Screening for Childhood Trauma in Adult Primary Care Patients: A Cross-Sectional Survey

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Objective: Compared to screening for partner violence, screening for childhood physical and sexual abuse among adult patients has received little attention, despite associated adverse health consequences. The objective of this exploratory study was to describe the practices, skills, attitudes, and perceived barriers of a large sample of family physicians in screening adult patients for childhood sexual or physical abuse.

Method: Surveys were mailed to the 833 members of the Massachusetts Academy of Family Physicians in 2007 eliciting information about screening practices. Factors associated with routine or targeted screening among adult primary care patients were evaluated.

Results: Less than one-third of providers reported usually or always screening for childhood trauma and correctly estimated childhood abuse prevalence rates; 25% of providers reported that they rarely or never screen patients. Confidence in screening, perceived role, and knowledge of trauma prevalence were associated with routine and targeted screening. Women and physicians reporting fewer barriers were more likely to routinely screen adult patients.

Conclusions: Despite the 20%–50% prevalence of child abuse exposure among adult primary care patients, screening for childhood abuse is not routine practice for most physicians surveyed; a large subgroup of physicians never screen patients. Study findings draw attention to a largely unexplored experience associated with considerable health care costs and morbidity. Results highlight the need to develop training programs about when to suspect trauma histories and how to approach adult patients.

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Histories of childhood physical or sexual abuse of adults in primary care are at least as frequent as those observed in the community, with 20%–50% of adult patients reporting sexual or physical abuse and 44% reporting childhood physical, sexual, or emotional abuse.[1,2] Childhood abuse can have long-lasting repercussions placing adults at risk for adverse psychological and physical health sequelae, including depression, posttraumatic stress disorder, substance abuse, somatic and stress-related illness, and chronic pain syndromes.[3–8] Felitti et al,[6] in the Adverse Childhood Experiences study, found a significant dose-response relationship between the number of childhood traumatic experiences and a history of cancer, chronic bronchitis/emphysema, hepatitis, ischemic heart disease, and poor self-related health. They also found a cumulative relationship between early abuse and disability and early death.[6] More recent literature describes a graded relationship of mental and physical health and quality of life to the extent of the childhood abuse exposure.[9–11] Patients with an abuse history utilize more medical resources compared to those without, with greater utilization associated with more trauma.[9,12,13]

During the past 10 years, professional organizations such as the American Medical Association have recommended routine screening for current intimate partner violence.[14,15] However, these guidelines primarily address adult partner violence and do not address screening adults for histories of childhood physical or sexual abuse. Many physicians may be unaware of the potential for long-lasting medical consequences of childhood physical and sexual abuse. We are unaware of any studies that report on physician screening practices focused specifically on childhood abuse exposure among patients. One study of British general practitioners[16] found that two-thirds did not believe that general practitioners should routinely screen for childhood sexual abuse, although more than half desired training on the subject. Only 1 in 100 respondents reported routine screening.[16]

The primary care visit offers a key opportunity to recognize and manage many of the emotional and physical sequelae of early abuse. Many primary care patients with a history of childhood abuse are willing to be screened and believe that physicians can help with these problems.[17,18] In 1 study, 81% of self-reported victims of childhood abuse stated that they had sought professional help for problems related to the abuse, in half the cases from their family practitioner.[18] However, another study found that only one-third of women who have been abused have discussed it with their doctor.[3]

Clinical Points

- Childhood physical and sexual abuse histories are common among adult primary care patients and are associated with physical health and psychological sequelae.
- Educational programs are needed to help physicians gain skills in identifying a history of childhood abuse.
- Primary care clinicians can potentially reduce the emotional and physical health burden associated with child abuse exposure through identifying and engaging patients with histories of victimization.

Understanding physician knowledge, practices, and attitudes about screening for a history of childhood victimization is a necessary first step in developing interventions to help physicians gain the skills and confidence to inquire about abuse and respond to patients with histories of childhood physical or sexual abuse. The goal of this exploratory study was to describe the practices, skills, attitudes, and perceived barriers of a large sample of family physicians in screening adult patients for childhood sexual or physical abuse.

METHOD

Using the 2007 membership list of the Massachusetts Academy of Family Physicians (MAFP), we surveyed physicians using a 54-item questionnaire to elicit information about screening practices. This cross-sectional survey also asked about perceived role in screening, confidence in screening, patient utility if screened, barriers to screening, and follow-up and referral activities of providers. We inquired about knowledge of prevalence of childhood trauma in adult men and women, conditions associated with trauma, medical education and training information, and personal characteristics of the family physicians and their practice sites. We derived specific questions on the survey instrument from items used in published literature.[6,12,19–21] The study received approval from the University of Massachusetts Medical School Institutional Review Board, Worcester.

To understand the influence of personal abuse exposure on physician screening practices, we asked respondents 5 questions taken from prior studies about their own exposure to childhood physical or sexual abuse, adulthood partner violence, and witness to parental violence.[12,19] Following a pilot test with 12 non-MAFP family physicians and internists, we mailed a total of 833 MAFP members a letter explaining the purpose of the study, a questionnaire, and a stamped return-addressed envelope. We offered those who completed the survey a raffle for three $100 bookstore gift certificates. Guided by Dillman's Tailored Design Method,[22] we mailed a reminder letter to nonrespondents approximately 2 weeks later, and full survey packets to persisting nonrespondents approximately 2 to 3 weeks later.

Data were double entered into EpiInfo (http://www.cdc.gov/Epiinfo/) and analyzed using SPSS/PC statistical software (V14.0, SPSS, Inc, Chicago, Illinois). We used univariate statistics to describe the physician population, their practice settings, and their screening practices; we used bivariate statistics to examine relationships between screening variables and gender, practice type, personal exposure to childhood trauma, years of experience, and whether physicians provided prenatal and obstetrical care. Summary measures for the groups of screening questions (ie, screening practices, perceived role, utility of screening, confidence in screening—each measured using a 4-point scale) were computed. All summary measures had high internal consistency reliability (α coefficients from .841 to .987). We created dichotomous variables as follows: (1) screening, "rarely or never/sometimes" versus "usually/always"; (2) confidence, "not at all/somewhat" versus "moderately/very"; (3) perceived role in screening, "not at all/some extent" versus "moderate/great extent"; (4) utility of screening, "not at all/somewhat" versus "moderate/very"; and (5) personal experience with trauma, "never" versus "at least sometimes." Finally, we used factor analysis to explore combining the 12 questions asking about barriers to screening (responses were major barrier, minor barrier, or not a barrier). We grouped the barriers to screening into 3 categories—time, perception that their patients were not victims of childhood abuse, and discomfort with screening/there being little the family physician could do—and created sum scores for these 3 factors.

Chi-square tests or *t* tests were used to assess significance for categorical or continuous measures, respectively, using an α of .05 to denote statistical significance. To select independent variables to include in multivariate models, we used variables with unadjusted associations with the outcome ($P < .25$). In multivariate analysis, our dependent variable was screening of adult patients (either men or women and either new or established) for a history of childhood trauma (dichotomized as usually/always vs never/rarely/

Table 1. Questions Asked of Survey Respondents Regarding Screening Practices for Male and Female and New and Established Patients in 2007[a]

How often do you ask about a history of childhood physical or sexual abuse with:
New female patients?
Female patients at follow-up visits?
New male patients?
Male patients at follow-up visits?

[a]Scored on a 4-point Likert scale wherein 1 = rarely/never, 2 = sometimes, 3 = usually, and 4 = always. Screenings of the individual 4 questions were significantly related to one another. A dichotomous variable was created if one answered "usually" or "always" to any of the 4 questions. A second dichotomous variable was created if one answered "sometimes," "usually," or "always" to any 1 of the 4 questions.

sometimes, collapsed across the 4 variables, Table 1). We performed a stepwise logistic regression to evaluate the association between screening for childhood abuse and independent variables, including physician characteristics, practice type, personal exposure to childhood trauma, barriers to screening, knowledge of prevalence, and screening variables regarding perceived role, confidence, utility, and referral practices. Given the possibility that targeted screening might be a more suitable or practical general strategy, as part of a sensitivity analysis, we also grouped our outcome variable (frequency of screening practices) into "rarely or never" versus "at least sometimes or more frequent screening" and duplicated all analyses. Individual models were fit for each version of the outcome variable with a final model being fit using factors that were significant for either of the 2 models.

RESULTS

Of 833 surveys mailed, 380 were returned (response rate of 45.6%). Among the 380 returns, 67 were ineligible (8 undeliverable, 26 "not currently performing primary care," 2 "no time to complete," 6 retired, 18 not providing care in Massachusetts, and 7 not seeing adult patients). A total of 313 completed and eligible surveys were available for analysis. Using data from the MAFP state database, we compared respondents to MAFP members, finding respondents did not differ in terms of gender, race, ethnicity, or practice type (data not shown).

Table 2 displays the characteristics of the 313 study participants. Respondents were evenly split by gender, were predominantly non-Hispanic whites, and had been in practice a mean of 14 years. Most physicians practiced in either single-specialty groups or community health centers.

More than a quarter (28.6%) of physicians reported that they usually or always screened female patients, either new or established; 12.2% usually or always screened men. When combined, 29.6% of providers reported usually or always screening either men or women for childhood trauma among adult primary care patients. Three of 4 (75.2%) physicians "at least sometimes" screened either new or established female patients; just under half (45.5%) reported that they at least sometimes screened male patients.

Table 2. Frequency, Percent Distributions, and Descriptive Statistics of the Survey Respondents in 2007 (N = 313)[a,b]

Variable	Respondents
Gender	
Male	154 (49.5)
Female	157 (50.5)
Years in practice	
Range	1–42
Mean (SD)	14.1 (9.4)
Race[c]	
White	268 (87.0)
Black	3 (1.0)
Asian	32 (10.4)
Native American	3 (1.0)
Other	8 (2.6)
Ethnicity	
Non-Hispanic	302 (98.1)
Hispanic	6 (1.9)
Practice structure	
Solo practice	45 (14.6)
Single-specialty group	110 (35.6)
Staff-model HMO	1 (0.3)
Multispecialty group	48 (15.5)
Community health center/FQHC	79 (25.2)
Hospital-based clinic	26 (8.3)
Practice location	
Urban	128 (41.6)
Suburban	121 (39.3)
Rural	59 (19.2)
Patients seen besides adult primary care	
Children	286 (91.7)
Adolescents	292 (93.6)
Young adults	300 (96.2)
Pregnant women	152 (48.7)

[a]Data are presented as n (%) unless otherwise specified.
[b]Some variables may not total to 313 because of sporadic missing data.
[c]Respondents may have checked more than 1 response; thus, the total exceeds the 313 individuals in the study sample.
Abbreviations: FQHC = federally qualified health center, HMO = health maintenance organization.

While the literature suggests that between 20%–50% of adult male and female primary care patients are survivors of childhood physical or sexual trauma,[1] physician respondents selected the frequency of 20%–50% only one-third of the time (31.8%) for female patients, but less than 10% of the time (7.4%) for male patients. When asked what 4 conditions might lead them to suspect a history of childhood abuse, physicians listed depression, anxiety, other psychiatric conditions (combined), and substance abuse as their top 4, ranking chronic pain and somatic symptoms much lower on their composite list.

Nearly 4 of 5 family physicians (79.0%) believed their role includes screening for a history of childhood abuse to a moderate or great extent. One-half (50.3%) of respondents were moderately or very confident in their ability to screen for a childhood abuse history. Among 12 possible barriers to screening, most physicians endorsed 3 items as major barriers: not enough

Table 3. Relationship Between Screening and Select Variables Measuring Perceived Role, Confidence, Barriers, Personal Experiences, Practice, and Sociodemographic Characteristics of Survey Respondents in 2007 (N = 313)[a,b,c]

Variable	Sometimes/Usually/Always Screen for a History of Childhood Trauma	Statistics		Usually/Always Screen for a History of Childhood Trauma	Statistics	
		χ^2	*P*		χ^2	*P*
Gender						
Male (n = 153)	110 (71.9)	2.14	.144	35 (22.9)	**6.30**	**.012**
Female (n = 153)	121 (79.1)			55 (35.9)		
Practice type						
Non-community health center (n = 225)	161 (71.6)	**6.63**	**.010**	56 (24.9)	**8.05**	**.005**
Community health center (n = 79)	68 (86.1)			33 (41.8)		
Percent of adult primary care female patients believed to have a history of childhood trauma						
≤ 10% (n = 64)	39 (60.9)	**9.26**	**.002**	10 (15.6)	**7.41**	**.006**
> 10% (n = 242)	192 (79.3)			80 (33.1)		
Percent of adult primary care male patients believed to have a history of childhood trauma						
≤ 10% (n = 180)	132 (73.3)	1.10	.294	50 (27.8)	0.56	.453
> 10% (n = 126)	99 (78.6)			40 (31.7)		
Percent of all adult primary care patients believed to have a history of childhood trauma						
≤ 10% male or female (n = 183)	135 (73.8)	0.86	.353	50 (27.3)	1.40	.237
> 10% male or female (n = 125)	98 (78.4)			42 (33.6)		
Care for other patients besides adult primary care						
Pregnant women						
No (n = 156)	108 (69.2)	**6.90**	**.009**	42 (26.9)	1.40	.237
Yes (n = 151)	124 (82.1)			50 (33.1)		
How confident are you in your ability to screen for a history of childhood abuse?						
Not at all/somewhat (n = 152)	93 (61.2)	**33.07**	**< .001**	24 (15.8)	**26.29**	**< .001**
Moderate/very (n = 153)	137 (89.5)			65 (42.5)		
To what extent do you think it is your role as a physician to screen for a history of childhood abuse?						
Not at all/small extent (n = 63)	30 (47.6)	**33.07**	**< .001**	3 (4.8)	**23.38**	**< .001**
Moderate/great extent (n = 242)	200 (82.6)			87 (36.0)		
How useful to the patient do you think it is for a family physician to screen for a history of childhood abuse?						
Not at all/somewhat (n = 84)	47 (56.0)	**23.45**	**< .001**	7 (8.3)	**23.98**	**< .001**
Moderate/very (n = 220)	182 (82.7)			81 (36.8)		
Self-reported history of personal trauma						
Never (n = 194)	141 (72.7)	2.69	.101	49 (25.3)	3.69	.055
At least sometimes (n = 97)	79 (81.4)			35 (36.1)		
Self-reported history of personal trauma to oneself (minus witnessing trauma)						
Never (n = 205)	150 (73.2)	2.22	.136	53 (25.9)	3.07	.080
At least sometimes (n = 86)	70 (81.4)			31 (36.0)		
Do you know someone with a history of childhood trauma outside of your professional relationships?						
No (n = 81)	51 (63.0)	**9.21**	**.002**	20 (24.7)	1.08	.300
Yes (n = 224)	179 (79.9)			69 (30.8)		
If patient reveals a childhood abuse history, refer patient to a mental health specialist						
Rarely/never/sometimes (n = 74)	59 (79.7)	0.95	.330	27 (36.5)	2.35	.125
Usually/always (n = 232)	172 (74.1)			63 (27.2)		
If patient reveals a childhood abuse history, discuss history in some detail with patient						
Rarely/never/sometimes (n = 137)	94 (68.6)	**7.28**	**.007**	35 (25.5)	1.76	.184
Usually/always (n = 166)	136 (81.9)			54 (32.5)		
If patient reveals a childhood abuse history, discuss medications to help relieve persisting symptoms						
Rarely/never/sometimes (n = 202)	146 (72.3)	3.58	.059	59 (29.2)	0.01	.929
Usually/always (n = 101)	83 (82.2)			30 (29.7)		
If patient reveals a childhood abuse history, bring up abuse history at subsequent visits						
Rarely/never/sometimes (n = 212)	153 (72.2)	**4.07**	**.044**	57 (26.9)	2.48	.116
Usually/always (n = 89)	74 (83.1)			32 (36.0)		

(continued)

Table 3 (continued). Relationship Between Screening and Select Variables Measuring Perceived Role, Confidence, Barriers, Personal Experiences, Practice, and Sociodemographic Characteristics of Survey Respondents in 2007 (N = 313)[a,b,c]

Variable	Sometimes/Usually/Always Versus Never/Rarely Screen for a History of Childhood Trauma	Statistics		Usually/Always Versus Never/Rarely/Sometimes Screen for a History of Childhood Trauma	Statistics	
		t	*P*		*t*	*P*
Time as a barrier to screening sum score, mean (SD)[d]	1.54 (0.50) vs 1.64 (0.55)	1.27	.206	1.54 (0.49) vs 1.78 (0.61)	**3.30**	**.001**
My patients are unlikely victims of childhood abuse as a barrier to screening sum score, mean (SD)[d]	2.73 (0.51) vs 2.84 (0.42)	1.77	.079	2.76 (0.49) vs 2.94 (0.26)	**3.96**	**<.001**
Discomfort with screening, little I can do to help patients as a barrier to screening sum score, mean (SD)[d]	2.52 (0.38) vs 2.64 (0.33)	**2.42**	**.017**	2.56 (0.36) vs 2.73 (0.26)	**4.47**	**<.001**
Years in practice, mean (SD)	15.43 (9.24) vs 13.61 (9.51)	1.44	.151	14.40 (9.51) vs 13.23 (9.35)	0.97	.331

[a]Data are presented as n (%) unless otherwise specified.
[b]Some variables may not total to 313 because of sporadic missing data.
[c]Bolded values indicate statistical significance.
[d]For barrier variables, a higher score indicates it was reported as less of a barrier.

time to evaluate or counsel childhood abuse victims (91.9%), not enough time to ask about a childhood abuse history (89.0%), and competing primary care recommendations (65.7%). Fewer physicians identified other barriers; eg, 45.1% reported there is "little I can do to help those patients who have revealed a history of childhood abuse," while only 12.8% agreed that "a history of childhood abuse is not a medical problem." Of note, almost 40% of respondents reported no formal training in screening adults for childhood abuse histories. Of those with some training, 39.5% reported training in medical school, 71.6% during residency, and 41.6% as part of continuing medical education.

Physicians' responses to patients indicating a history of childhood abuse ranged considerably. Three-quarters (75.5%) of the respondents usually/always suggested a referral to a mental health provider. Over one-half (54.6%) of physicians reported discussing the abuse history and its aftermath in some detail with the patient. About one-third of physicians noted raising the possibility of medication to relieve symptoms (34.1%). Fewer (29.7%) reported that they bring up a disclosed abuse history at subsequent visits.

Among the 95% (n = 297) of physicians responding to questions about personal trauma, one-third (33.6%) acknowledged a history of personal abuse (physical or sexual abuse) or personal trauma (including witnessing abuse between parents). Nearly a third (29.5%; 42.4% of women and 24.3% of men) reported physical or sexual abuse to oneself (as adults or children), while 22.4% reported any childhood physical or sexual abuse. Nearly three-quarters (73.5%) reported knowing someone outside of patient care (ie, friend, family member, etc) with a history of childhood trauma.

Table 3 shows characteristics associated with increased rates of screening. Women providers, those working in a community health center, and providers more likely to correctly identify the prevalence of childhood trauma among female patients were more likely to screen usually or always. Additionally, primary care physicians who felt more confident in their ability to screen, those who felt it was their role to screen, and those who felt that it was useful to their patients to screen for such histories were also more likely to usually/always screen. Those who felt time was an unlikely barrier to screening, as well as those less likely to think their patients are not victims of trauma, and finally providers who were less likely to report discomfort with asking screening questions were, independently, more likely to usually/always screen their patients. Years in practice, providing obstetrical care, referral practices, and knowing someone personally with a history of trauma were not independently related to frequency of screening.

When assessing screening frequency, combining those who reported sometimes screening with those who reported usually/always screening revealed a slightly different pattern of physician characteristics and attitudes (Table 3). While differences in rates were in the same direction, gender, time as a barrier, and likelihood of patients being victims of childhood abuse were no longer significantly associated with screening. In this analysis, providers who reported knowing someone personally with a trauma history and physicians who provided obstetrical care were more likely to report at least sometimes screening their patients for trauma histories. Additionally, if a patient revealed a history of trauma, physicians who reported subsequently discussing the trauma with the patient in some detail and those who brought up the trauma history at a follow-up visit were all independently more likely to report an increased frequency of screening patients at least sometimes.

Table 4 indicates that usually or always screening was associated significantly with 8 of 12 barriers. Concerns about retraumatizing patients, concerns about reimbursement for screening, and the perceived difficulty in verifying reports of trauma were not related to the frequency of reported screening for childhood trauma. Among those physicians who reported screening their patients at least sometimes,

Table 4. Frequency and Percent Distributions of Perceived Barriers to Screening as They Relate to Reported Screening Practices Among Adult Primary Care Patients (N = 313) in 2007[a,b,c]

Variable	Sometimes/Usually/Always Screen for a History of Childhood Trauma	Statistics		Usually/Always Screen for a History of Childhood Trauma	Statistics	
		χ^2	*P*		χ^2	*P*
Not enough time to ask about a history of childhood trauma						
Major barrier (n = 179)	132 (73.7)	2.53	.282	43 (24.0)	**7.13**	**.028**
Minor barrier (n = 94)	76 (80.9)			33 (35.1)		
Not a barrier (n = 32)	22 (68.8)			14 (43.8)		
Not enough time to evaluate and counsel victims of childhood trauma						
Major barrier (n = 216)	154 (71.3)	**6.83**	**.033**	54 (25.0)	**8.07**	**.018**
Minor barrier (n = 65)	56 (86.2)			23 (35.4)		
Not a barrier (n = 24)	20 (83.3)			12 (50.0)		
Uncomfortable inquiring about psychosocial issues						
Major barrier (n = 20)	12 (60.0)	4.30	.116	4 (20.0)	4.77	.092
Minor barrier (n = 115)	84 (73.0)			27 (23.5)		
Not a barrier (n = 169)	134 (79.3)			58 (34.3)		
The women I see are unlikely to have been victims of childhood trauma						
Major barrier (n = 7)	5 (71.4)	**7.00**	**.030**	1 (14.3)	**12.14**	**.002**
Minor barrier (n = 36)	21 (58.3)			2 (5.6)		
Not a barrier (n = 259)	203 (78.4)			85 (32.8)		
The men I see are unlikely to have been victims of childhood trauma						
Major barrier (n = 10)	7 (70.0)	3.47	.177	1 (10.0)	**7.96**	**.019**
Minor barrier (n = 43)	28 (65.1)			6 (14.0)		
Not a barrier (n = 249)	194 (77.9)			81 (32.5)		
History of childhood trauma is not a medical problem						
Major barrier (n = 8)	7 (87.5)	**7.96**	**.019**	0 (0.0)	**9.57**	**.008**
Minor barrier (n = 29)	16 (55.2)			3 (10.3)		
Not a barrier (n = 262)	204 (77.9)			85 (32.4)		
Concern that asking about an abuse history may retraumatize my patients						
Major barrier (n = 15)	11 (73.3)	3.22	.200	2 (13.3)	2.02	.365
Minor barrier (n = 97)	80 (82.5)			29 (29.9)		
Not a barrier (n = 189)	138 (73.0)			58 (30.7)		
Little I can to do help patients who have revealed a history of childhood trauma						
Major barrier (n = 29)	15 (51.7)	**12.93**	**.002**	1 (3.4)	**11.45**	**.003**
Minor barrier (n = 106)	78 (73.6)			30 (28.3)		
Not a barrier (n = 166)	136 (81.9)			57 (34.3)		
Concern about offending my patients by asking about a history of childhood trauma						
Major barrier (n = 18)	10 (55.6)	**7.94**	**.019**	1 (5.6)	**17.55**	**<.001**
Minor barrier (n = 104)	74 (71.2)			19 (18.3)		
Not a barrier (n = 179)	145 (81.0)			68 (38.0)		
No reimbursement in screening for childhood trauma						
Major barrier (n = 19)	15 (78.9)	0.21	.899	4 (21.1)	0.79	.675
Minor barrier (n = 54)	40 (74.1)			15 (27.8)		
Not a barrier (n = 228)	174 (76.3)			69 (30.3)		
Difficult to verify reports of histories of childhood trauma						
Major barrier (n = 18)	9 (50.0)	**7.35**	**.025**	4 (22.2)	3.41	.182
Minor barrier (n = 73)	57 (78.1)			16 (21.9)		
Not a barrier (n = 209)	163 (78.0)			68 (32.5)		
Competing multiple primary care recommendations						
Major barrier (n = 114)	87 (76.3)	0.84	.656	28 (24.6)	**7.42**	**.024**
Minor barrier (n = 81)	59 (72.8)			20 (24.7)		
Not a barrier (n = 103)	81 (78.6)			41 (39.8)		

[a]Data are presented as n (%).
[b]Some variables may not total to 313 because of sporadic missing data.
[c]Bolded values indicate statistical significance.

only one-half of the queried barriers were significantly related to screening frequency (5 of the 6 were similar to those related to usually/always screening).

The logistic regression analyses presented in Table 5 show physician personal and practice characteristics associated with how often family physicians screen for a history of trauma. Female providers and those with greater confidence were more likely to usually/always screen for childhood physical or sexual abuse. Moreover, physicians reporting a greater perceived role in screening, a decreased reporting of time as a barrier, and a decreased reporting of the perception of the unlikelihood that

Table 5. Logistic Regression of Factors Related to Screening Adult Primary Care Patients for a History of Childhood Trauma (N = 313) in 2007[a]

Independent Factors	Sometimes/Usually/Always Screen for a History of Childhood Trauma, Odds Ratio (95% CI)	Usually/Always Screen for a History of Childhood Trauma, Odds Ratio (95% CI)
Gender		
Female vs male	1.435 (0.778–2.647)	2.067[b] (1.154–3.701)
Knowledge of prevalence of trauma in adult female patients		
Correct vs incorrect	2.153[b] (1.078–4.303)	2.297 (0.993–5.312)
Confidence in screening for childhood trauma in adult primary care patients		
Moderate/very vs not at all/somewhat	4.288[b] (2.155–8.536)	2.548[b] (1.385–4.688)
Perceived role to screen for childhood trauma among adult primary care patients		
Moderate/great extent vs not at all/small extent	3.314[b] (1.704–6.447)	11.800[b] (2.701–51.555)
Time as a barrier to screening[c]	1.066 (0.588–1.933)	2.255[b] (1.306–3.894)
Patients are not perceived to be likely victims of childhood abuse[c]	1.298 (0.685–2.459)	3.133[b] (1.263–7.771)

[a]Screening for childhood trauma was originally queried as rarely/never, sometimes, usually, or always. For the purposes of these analyses, the variable was dichotomized in 2 different manners: never/rarely vs sometimes/usually/always and never/rarely/sometimes vs usually/always.
[b]Variables were significant in their individually run models.
[c]Continuous variable; a higher score indicates it was reported as less of a barrier.

their patients had been victims of trauma (as a barrier to screening) were also more likely to usually/always screen adult primary care patients. Physicians with a greater knowledge of trauma prevalence had a similar estimated increased likelihood of usually/always screening. Practice location, years in practice, a personal trauma history, and other previously identified barriers to screening were not significantly related to the odds of screening (usually/always) in this multivariate model. When examining results using the outcome of screening at least sometimes versus never/rarely, only confidence in screening, perceived role to screen, and knowledge of trauma prevalence in adult female patients were significantly associated with screening. All other variables associated with more frequent screening (ie, usually/always) were no longer associated with screening practices.

DISCUSSION

In contrast to screening for intimate partner violence, screening for childhood physical and sexual abuse has received little attention. This study provides information from a large, statewide survey about family physicians' knowledge, skills, attitudes, and perceived barriers related to screening adult patients for exposure to childhood violence. Despite the widespread prevalence of this problem, our results suggest that screening for childhood abuse is not routine practice for the majority of family physicians surveyed. Fewer than one-third of physicians routinely screen female patients for childhood abuse, and only 1 in 8 routinely screens male patients. A large subgroup of physicians rarely or never screen female patients (25%), and half of physicians rarely or never screen male patients.

Consistent screening is challenging for any problem in primary care. However, as with intimate partner violence,[23] screening for a history of childhood abuse provokes physician discomfort and uncertainty and lacks evidence-based guidelines. Specifically, no clinical guidelines exist to recommend that clinicians perform either universal or targeted screening for histories of childhood abuse. Given that primary care physicians face increasing demands to screen patients for a range of conditions, identification of the best strategy would be helpful.

Screening sometimes, either in a targeted manner or over time in the course of continuous relationships with patients, may be one feasible approach to child abuse inquiry given competing demands. Therefore, we performed our analyses of screening patterns to examine both that group of physicians who screen always/almost always (compared to those who screen less often) as well as those who screen at least sometimes (compared to those who never or rarely screen). The 2 groups—the routine versus the sometimes screeners—were similar in many respects except that female physicians predominated in the routine screeners and the barriers were different. Not surprisingly, routine screeners were less likely to identify barriers (eg, time and unlikely victimhood) than those who screened sometimes. However, in both groups, confidence, perceived role, and knowledge of trauma prevalence related to screening.

The recommendation for targeted screening, in particular, would require that clinicians have a good understanding of the prevalence, presenting signs and symptoms, and typical presentations in primary care of adult survivors of childhood abuse. Unfortunately, our survey found that many family physicians substantially underestimate the prevalence of child abuse and have major gaps in knowledge about the well-documented physical health sequelae associated with abuse exposure—unexplained or difficult-to-treat symptoms, including somatization and chronic pain.[2,24,25] The usual approach to care (ie, the diagnosis and treatment of a specific problem) will likely fall short when approaching such distressed patients.[26] While not sufficient in and of

itself, increasing physician awareness of the prevalence of childhood violence exposure and the various adult conditions commonly associated with such exposure seems a necessary first step to encourage physicians to screen, whether on a targeted or routine basis.

Confidence in screening emerges as one of the major independent predictors of screening for both groups who screened always or at least sometimes. However, many of the surveyed physicians lack confidence to conduct such screening and do not feel comfortable using the information, even though most believe that screening for abuse is helpful and within their professional role. Other research supports our findings; physicians in a qualitative study reported inadequate training to address trauma issues.[27] More than one-third of physicians in our study reported no prior education or training related to childhood abuse. These results highlight the need for education about this topic in medical school, residency, and primary care continuing medical education programs, including helping physicians to gain skills in identifying a history of abuse, engaging patients, and managing the emotional impact of caring for patients with histories of victimization.

Gender also emerges as an independent predictor of screening usually or always, with female physicians more likely to screen for childhood abuse histories than men. Female physicians' greater exposure to personal abuse across the lifespan compared to their male colleagues, as reported in this study and others,[28] may sensitize them to the issue of abuse and lead them to feel more confident to screen on a consistent basis.

Nearly one-third of the physicians in our study reported a personal exposure to childhood physical or sexual violence. These experiences might predispose providers to limit inquiry into or minimize the importance of such events or, alternatively, might sensitize providers and incline them toward increased screening. Our findings demonstrate an association between physicians' personal history of abuse and greater likelihood of screening patients for childhood abuse exposure, but this association was strongly mediated by gender and did not emerge as predictive of screening in our final model. A subsequent article will address the relationship between personal exposure history and screening practices, as well as education and training implications.

Integrating routine screening for childhood abuse into primary care practice is challenging given many competing screening requirements now expected of physicians. While there is no clear evidence for the optimal screening frequency, given the considerable morbidity and mortality associated with abuse exposure, targeted screening is probably the most reasonable approach at this time. For targeted screening at a minimum, physicians would benefit from knowing (1) the prevalence of childhood abuse exposure and what types of symptoms are associated with an abuse history (ie, when to suspect and screen for it), (2) brief screening questions to ascertain such history when suspected, and (3) an approach to respond to those patients who report a childhood trauma. Qualitative interviews with family physicians about screening for sexual abuse suggest that knowledge, skills, and confidence affect their practice.[15] Educational programs to address childhood abuse exposure among adult patients would better prepare providers to know when and how to approach this important issue.

Survivors of childhood sexual abuse are known to be avoidant of self-care habits such as Pap smears and mammography.[29,30] Screening for childhood abuse will be most helpful if it can be coupled with effective approaches to patients' health care experiences. However, the literature offers few evidence-based interventions that improve outcomes for adults with childhood abuse histories. A recent systematic review by Havig[31] analyzed 10 studies about the health care experiences of adult survivors of child abuse and identified some best practices. Specific strategies in communication facilitate disclosure of abuse, and targeted approaches can enhance patients' experiences in health care and minimize retrauma and negative experiences typical for survivors of abuse. Medical tests and procedures, including ordinary activities like disrobing or undergoing pelvic or rectal examinations, can cause unintended restimulation of prior abuse, making clinical interactions difficult and ultimately costly, particularly when providers are unaware of that possibility. Directed communication before conducting such examinations or tests can alert the provider to the possibility of retraumatization and sometimes avert it. A patient's sense of safety and control can be enhanced by informing patients before touching them or performing procedures, by allowing for breaks, and by using examination rooms with walls rather than curtains.[31]

Once aware of an abuse history, a physician can validate the patient's experience and make links between current symptoms and past traumatic exposures. An intervention to teach providers how to talk with patients about childhood abuse may enable patients to engage more effectively in their medical care rather than avoiding or sabotaging it.[32] Unfortunately, transforming the medical environment, with its focus on routines and efficiency, to be sensitive to patients with histories of past trauma, is a major challenge to usual practice. While past research on ways to enhance patients' experience of care and disclosure of abuse has offered important practice suggestions, research is still necessary to examine the impact of specific interventions on additional outcomes, including health status and service utilization.

This study is potentially limited by having surveyed only 1 specialty in 1 state, and results may not be generalizable to other primary care specialties or geographic regions. Although the study's response rate is good for a survey of physicians, the fact that it is less than 50% is also a potential limitation. However, statewide participation by physicians from a wide range of practice types plus comparison to the state data from the MAFP make us confident that our results are representative of family physicians in the Northeast and probably other parts of the United States. The survey, which included a higher proportion of family physicians practicing in community health centers than is typical nationally, may skew the results toward providers who choose to work with the underserved and who may be more aware of abuse issues, raising the possibility that our survey may overestimate the rate of screening. Also, some Massachusetts physicians know the authors from statewide meetings and training and may be aware of their interests in victimization, again skewing results toward higher reporting. The self-reported data may also be limited by underreporting of personal experiences due to the sensitivity of these items and/or overreporting of screening practices due to social desirability.

To our knowledge, this study provides the first report of screening practices of adults for histories of child abuse among a large sample of primary care physicians. Despite the study's limitations, the findings reported here draw attention to a largely unexplored and critical life experience associated with considerable health care costs and health-related morbidity. We found significant gaps in knowledge and screening practices among physicians. While the determination of what screening frequency is most appropriate for primary care physicians requires further research, our results highlight the need to raise awareness among physicians about the prevalence of childhood abuse and to develop training programs about when to suspect it and how to provide some level of intervention when indicated. Effective primary care–based approaches will afford a key opportunity to recognize and reduce the emotional and physical health burden associated with the common experience of exposure to childhood physical and sexual abuse.

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