the associated physical and psychosocial comorbidities, considerable evidence suggests that abuse heightens the risk for health-detrimental behaviors, emergency mental health, general health care overutilization, and subsequent re-victimization.<sup>3–9,11,20,21,26–28</sup> Children exposed to family violence both directly and vicariously also experience comparable health-relevant sequelae contemporaneously and as adults.<sup>6,18,20,29</sup> Hence, it is likely that most health practices include numerous affected patients.<sup>10,11,28,30–33</sup> For this reason, the World Health Organization has identified family violence as a multifaceted health care concern,<sup>10</sup> and Healthy People 2010 proposes screening and treatment as an important public health goal.<sup>34</sup> Most states have mandatory family violence reporting laws for health care providers. Although a discussion on the variegated state-specific requirements for mandatory reporting is beyond the scope of this paper, several websites, such as the National Clearinghouse on Abuse in Later Life ([http://www.ncall.us/docs/Mandatory\\_Reporting\\_EA.pdf](http://www.ncall.us/docs/Mandatory_Reporting_EA.pdf)) and The Family Violence Prevention Fund (<http://endabuse.org/health/mandatoryreporting>), provide national comparisons of state laws.

Considering the clinical and public health implications of family violence, this article provides a conceptual overview on family violence, discusses the role of chiropractors in the detection of family violence, and presents some emerging educational models for developing key competencies to recognize these problems and move to action. We emphasize multidisciplinary collaboration in the biopsychosocial treatment of these multifaceted problems. This is particularly relevant given that most practitioner groups, including the American Chiropractic Association, support legislation mandating the reporting of family violence.<sup>10,12,31</sup> Because the broader health care literature has provided the overwhelming bulk of published research and discussion on family violence to date, we begin by reviewing the broader data as a prelude for our primary focus on chiropractic education, training, and practice.

## METHODS

A selective review of the empirical literature on family violence was conducted between the years 1995 and 2005 using PsycINFO and MEDLINE,

supplemented by selected government (eg, CDC) reports, professional guidelines, and other policy papers (including those presented at the 2006 ACC-RAC conference), with a focus on issues relevant to chiropractic training and professional identity.

## RESULTS

### Health Professionals' Current Practices

Over the past several years, considerable data have accumulated to suggest that only a small minority of health professionals regularly screen for family violence, despite widespread acknowledgment of the importance of prevention and early intervention as well as the proliferation of professional guidelines recommending routine assessment.<sup>19,20,31,34–37</sup> Across a variety of different health provider groups, reported rates of routine assessment remain quite low, ranging from an estimated 10–15% for physicians<sup>1,13,27,38–41</sup> to < 19% for psychologists,<sup>19</sup> although rates may increase somewhat when physical injury is the presenting concern.<sup>42</sup>

Hence, across traditional health care disciplines (chiropractic is discussed later in the article), providers' behaviors have remained seemingly refractory to professional recommendations for universal screening.<sup>36</sup> These low rates of routine screening are especially noteworthy given that family violence is unlikely to be spontaneously reported by patients in the absence of direct questioning by providers.<sup>41,43</sup>

Given the common focus across professional groups on screening and detecting family violence,<sup>13,20,27,29,31,34,37,38</sup> the data indicating that screening enhances detection,<sup>18,29,44</sup> and health care providers' own acknowledgment of the importance of early detection,<sup>6</sup> considerable research has sought to identify the obstacles to universal family violence screening. Among the wide variety of barriers reported over the past several years, those most commonly reported have centered on four broad categories, including limitations in professional preparation, scope of practice concerns, inadequate system support, and a lack of interdisciplinary collaboration.

### Limitations of Current Professional Preparation

One of the most consistent findings to emerge from the literature is the clear perception among

health practitioners that they are inadequately trained to screen for and address family violence among their patients.<sup>13,21,45–49</sup> Although a majority of medical and nursing schools report providing some information about family violence, many fewer students report having been trained to screen and manage family violence,<sup>50</sup> perhaps because curriculum offerings vary widely from content provided within required courses, to elective courses, to more systematic curriculum coverage.<sup>13,51–53</sup> Although increasing family violence coverage has been noted in recent years, providers' perceived competence and screening behaviors do not seem to have been enhanced by didactics alone, at least not in the "dose" or modality to which many providers traditionally have been exposed.<sup>19,49,50,54</sup>

### **Scope of Practice Concerns**

Even when health providers perceive themselves competent to assess family violence, the accumulated literature indicates that many question whether this task legitimately falls within their scope of primary professional responsibilities.<sup>13,27,45,55</sup> Indeed, over the past decade most health professionals have witnessed a continual expansion of professional practice guidelines, as standards of practice have struggled to keep pace with emerging scientific advances in an ever-constricting health care resource climate. In an excellent illustration of these burgeoning professional demands in the area of family violence alone, Gerbert and colleagues<sup>36</sup> note that, although professional guidelines do not require physicians to assume the "full burden of intervention" for family violence, medical doctors are called to "play a large role" requiring levels of expertise, time, and focus well beyond the reasonable limits of most medical providers, such as to

...conduct routine screening; identify coping mechanisms; inquire about child abuse; perform a safety assessment; develop a safety plan; validate patients' experiences; document the abuse, including taking photographs of injuries; maintain records; refer to specially-trained staff or outside resources; report to local law enforcement agencies; provide emergency numbers and shelter information; and set out a follow-up plan with future physician visits and coordinate efforts with community resources. . . . (pp. 2–3)<sup>36</sup>

Considering that most other basic standard-of-care requirements for assessing and managing patients are expanding simultaneously and the legal/ethical

complications surrounding the identification and reporting of family violence,<sup>33,56–59</sup> it is not surprising that so few health providers regularly screen for family violence.<sup>18,29</sup>

### **Inadequate System Support**

Numerous institutional barriers have been reported by health professionals. Some of the most commonly noted obstacles include the lack of empirically supported screening instruments and validated methods for identifying and treating patients, unclear system policies for reporting and managing family violence, uncertainties about the legal/professional requirements, questions regarding the efficacy of mandatory reporting and protective services agencies to address family violence problems, the paucity of on-site multidisciplinary collaborative relationships and accessible referral resources for consultation and patient follow-up, and the absence of private areas conducive to discussing sensitive family violence issues.<sup>14,22,30,32,36,45,57,60–64</sup>

### **Lack of Interdisciplinary Collaboration**

Increasingly, interdisciplinary care is being built into health care delivery systems consistent with current models of managed care and evidence-based medicine.<sup>36,60</sup> As noted above, many providers report that family violence screening and intervention exceeds their expertise, time, and/or scope of practice without broader consultation and community referral resources.<sup>13,27,55,64</sup> Mirroring the data on providers' perceptions, several model programs and reviews have been published illustrating the benefits of multidisciplinary collaborative efforts across traditionally separated services within health care settings as well as between health providers and broader community-based advocacy services or referral networks.<sup>17,35,63,65</sup>

### **Efforts to Address Limitations: Professional Training and Continuing Education**

Considering the potential importance of professional training to systematically develop the knowledge, skills, and zeitgeist for universal family violence assessment and intervention, a growing number of professional organizations have proposed model curricula for medical/nursing school, fellowship, and residency training.<sup>48,66–69</sup> Several other sites have implemented innovative education programs for students, fellows, and residents on elder abuse,<sup>70</sup>

trauma assessment,<sup>21</sup> domestic/intimate partner violence,<sup>27,43,71-74</sup> and violence prevention.<sup>75</sup> Continuing education programs for providers also have been described.<sup>39,47,76-83</sup>

The most progressive of these training approaches go beyond simple didactics to include mentored clinical experiences with clearly articulated objectives and outcomes in multidisciplinary contexts, including a full health care team (eg, physicians, nurses, allied health professionals, staff) and collaborative relationships and professional referral networks outside the immediate practice site.<sup>48,49,66,69</sup> Although most model curricula recommend a clear specification of goals and objectively measured outcomes, few systematic results of these multicomponent programs are reported to date. It is noteworthy, however, that physician retrospective self-reports of even relatively brief training exposures are associated with some increased probability of provider screening relative to no training at all.<sup>13,34,38,78,84</sup> However, consistent with the current emphasis on continuing education, the time elapsed since training is an especially important predictor of screening.<sup>13,38</sup>

Based on the evidence supporting the benefits of interdisciplinary collaboration and coordination of care, several emerging models of interagency training and service delivery also are proposed. Some illustrative published programs represent elder abuse,<sup>85</sup> child protection,<sup>86</sup> and family violence.<sup>17</sup> Although focused in different areas, these models share a commitment to coordinating numerous community agencies that work to improve the lives of the same constituent group. In addition to coordination of care, many of these efforts<sup>85,86</sup> seek to provide a wide variety of other services (including interdisciplinary training, advocacy/outreach, resource development/ funding, etc). Because these models are just evolving, formal outcome evaluations have yet to be published. Nevertheless, they are included here to stimulate thinking and discussion on future developments. Although not yet empirically validated, it has been suggested that emphasizing each professional's more realistically circumscribed role within the context of a multidisciplinary or interagency team may enhance each provider's perceived competence, thereby increasing the likelihood of screening, detection, and intervention efforts aimed at family violence.<sup>36,54</sup>

## Continuing Needs

Despite the data indicating that screening increases family violence detection, there is a paucity of research examining the effectiveness of interventions for victims, especially in the case of violence against adult women and older adults.<sup>10,15,20,29,31</sup> Although the largely untested efficacy of current intervention approaches has stimulated some debate on the merits of universal screening,<sup>29</sup> most professional groups urge providers to continue routine detection efforts pending the results of empirically supported outcomes. Indeed, much of the current literature emphasizes: (1) reconsideration of reasonable outcome expectations (such as raising patient and societal awareness of community resources) given the nature of complicated social problems in which family violence is embedded,<sup>18</sup> (2) development of more systematic methods for tracking identified patient outcomes in longer-term outpatient and other referral settings,<sup>28,87</sup> and (3) efforts to maximize the identification of high-risk patients through more efficient methods. As an example of the latter, Gerber and colleagues<sup>26</sup> raise the possibility that other universally screened risk behaviors (eg, smoking, alcohol problems) may, because of their correlation with family violence, signal potentially heightened vulnerability and the need for careful family violence screening. Although provocative and very tentative at this point, if confirmed by subsequent research, such methods for enhancing provider screening efficiency may offer yet another avenue for reducing the perceived burden for practitioners.

## Chiropractic Standards Ahead of Chiropractic Researchers and Educators: Will the Cart Lead the Horse?

As noted above, chiropractors are mandated reporters in many states with the American Chiropractic Association supporting legislation mandating the reporting of family violence.<sup>12</sup> Moreover, according to the Council on Chiropractic Education (CCE) Accreditation Standards (scheduled for February 1, 2007 implementation; available at <http://www.cce-usa.org/2006%20January%20STANDARDS.pdf>): "As a gatekeeper for direct access to the health delivery system, the doctor of chiropractic's responsibilities as a primary care physician include wellness promotion, health assessment, diagnosis and the chiropractic management of the patient's health care needs." Not only do these proposed standards

specify health promotion and wellness as key chiropractic competencies but, in the knowledge domain, they also include an explicit mention of injury and violence competence.

Yet, there is a paucity of peer-reviewed publications on family violence in the chiropractic literature. One of the few published reports to date on the screening practices of chiropractors<sup>88</sup> indicated that less than one third of practicing doctors of chiropractic actually screen patients regularly, even though a majority endorse the importance of early detection of domestic violence. Although Hawk and colleagues<sup>88</sup> are to be commended for their attempt to provide a preliminary estimate on the rate of preventive service activities, the low (27%) response rate compromises interpretation of the results and raises questions about whether these self-reported data may overestimate actual detection efforts.

Indeed, other chiropractic research raises the possibility that self-reports of preventive health screening may overestimate actual professional practice behaviors. For instance, an examination of chiropractic interns' preventive health recommendations<sup>89</sup> reported a sharp dissonance between high levels of intern support for the importance of preventive health service recommendations (including domestic violence) compared with those who actually did so, as reflected by the patient medical record. As Globe and colleagues point out,<sup>89</sup> "Of the 408 charts examined, there were only 4 documented instances (1%) of recommendations for any of the 9 preventive health service categories."

Unfortunately, by contrast to the considerable literature on physicians, very little is known empirically about the factors contributing to the values-practices discrepancy among chiropractors. However, there are some hints that one contributing factor may be traditional chiropractic curricula. For instance, Globe and colleagues<sup>89</sup> noted that the outdated content of public health coursework at most chiropractic colleges (eg, focusing on issues such as sewage treatment, potable water, pasteurization, etc) was one impetus for the development of the Model Course for Public Health Education in Chiropractic Colleges, which was proposed by the Chiropractic Health Care Section of the American Public Health Association.<sup>90</sup> Unfortunately, although the Model Curriculum increased coverage of more public health issues relevant to contemporary chiropractic practice (eg, obesity, sedentary lifestyle, tobacco use) for the schools adopting it, Globe et al<sup>89</sup> contend that the Model Curriculum still may lack sufficient time

for the development of learner self-efficacy around health promotion concepts.

Anecdotal reports<sup>89</sup> also suggest that chiropractors may experience preventive health screening disincentives comparable with those experienced by other health professionals (discussed above), such as feeling overwhelmed with the diagnostic and treatment priorities relevant to their primary (neuromusculoskeletal) specialization for which the patient presented. Moreover, as chiropractors increasingly collaborate with more traditional providers in health care settings such as medical centers and hospitals,<sup>91,92</sup> chiropractors may increasingly experience many of the other universal screening barriers reported by their hospital-based colleagues. There is a pressing need for more systematic investigations on the barriers to family violence screening in the variety of novel settings in which chiropractors increasingly practice.

## DISCUSSION

Unfortunately, rigorous examinations of preprofessional chiropractic training have not focused specifically on family violence. Nevertheless, anecdotally, family violence traditionally is not well represented in the typical chiropractic curriculum, and continuing education on family violence targeted specifically at chiropractors does not appear commonly accessible. Although a couple of review papers based on the broader medical research have been published in journals commonly read by chiropractors,<sup>93,94</sup> family violence rarely is a major topic at most well-attended chiropractic conferences, including those tailored to professionals responsible for chiropractic curriculum development and education (eg, ACC-RAC).

Nevertheless, it has been proposed<sup>93,94</sup> that chiropractors may be especially well positioned to identify and manage family violence concerns. Compared with providers in more acute settings, chiropractors traditionally are outpatient providers who tend to monitor patients, and increasingly their families, over extended periods of time.<sup>28</sup> Although it has been suggested that, because of the typical nature of abuse-related injuries, family violence victims may be especially inclined to seek out chiropractic manipulation and that chiropractors may be especially inclined to notice complications secondary to abuse given their careful assessment of past injuries and observation of patients' reactions to

body manipulation,<sup>93,94</sup> very little chiropractic training actually reviews the characteristic indications of abuse.<sup>90</sup> Hence, the extent to which most chiropractors would correctly identify a pattern of unexplained injuries as abuse or draw some other etiological conclusion (eg, subluxation) remains to be explored.

Furthermore, at least some chiropractors may consider psychosocial problems (such as family violence) as contraindications for optimal chiropractic treatment response and, consequently, outside their perceived area of primary expertise. Hence, more research is needed to advance our understanding of chiropractors' training and current approaches to family violence screening, detection, and intervention.

### **Establishing Training Priorities**

Given the prevalence of family violence, its consequences, and estimates suggesting that most health practices are populated with numerous abuse victims,<sup>10,11,28,31-33</sup> family violence has been a remarkably underresearched topic in the chiropractic literature.

Extrapolating from the broader literature, models for medical training and continuing education are proposed to address the critical need for assessment and early intervention that may inform chiropractic curriculum development pertaining to family violence. The most progressive of these models takes a comprehensive, developmental approach to learning. This model works to infuse knowledge, skill building, and mentored practice experiences in a progressively differentiated manner across professional education levels. Thus, it begins with the professional school curriculum, continues through internship/residency training, and progresses to ongoing postprofessional education. Different contexts are used for the learning environment, including classrooms, clinics, and inpatient/outpatient settings, in an effort to produce broader based knowledge, more finely honed skills, and superior trans-situational gains in perceived competence compared with classroom didactics on family violence issues. In addition to highlighting the importance of continuous, progressively differentiated, discipline-specific training experiences, the family violence literature also underscores the critical need for interdisciplinary collaboration and community referral networks to support the treatment team's recognition and management of family violence as a multidisciplinary issue.

As chiropractors become more mainstream portal-of-entry providers and continue to strive to provide more primary care, as mandated by the Council on Chiropractic Education,<sup>95</sup> there is a clear need to translate the didactics of family violence into the clinical setting to provide students an opportunity to master the basic competencies to manage these challenging problems and for inculcating skills commensurate with those of other primary care providers. Given the paucity of existing data on chiropractors' knowledge and practices, more research is needed to provide a firm foundation to advance training and practice relevant to family violence and to evaluate their impact.

### **Issues Germane to Integrating Training Priorities/Approaches into Chiropractic Education**

Yet, at the same time, the extent to which training priorities and approaches extrapolated from other health care disciplines should be incorporated wholesale by the chiropractic profession merits further consideration. Accordingly, several issues deserve attention in future chiropractic research and policy discussions.

#### **Issue 1**

Do accreditation standards and practice guidelines actually impact professional practice behaviors? Many states consider chiropractors to be mandated reporters of family violence and the American Chiropractic Association supports this legislation.<sup>12</sup> Moreover, the CCE Accreditation Standards (proposed for February 2007 implementation) specify health promotion and wellness as key chiropractic competencies, with injury and violence explicitly mentioned in the knowledge domain of competencies (see above). However, it is noteworthy that the CCE standards fall short of recommending specific skill requirements, resulting in what seems to be a disconnect between a general professional recognition that doctors of chiropractic should report family violence and an absence of mandated educational standards to train chiropractic students in how to recognize and report. If the proposed CCE Standards (presently in the comment phase before full implementation) remain as currently written, CCE seems to call on chiropractors to function as primary care providers but does not seem ready to specify, within the core of the standards, the requisite competencies and skills that are expected of medical primary care providers.<sup>96</sup>

Considering the lack of complete consistency in chiropractic educational and professional guidelines (taken as a whole) and the state-by-state variations in reporting requirements, whether and to what extent prevention and early intervention of family violence will become a routine part of chiropractors' practice behaviors remains to be seen. Given data indicating that only 10% of physicians (on average) routinely screen for family violence in the context of consistent legal and professional directives to do so (discussed above), will chiropractors respond differently?

### **Issue 2**

Are we focusing on the right preventive health issues? Comparing the numerous preventive health issues targeted in key public health documents such as the US Department of Health and Human Services' Healthy People 2010<sup>97</sup> and professional practice guidelines/position statements,<sup>95</sup> with a limited amount of patient contact time, chiropractic providers are faced with a trade-off in which some preventive health issues become an area of focus at the expense of others. Unfortunately, this process of clinical decision making has yet to be empirically examined, and an evidence-based heuristic for prioritizing preventive health concerns remains to be advanced. Should chiropractors attempt to avert problems that may never emerge ("primary prevention") or focus on early intervention and detection of patients already beginning to show evidence of dysfunction ("secondary prevention")? What is the best way to triage preventive efforts? Should clinicians rely on individual-level risk factors to help prioritize patient-relevant issues or, alternately, emphasize the systematic assessment of local, community-based needs to help identify those issues of particular significance in different geographic areas? In addition to elucidating local preventive health priority areas, the latter focus may provide a collaborative opportunity between chiropractic colleges and locally practicing chiropractors to reinforce the integration of science and practice as well as provide a bridge for more translational research efforts. Are individual versus community levels of analysis mutually exclusive? There is an urgent need to better understand the clinical decision-making process and to provide an empirically supported heuristic to help clinicians prioritize the myriad preventive health issues of potential relevance to patients.

### **Issue 3**

Does the assessment and treatment of preventive health issues (such as family violence) legitimately fall within the scope of practice and professional identity of chiropractic? Although it is reasonable and ethical for doctors of chiropractic to be expected to report family violence when they detect it, considerable controversy exists regarding the professional identity of chiropractors and legitimate scope of practice boundaries for the profession. This scope of practice controversy centers not on a doctor of chiropractic's mandated duty to report but, rather, the extent to which training focused on these competencies should be seen as key competencies for the profession to merit substantial investment of resources at the expense of other primary care competencies (see issue 2 above).

To paraphrase Hawk and colleagues,<sup>98</sup> the debate centers on whether chiropractic is "...a complete system of healing...based on a unique approach to healthcare" or a therapeutic modality/procedure (ie, spinal manipulation). Some believe the future of chiropractic rests in broadening the traditional scope of practice to include primary/preventive care.<sup>99-103</sup> and there is evidence that patients' preferences for wellness services may be increasing.<sup>104</sup> However, others doubt that an expanded scope of practice is in the best interests of the profession at the present time, given the limited reimbursement for preventive health services, the uncertain willingness of patients to pay out of pocket to address potential health issues that have not yet and might not develop,<sup>105</sup> and the reported unfamiliarity of many chiropractic clinical teaching faculty members with national preventive health priorities.<sup>106</sup>

## **CONCLUSION**

If the profession decides its identity includes prevention, should chiropractors seek to help clients avert potential health problems that have yet to develop ("primary prevention") or wait until early signs of emerging problems become manifest ("secondary prevention")? In short, does the move to carve out a niche in preventive health care represent a unique approach to chiropractic whose time has come or simply represent a jump on the bandwagon of services already offered by other primary care providers? There is a clear need for continued discussion on the benefits as well as possible unintended consequences associated with

expanding chiropractic from a focused specialty to a broad, preventively oriented, primary care profession.

## ACKNOWLEDGMENT

Preliminary portions of this research were presented at the 17th Annual Conference of the Association of Chiropractic Colleges.

**Received**, April 13, 2006

**Revised**, June 5, 2006

**Accepted**, June 12, 2006

**Address correspondence to:** Gary Globe, DC, MBA, PhD, Cleveland Chiropractic College, 590 North Vermont Avenue, Los Angeles, CA 90004; gglobe@sbcglobal.net.

## REFERENCES

1. Acierno R, Resnick H. Health impact of interpersonal violence I: prevalence rates, case identification, and risk factors for sexual assault, physical assault, and domestic violence in men and women. *Behav Med* 1997;23:53–64.
2. Centers for Disease Control and Prevention. Costs of intimate partner violence against women in the United States. Washington, DC: Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2003 Mar. Available from [http://www.cdc.gov/ncipc/pub-res/ipv\\_cost/03\\_incidence.htm](http://www.cdc.gov/ncipc/pub-res/ipv_cost/03_incidence.htm).
3. Arias I. The legacy of child maltreatment: long-term health consequences for women. *J Womens Health* 2004;13:468–73.
4. Casey E, Nurius P. Trauma exposure and sexual revictimization risk: comparisons across single, multiple incident, and multiple perpetrator victimizations. *Violence Against Women* 2005;11:505–30.
5. Gabor T, Mata F. Victimization and repeat victimization over the life span: a predictive study and implications for policy. *Int Rev Victimology* 2004;10:193–221.
6. Groves B, Augustyn M. Identification, assessment, and intervention for young traumatized children within a pediatric setting. In: Osofsky J, editor. *Young children and trauma: intervention and treatment*. New York: Guilford; 2004. p. 173–93.
7. Lang A, Stein M, Kennedy C, Foy D. Adult psychopathology and intimate partner violence among survivors of childhood maltreatment. *J Interpers Violence* 2004;19:1102–18.
8. Resnick H, Acierno R, Kilpatrick D. Health impact of interpersonal violence: II. Medical and mental health outcomes. *Behav Med* 1997;23:65–78.
9. Smith P, White J, Holland L. A longitudinal perspective on dating violence among adolescent and college-age women. *Am J Public Health* 2003;93:1104–9.
10. Bergeron L. Elder abuse: clinical assessment and obligation to report. In Kendall-Tackett K, editor. *Health consequences of abuse in the family: a clinical guide for evidence-based practice*. Washington, DC: American Psychological Association; 2004. p. 109–28.
11. McCloskey K, Grigsby N. The ubiquitous clinical problem of adult intimate partner violence: the need for routine assessment. *Prof Psychol Res Pr* 2005;36:264–75.
12. American Chiropractic Association. Policies on public health and related matters [homepage on the Internet]. Arlington, VA: the Association; 1999 Aug. Available from: [www.amerchiro.org/about/policies.shtml#30](http://www.amerchiro.org/about/policies.shtml#30).
13. Davidson L, Grisso J, Garcia-Moreno C, Garcia J, King V, Marchant S. Training programs for healthcare professionals in domestic violence. *J Womens Health Gender-Based Med* 2001;10:953–69.
14. Scholle S, Buranosky R, Hanusa B, Ranieri L, Dowd K, Valappil B. Routine screening for intimate partner violence in an obstetrics and gynecology clinic. *Am J Public Health* 2003;93:1070–2.
15. Nelson H, Nygren P, McInerney Y, Klein J. Screening women and elderly adults for family and intimate partner violence: a review of the evidence for the U.S. Preventive Services Task Force. *Ann Intern Med* 2004;140:387–96.
16. Felson R, Pare P. The reporting of domestic violence and sexual assault by nonstrangers to the police. *J Marriage Fam* 2005;67:597–610.
17. Pulido M. Pregnancy: a time to break the cycle of family violence. *Health Soc Work* 2001;26:120–4.
18. Taket A, Nurse J, Smith K, et al. Routinely asking women about domestic violence in health settings. *BMJ* 2003;327:673–6.
19. Samuelson S, Campbell C. Screening for domestic violence: recommendations based on a practice survey. *Prof Psychol Res Pr* 2005;36:276–82.
20. U.S. Preventive Services Task Force. Screening for family and intimate partner violence: recommendation statement. *Ann Fam Med* 2004;2:156–160.
21. Currier G, Briere J. Trauma orientation and detection of violence histories in the psychiatric emergency service. *J Nerv Mental Dis* 2000;188:622–4.
22. Fulmer T, Guadagno L, Bolton M. Elder mistreatment in women. *J Obstet Gynecol Neonatal Nurs* 2004;33:657–63.
23. Koenig R, DeGuerre C. The legal and governmental response to domestic elder abuse. *Clin Geriatr Med* 2005;21:383–98.
24. Kruger R, Moon C. Can you spot the signs of elder mistreatment? *Postgrad Med* 1999;106:169–173, 177–8, 183.
25. Quinn K, Zielke H. Elder abuse, neglect, and exploitation: policy issues. *Clin Geriatr Med* 2005;21:449–57.
26. Gerber M, Ganz M, Lichter E, Williams C, McCloskey L. Adverse health behaviors and the detection of partner violence by clinicians. *Arch Intern Med* 2005;165:1016–21.
27. Korenstein D, Thomas D, Folder C, Ross J, Halm E, McGinn T. An evidence-based domestic violence education program for internal medicine residents. *Teach Learn Med* 2003;15:262–6.
28. Minsky-Kelly D, Hamberger L, Pape D, Wolff M. We've had training, now what? *J Interpers Violence* 2005;20:1288–1309.
29. Ramsay J, Richardson J, Carter Y, Davidson L, Feder G. Should health professionals screen women for domestic violence? Systematic review. *BMJ* 2002;325:314.
30. Candib L. Primary violence prevention: taking a deeper look. *J Fam Pract* 2000;49:904–6.

31. Rhodes K, Levinson W. Interventions for intimate partner violence against women: clinical implications. *JAMA* 2003;289:601–5.
32. Shugarman L, Fries B, Wolf R, Morris J. Identifying older people at risk of abuse during routine screening practices. *J Am Geriatr Soc* 2003;51:24–31.
33. Tilden V, Schlmidt T, Limandri B, Chiodo G, Garland M, Loveless P. Factors that influence clinicians' assessment and management of family violence. *Am J Public Health* 1994;34:628–33.
34. Woodworth H, Byrd T, Shelton A, Parcel G. Health care professionals' skills, beliefs, and expectations about screening for domestic violence in a border community. *Community Health* 2001;24:39–54.
35. Gerbert B, Caspers N, Milliken N, Berlin M, Bronstone A, Moe J. Interventions that help victims of domestic violence: a qualitative analysis of physicians' experiences. *J Fam Pract* 2000;49:889–95.
36. Gerbert B, Moe J, Caspers N, et al. Physicians' response to victims of domestic violence: toward a model of care. *Women Health* 2002;35:1–22.
37. Kellogg N. The Committee on Child Abuse and Neglect. The evaluation of sexual abuse in children. *Pediatrics* 2005;116:506–12.
38. Elliott L, Nerney M, Jones T, Friedmann P. Barriers to screening for domestic violence. *J Gen Intern Med* 2002;17:112–6.
39. Haney K, Kachur E, Zabar S. A brief but multi-faceted approach improves clinicians' domestic violence confidence, competence and clinical performance. *Med Educ* 2003;37:473–89.
40. Rodriguez M, Bauer H, McLoughlin E, Grumbach K. Screening and intervention for intimate partner abuse: practices and attitudes of primary care physicians. *JAMA* 1999;282:468–74.
41. Rodriguez M, Sheldon W, Bauer H, Perez-Stable E. The factors associated with disclosure of intimate partner abuse to clinicians. *J Fam Pract* 2001;50:338–44.
42. Chamberlain L, Perham-Hester K. The impact of perceived barriers on primary care physicians' screening practices for female partner abuse. *Women Health* 2002;35:55–69.
43. Weiss L, Kripke E., Coonse H, O'Brien, M. Integrating a domestic violence education program into a medical school curriculum: challenges and strategies. *Teach Learn Med* 2000;12:133–40.
44. Holtrop T, Fischer H, Gray S, Barry K, Bryant T, Wei D. Screening for domestic violence in a general pediatric clinic: be prepared! *Pediatrics* 2004;114:1253–7.
45. Hamberger L, Patel D. Why health care professionals are reluctant to intervene in cases of ongoing domestic abuse. In: Kendall-Tackett K, editor. *Health consequences of abuse in the family: a clinical guide for evidence-based practice*. Washington, DC: American Psychological Association; 2004. p. 63–80.
46. Leder M, Emans S, Hafler J, Rappaport L. Addressing sexual abuse in the primary care setting. *Pediatrics* 1999;104:270–3.
47. Macleod C, Dornan O, Livingstone A, McCormack L, Lees J, Jenkins M. Teaching junior doctors to recognize child abuse and neglect. *Med Educ* 2003;37:1025–49.
48. Starling S, Sirotnak A, Jenny C. Child abuse and forensic pediatric medicine fellowship curriculum statement. *Child Maltreat* 2000;5:58–62.
49. Ward M, Bennett S, Plint A, King W, Jabbour M, Gaboury I. Child protection: a neglected area of pediatric residency training. *Child Abuse Negl* 2004;28:1113–22.
50. Varjavand N, Cohen D, Novack D. An assessment of residents' abilities to detect and manage domestic violence. *J Gen Intern Med* 2002;17:465–8.
51. Centers for Disease Control and Prevention. Education about adult domestic violence in 25 U.S. and Canadian Medical Schools, 1987–88. *MMWR Morb Mortal Wkly Rep* 1989;38:17–9.
52. Guttman M, Solomon E. Family violence content in dental hygiene curricula: a national survey. *J Dent Educ* 2002;66:999–1005.
53. Woodtli M, Breslin E. Violence-related content in the nursing curriculum: a follow-up national survey. *J Nurs Educ* 2002;41:340–8.
54. Miller A., Coonrod D, Brady M, Moffitt M, Bay R. Medical student training in domestic violence: a comparison of students entering residency training in 1995 and 2001. *Teach Learn Med* 2004;16:3–6.
55. Wissow L, Larson S, Anderson J, Hadjisky E. Pediatric residents' responses that discourage discussion of psychosocial problems in primary care. *Pediatrics* 2005;115:1569–78.
56. Nayda R. Influences on Registered Nurses' decision-making in cases of suspected child abuse. *Child Abuse Rev* 2002;11:169–78.
57. Johnson T, Boccia A, Strayer M. Elder abuse and neglect: detection, reporting, and intervention. *Spec Care Dentist* 2001;21:141–6.
58. Mallon W, Kassinove A. Mandatory reporting laws and the emergency department. *Top Emerg Med* 1999;21:63–72.
59. Lancet Editorial Staff. Child protection: stop blaming doctors. *Lancet* 2004;363:2099.
60. Borrowsky I, Ireland M. Parental screening for intimate partner violence by pediatricians and family physicians. *Pediatrics* 2002;110:509–16.
61. Janssen P, Landolt M, Grunfeld A. Assessing for domestic violence exposure in primary care settings. *J Interpers Violence* 2003;18:623–33.
62. Sugg N, Thompson R, Thompson D, Maiuro R, Rivara F. Domestic violence and primary care. *Arch Fam Med* 1999;8:301–6.
63. Swenson C, Spratt E. Identification and treatment of child physical abuse through medical and mental health collaborations. *Child Health Care* 1999;28:123–39.
64. Williamson K, Coonrod D, Bay C, Brady M, Partap A, Lone Wolf W. Screening for domestic violence: practice patterns, knowledge, and attitudes of physicians in Arizona. *South Med J* 2004;97:1049–54.
65. Punukollu M. Domestic violence: screening made practical. *J Fam Pract* 2003;52:537–43.
66. Botash A. From curriculum to practice: implementation of the child abuse curriculum. *Child Maltreat* 2003;8:239–41.
67. Hill J. Teaching about family violence: a proposed model curriculum. *Teach Learn Med* 2005;17:169–78.
68. Jezierski M, Lynch M, Pharris M, Sateren J. Family violence nursing curriculum; 2004 [monograph on the Internet]. St. Paul, MN: Minnesota Center Against Violence and Abuse; 2004. Available from: [www.min-cava.umn.edu](http://www.min-cava.umn.edu).
69. Starling S, Boos S. Core content for residency training child abuse and neglect. *Child Maltreat* 2003;8:242–7.
70. Heath J, Dyer C, Kerzner L, Mosqueda L, Murphy C. Four models of medical education about elder mistreatment. *Acad Med* 2002;77:1101–6.
71. Berger R, Bogen D, Dulani T, Broussard E. Implementation of a program to teach pediatric residents and

- faculty about domestic violence. *Arch Pediatr Adolesc Med* 2002;156:804–10.
72. Brienza R, Whitman L, Ladouceur L, Green M. Evaluation of a women's safe shelter experience to teach internal medicine residents about intimate partner violence. *J Gen Intern Med* 2005;20:536–40.
  73. Knight R, Remington P. Training internal medicine residents to screen for domestic violence. *J Womens Health Gender-Based Med* 2000;9:167–74.
  74. Kripke E, Steele G, O'Brien M, Novack D. Domestic violence training program for residents. *J Gen Intern Med* 1998;13:839–41.
  75. Johnson C, Fein J, Campbell C, Ginsburg K. Violence prevention in the primary care setting: a program for pediatric residents. *Arch Pediatr Adolesc Med* 1999;153:531–5.
  76. Hall M, Becker V. The front lines of domestic violence: training model for rural EMS personnel. *J Psychosoc Nurs Ment Health Serv* 2002;40:40–8.
  77. Hamberger L, Guse C, Boerger J, Minsky D, Pape D, Folsom C. Evaluation of a health care provider training program to identify and help partner violence victims. *J Fam Violence* 2004;19:1–11.
  78. Hendry E. Engaging general practitioners in child protection training. *Child Abuse Rev* 1997;6:60–4.
  79. Lamberg L. Domestic violence: what to ask, what to do. *JAMA* 2000;284:554–6.
  80. Weir A, Lynch E, Hodes D, Goodhart C. The role of the general practitioner in child protection and family support: a collaborative training model. *Child Abuse Rev* 1997;6:65–9.
  81. Nicolaidis C. The voices of survivors documentary: using patient narrative to educate physicians about domestic violence. *J Gen Intern Med* 2002;17:117–24.
  82. Polnay J, Blair M. A model programme for busy learners. *Child Abuse Rev* 1999;8:284–8.
  83. Shattuck S. A domestic violence screening program in a public health department. *J Community Health Nurs* 2002;19:121–32.
  84. Lapidus G, Cooke M, Gelven E, Sherman K, Duncan M, Banco L. A statewide survey of domestic violence screening behaviors among pediatricians and family physicians. *Arch Pediatr Adolesc Med* 2002;156:332–6.
  85. National Committee for the Prevention of Elder Abuse. Elder abuse prevention teams: a new generation [monograph on the Internet]. Washington, DC: National Center on Elder Abuse; 2003. Available from: [www.elderabusecenter.org](http://www.elderabusecenter.org).
  86. Horwath J, Glennie S. Inter-agency child protection training: gathering impressions. *Child Abuse Rev* 1999;8:200–6.
  87. Fulmer T, Guadagno L, Bitondo C, Connolly M. Progress in elder abuse screening and assessment instruments. *J Am Geriatr Soc* 2004;52:297–304.
  88. Hawk C, Long C, Perillo M, Boulanger K. A survey of U.S. chiropractors on clinical preventive services. *J Manipulative Physiol Ther* 2004;27:287–98.
  89. Globe G, Azen S, Valente T. Improving preventive health services training in chiropractic colleges: a pilot impact evaluation of the introduction of a model public health curriculum. *J Manipulative Physiol Ther* 2005;28:702–7.
  90. Health Resources and Services Administration. A model course for public health education in chiropractic colleges. ASPH Project #H092–04/04, Association of Schools of Public Health; 2002. Available from: [http://depts.washington.edu/ccph/pdf\\_files/MCWBFinalDrft02–19-02.pdf](http://depts.washington.edu/ccph/pdf_files/MCWBFinalDrft02–19-02.pdf).
  91. Maize H, Globe G, Pfefer M, Mayer S. Bridging the gap: introducing chiropractic services at a university student health medical center. *J Chiropr Educ* 2006;20:82.
  92. Pfefer M, Terre L, Globe G. Innovative roles for chiropractors in the hospital setting. *J Chiropr Educ* 2006;20:91.
  93. Olsen E. Identifying and responding to the battered woman. *J Neuromusculoskel Syst* 1996;4:45–51.
  94. te Kolstee R, Miller J, Knapp S. Routine screening for abuse: opening Pandora's box? *J Manipulative Physiol Ther* 2004;27:63–5.
  95. The Council on Chiropractic Education. Standards for Doctor of Chiropractic programs and requirements for institutional status, January 2005. Scottsdale: Council on Chiropractic Education; 2005. Available from: <http://www.cce-usa.org/2006%20January%20STANDARDS.pdf>.
  96. Stine C, Kohrs F, Little D, Kaprielian V, Catipon B, Haq C. Integrating prevention education into the medical school curriculum: the role of departments of family medicine. *Acad Med* 2000;75(7 suppl): S55–9.
  97. US Department of Health and Human Services. Healthy People 2010. Washington, DC: US Department of Health and Human Services; Jan, 2000.
  98. Hawk C, Byrd L, Jansen R, Long C. Use of complementary healthcare practices among chiropractors in the United States: a survey. *Altern Ther Health Med* 1999;5:56–62.
  99. Hawk C. Should chiropractic be a “wellness” profession. *Top Clin Chiropr* 2000;7:23–6.
  100. Hawk C. Toward a wellness model of chiropractic: the role of prevention and health promotion. *Top Clin Chiropr* 2001;8:1–7.
  101. Hawk C. Chiropractic: more than spinal manipulation. *J Chiropr Hum* 1998;8:71–6.
  102. Hawk C, Dusio M. A survey of 492 U.S. chiropractors on primary care and prevention-related issues. *J Manipulative Physiol Ther* 1995;18:57–64.
  103. Hawk C, Dusio M. Chiropractor's attitudes toward training in prevention: results of a survey of 492 U.S. chiropractors. *J Manipulative Physiol Ther* 1995;18:235–40.
  104. Blum C, Globe G, Mirtz T, Greene L. Patient preference for wellness care: is it on the menu? *J Chiropr Educ* 2006;20:53–4.
  105. Bezold C. The future of chiropractic revisited: 2005–2015. Alexandria, VA: Institute for Alternative Futures; 2005. Available from: <http://www.altfutures.com/docs/FutureofChiropracticRevisited.pdf>.
  106. Killinger L, Johnson J. Healthy People 2010 chiropractic clinical teaching faculty knowledge, perceptions, and plans of action. *J Chiropr Educ* 2006;20:28.