

THE PUBLIC'S HEALTH

Newsletter for Medical Professionals in Los Angeles County
Volume 9 • Number 4 April 2009

Adult Manifestations of Childhood Sexual Abuse

Background

While childhood sexual abuse (CSA) continues to be a major public health problem, an equally severe and silent epidemic are the estimated 39 million adult survivors of childhood sexual abuse in the United States who continue to exhibit aftereffects of CSA that predispose them to adverse psychosocial outcomes throughout their adolescent and adult life.

Early childhood traumas such as sexual abuse can have lifelong effects throughout adulthood, and the cost to society is high. Ninety percent of cases go unreported and untreated, as the symptoms of CSA are often misdiagnosed and unappreciated.

This article attempts to provide clinicians with awareness of the neurodevelopmental effects of CSA, the adult clinical symptoms, and the adverse psychosocial outcomes of CSA. It will also present tools to help identify the aftereffects of CSA in adulthood and provide mandated reporting protocols.

Definition

Sexual abuse is defined as any sexual activity that a child cannot comprehend or consent to. It includes acts such as fondling, oral-genital contact, and genital and anal intercourse, as well as exhibitionism, voyeurism, and exposure to pornography. A central characteristic of any abuse is the dominant position of

an adult that allows him or her to force or coerce a child into sexual activity. Researchers have determined that child sexual abuse victims come from all cultural, racial, and economic groups. The lack of a universal definition of CSA contributes to the complexity of data collection and estimates.

Continued on page 3



A Link Between Smoking and STDs



In addition to the many well-documented adverse health effects of smoking (e.g., lung cancer and cardiovascular disease), studies suggest that smoking may also increase both the incidence and consequences of some sexually transmitted diseases (STDs). For example, epidemiologic studies have found that smoking is independently associated with an increased risk for cervical, anal and oro-pharyngeal human papilloma virus (HPV)-associated disease (silent infections, warts, precancerous lesions and cancer).

Continued on page 2

THE PUBLIC'S HEALTH



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A Link Between Smoking and STDs...from page 1

The Surgeon General's report says, "The evidence is sufficient to infer a causal relationship between smoking and cervical cancer." In addition, some studies suggest that smoking may be an independent risk factor for HIV infection, pelvic inflammatory disease (PID), bacterial vaginosis, trichomonas infection, and ectopic pregnancy.

Tobacco smoke constituents are found in cervical mucus in female smokers and nonsmokers chronically exposed to environmental tobacco smoke. Smoking is known to decrease cellular and humoral immune system function, impair ciliary functioning, and increase bacterial adherence to exposed cells. Many of these abnormalities resolve within six weeks after smoking cessation. In one study, the smoking-associated increased risk for in-situ cervical cancer disappeared within three years after smoking cessation. These findings suggest that smoking cessation could be a potentially important supportive strategy for reducing both the risk and complications of some STDs.

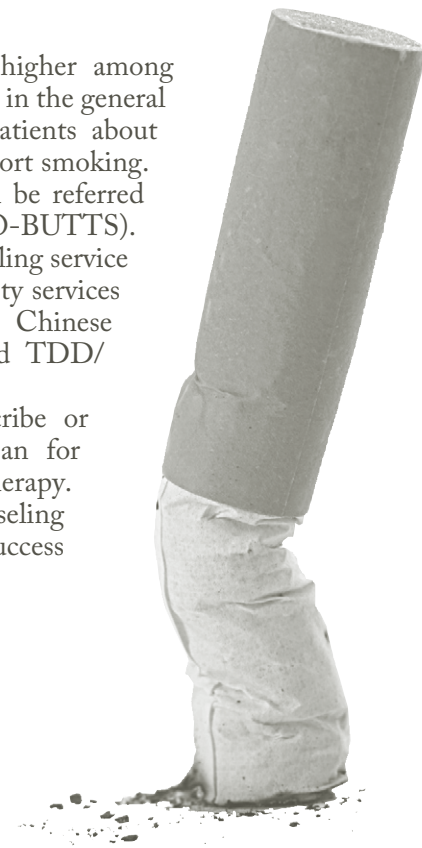
What Health Care Providers Can Do

Smoking rates have been found to be higher among patients with sexually transmitted diseases than in the general population. Providers should ask all STD patients about tobacco use and advise them to quit if they report smoking. An important resource to which smokers can be referred is the California Smokers' Helpline (800-NO-BUTTS). This telephone-based tobacco-cessation counseling service is funded by the State and provides high-quality services free of charge in English, Spanish, Korean, Chinese (Mandarin and Cantonese), Vietnamese, and TDD/TTY for the hearing impaired.

Health care providers should also prescribe or refer patients to their primary care physician for prescription of tobacco-cessation pharmacotherapy. The combination of multi-session tobacco counseling and pharmacotherapy can result in a one-year success rate of over 30% per quit attempt.

Marsha Epstein, MD, MPH

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Los Angeles County Department of Public Health



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- Fiore MC, Jaén CR, Baker TB, et al. Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. May 2008. Available at www.ahrq.gov/path/tobacco.htm

For the full list of references, contact Dr. Epstein at mepstein@ph.lacounty.gov.

Adult Manifestations of Childhood Sexual Abuse...from page 1

Incidence and Prevalence

Currently, CSA prevalence in the U.S. is not known, but estimates vary from 12% to 40%. Incidence studies suggest that while on average 5.5 children per 10,000 enrolled in day care are sexually abused, a greater number of children (8.9 children per 10,000) are sexually abused in their home. Further CSA studies suggest that 53% of the abuse occurs in the home, 57% report the perpetrator was a family member, and 65% report repeated abuse. **Overall, studies show that 1 in 3 females, and 1 in 6 males have experienced childhood sexual abuse by the age of 18.**

While nearly 90,000 cases of child sexual abuse are reported each year in the U.S., between 88%-90% of CSA cases are estimated to be unreported and interestingly, between 21%-49% of CSA victims appear asymptomatic following victimization. The lack of disclosing a history of sexual abuse contributes to the lifelong effects of the abuse.

Neurodevelopmental Damage of CSA

Controlled studies have shown that adult survivors of child sexual abuse (ASCSA) are more likely to exhibit adverse psychopathologies in adulthood, and neuroimaging studies confirm that exposure to sexual abuse in childhood alters the neurobiology and neurostructures in the brain, leading to scarring, an abnormal neurohormonal response to future stressors, and predisposes the victim to a lifetime of negative consequences.

Neurological damage from sexual abuse alters early brain development, increasing the risk for psychopathology in adolescence and adulthood (*Table 1*). The hippocampus, responsible for new learning and memory, plays a critical role in recording emotions that are attached to a stressful event such as sexual abuse. The hippocampus is known to be very sensitive to stress. During stress, high levels of glucocorticoids are released, and over time (as observed among CSA victims, including those re-victimized) elevated levels of glucocorticoids damage neurons in the CA3 region of the hippocampus and lead to atrophy. While the hippocampus has been shown to regenerate neurons, stress inhibits neurogenesis.

Abnormalities of the hippocampus have been shown to be associated with pathological fear, mood imbalances, and anxiety reactions in trauma-related disorders (also hallmarks among ASCSA).

Magnetic resonance imaging (MRI) studies have demonstrated a 12% left hippocampal volume size reduction among adults who have been sexually abused in childhood as compared to healthy controls (*Figure 1*). Similar reductions are exhibited among subjects with trauma-spectrum disorders such as depression, dissociation, PTSD, and borderline personality disorder. In addition, the amygdala, responsible for emotional and fear regulation, is affected by early sexual trauma, resulting in similar psychopathologies.

Studies suggest sexually traumatized children are also less able to utilize both brain hemispheres to process experiences. The corpus callosum, a longitudinal fissure that connects the left and right cerebral hemispheres, is shown to be abnormal in sexually abused children. Generally, the left side of the brain processes positive emotions and logical thinking, and the right processes negative emotions such as fear. When the corpus callosum is not operating properly these processes are unable to function at the same time, thus supporting theories why many abused individuals divide people into “all good” or “all bad” and exhibit mood swings, as observed in borderline patients.

Adult Manifestations of CSA

There is no adopted definition to identify the symptoms exhibited among ASCSA; however, evidence-based research has confirmed long-term effects of CSA in adolescence and into adulthood. Later in their lives, many ASCSA, whether reported or not, exhibit psychopathology, acting-out behaviors (social dysfunction), relationship problems (interpersonally), somatic symptoms, and sexual disorders.

CSA survivor studies suggest that ASCSA use health care services more often than the general population, are shown to exhibit more somatic symptoms that do not respond to medical treatment, and present more severe and complex symptoms. The response to sexual abuse during childhood varies, and is

Continued on page 4

Table 1: Neurodevelopmental effects from CSA

Neurodevelopmental Effect	Region/Structure	Outcome*
Diminished growth	Left hemisphere	Depression
Reduced volume size	Limbic system—hippocampus and amygdala	<ul style="list-style-type: none"> • Panic disorder • PTSD • Dissociative disorders • Borderline personality disorder • Memory impairments • Fear reaction deficits
Impairment (connection between hemispheres)	Corpus Callosum	Attention deficit hyperactivity disorder (ADHD)

*Teicher, M.D. (2000). Wounds that time won't heal: The neurobiology of child abuse. *Cerebrum: The Dana Forum on brain science*, 2(4), 50-67.

Adult Manifestations of Childhood Sexual Abuse...from page 3

Figure 1



Normal Child

Magnetic resonance image (MRI) of the hippocampus of a normal child

Post-CSA

MRI illustrating severe hippocampus atrophy of a child who suffered sexual abuse

Source: J. Douglas Bremner, MD

largely dependent on 1) age at onset; 2) severity; 3) duration; 4) relationship to the perpetrator; 5) the child's resiliency; and 6) stability of and support from the family.

Childhood survivors might initially seem unaffected by the trauma; however, by adolescence and adulthood, the consequences eventually become symptomatic, resulting in eating disorders, dissociation, phobias, obsessions, borderline personality disorder, depression, anxiety, bulimia, obesity, post traumatic stress disorder, hallucinations, conduct disorder,

substance abuse disorder, panic disorder, antisocial personality disorder, affective disorder, and impaired sense of self.

Behavioral Effects of CSA

Acting out

Children are limited in their physical, cognitive, and emotional development and, thus, dependent upon adult and often sibling caregivers to provide love, trust, and support. Once a child is violated however, shame and stigma often follow, as well as fear that disclosing the abuse will result in re-victimization, loneliness and isolation, physical violence, and death. Poor coping skills are common among this cohort, such as substance abuse, tobacco use, overeating, addiction, lying/stealing, poor academic performance, expectation of early death, poor adherence to medical treatment, suicide, anger, prostitution, and increased risk of sex crimes.

Relationship problems

Controlled studies identify an association between childhood sexual abuse and adult relationship problems. Adult manifestations of CSA increase the risk of intimate partner violence victimization and perpetration, rape after 18 years of age, low self-esteem, intimate relationship problems, divorce, interpersonal problems, victim-perpetrator cycle, superficial idealization of sexual relationships, and the inability to trust others.

Somatic symptoms

Evidence illustrates that CSA also results in biophysical changes. ASCSA show a decreased threshold for pain. Other effects include a heightened sensitivity in the pelvic or abdominal region, various bowel symptoms, musculoskeletal disorders, back pain, severe headaches, gastrointestinal problems, sleep disorders, asthma, and pseudocystitis.

Where can survivors get help in Los Angeles County?

There are many resources in Los Angeles County for adult survivors of childhood sexual abuse. The **L.A. County Department of Mental Health** offers a 24-hour Access Referral Line at (800) 854-7771. Survivors can ask for Community-based counseling referrals, or visit the Website at www.dmh.lacounty.gov to find mental health service providers in a specific area of Los Angeles County.

Information on Sexual Assault Awareness Month activities for April are posted on the Website of the **National Sexual Violence Resource Center** at www.nsvrc.org/saam/.

To obtain professional research, professional, and conference information on child maltreatment, visit the Website of the **American Professional Society on the Abuse of Children** at www.apsac.org.

For additional injury and violence prevention information, visit the **L.A. County Department of Public Health, Injury & Violence Prevention Program** Website at www.ph.lacounty.gov/ivpp.

Continued on page 5

Adult Manifestations of Childhood Sexual Abuse...from page 4

MANDATED REPORTING

Physicians are mandated reporters under California Penal Code, Section 11160. This code mandates that all physicians call the local law enforcement agency by telephone immediately or as soon as possible when a patient comes for medical care due to a sexual assault. Reporting forms must be completed and mailed to a law enforcement agency within 48 hours.

REPORTING FORMS

- OES 923** Acute (<72 Hours) Adult/Adolescent Medical/Evidentiary Sexual Assault Examination
http://www.cmtc.tv/pdf/oes_forms/oes_923_form.pdf
- OES 925** Nonacute (>72 Hours) Child/Adolescent Medical/Evidentiary Sexual Abuse Examination
http://www.cmtc.tv/pdf/oes_forms/oes_925_form.pdf
- OES 950** Sexual Assault Medical/Evidentiary Suspect Exam
http://www.cmtc.tv/pdf/oes_forms/oes_950_form.pdf

Online Continuing Education Courses: Sponsored by NASW, NBCC, BBS, NCFR

Child Sexual Abuse
Intervention and Treatment Issues

<http://www.ceregistration.com/portal/file/childsexualabuse.htm>

Child Abuse Assessment and Reporting

<http://www.ceregistration.com/portal/file/childabuseassessment.htm>

Sexual disorders

Adult manifestations of CSA increase adolescent and adult risk of exposure to sexually transmitted diseases, compulsive sexual behaviors, early sexual activity, extreme masturbation, sexual promiscuity, poor sexual adjustment, poor contraceptive practices, and teen pregnancy.

Functional amnesia

Functional amnesia (dissociative amnesia—dissociative disorders) can develop after severe trauma, such as child sexual trauma. This is especially true among children experiencing severe sexual trauma or in those aged 5 years or younger. Functional amnesia among CSA cases varies widely, from 19% to 88%. While theories about amnesia and delayed recall of CSA vary and may be controversial due to false memories, it is important to recognize that later in adolescence or adulthood, the victim may not recall the experience. Additionally, if the abuse occurred in middle childhood, ages 6-12, the victim may 1) develop false memories that the abuse ever occurred; 2) be in denial; or 3) be unaware that the type of experience was determined to be sexual abuse.

Role of the Clinician

The clinician plays an important role in caring for adult survivors of childhood sexual abuse. Because the presenting symptoms can be somatic in nature, the role of CSA in the patient's illness or presenting symptoms can be overlooked.

Child Sexual Abuse Statistics

- 53% of CSA occurs in the home.
- 57% of perpetrators are family members.
- 65% of victims report repeated abuse.
- 1 in 3 females, and 1 in 6 males have experienced CSA.
- 88%-90% of CSA cases are estimated to be unreported.

Continued on page 6

Adult Manifestations of Childhood Sexual Abuse...from page 5

Table 2

SAVE Universal Screening Tool		
S	Screen all of your patients for sexual violence	<ul style="list-style-type: none"> • Ask the patient when no one else is in the examining room. • Make direct eye contact and actively listen to the response.
A	Ask direct questions in a non-judgmental way	<ul style="list-style-type: none"> • Talk with your patient and say, I need to ask you some personal questions. • Asking these questions will help me care for you better. • Since I am your doctor, we need to have a good partnership. I can better understand your health if you would answer some questions about your sexual history. I ask all of my patients these questions because it is important for me to know what has gone on in their lives. Then ask the patient directly: <ol style="list-style-type: none"> 1. Have you ever been touched sexually against your will or without your consent? 2. Have you ever been forced or pressured to have sex? 3. Do you feel that you have control over your sexual relationships and will be listened to if you say “no” to having sex?
V	Validate your patient’s response	<p>Tell your patient</p> <ul style="list-style-type: none"> • Thank you for telling me about such a difficult experience. • I am sure that was hard for you to tell me. It is good that you told me. • Rape is devastating in many ways. Let’s talk about some of the ways you need support. <p>Be sure to document the response in your chart using the patient’s own words.</p>
E	Evaluate , educate and make referrals	<p>If your patient says “yes”</p> <ul style="list-style-type: none"> • Immediately evaluate present-day level of danger, other violence, drug and alcohol use, and health habits. Mention the disclosure again during another visit and ask about the patient’s needs. • Request a one- to two-week follow-up appointment if necessary. • Refer to a specialist. <p>If your patient says “no”</p> <ul style="list-style-type: none"> • Evaluate the experience with the patient and provide education about violence and consent.

Despite never reporting the abuse, 85% of adult survivors of child sexual abuse favor physician screening. Directly asking patients about the occurrence of abuse has been shown to elicit more positive responses compared to self-reporting, 29% versus 7% respectively. Further, especially among adolescent patients, it is important to remember that early disclosure of sexual abuse by the victim is critical to reducing the effects of CSA and to helping reduce psychological distress later in life. Symptoms of ASCSA can vary greatly and, in fact, the patient can be asymptomatic.

Evidence-based research suggests that many interventions can be useful in this population. For example, coping-skill interventions seem to help diminish or prevent post traumatic stress disorder and related adult aftereffects of CSA. Physicians can use the SAVE universal screening tool (*Table 2*) for childhood sexual abuse in adulthood, developed by the Florida Council Against Sexual Violence. This useful tool screens patients for sexual violence.

Physicians should also be familiar with their own hospital, clinic, or HMO policies and procedures regarding sexual violence reporting, as well as the use of specific reporting forms. The California Medical Training Center develops instructional materials and conducts training in clinical forensic medicine techniques for physician and other health care professionals, social workers, and related reporters.

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Promoting Health Through the Food Stamp Program

The Food Stamp Program is the largest food assistance program in the State and is designed to help low-income Californians and their families buy the food they need for good health. During these tough economic times, individuals may need to make tough decisions about what foods are affordable for their families. A perceived lack of money to purchase healthy foods can lead to the increased likelihood of buying cheaper, unhealthy foods.

Currently, only 56% of Angelenos eligible for food stamps are enrolled. Promoting the Food Stamp Program can enhance the nutrition and physical activity guidance provided in health care offices and clinics by incorporating both the “Why” and “How to” components necessary to support behavior change.

Effects of Unhealthy Foods

People who are not getting enough healthy food to eat can suffer from fatigue, lack of concentration and low work productivity. Children are especially vulnerable to the side effects of hunger and poor nutrition. School attendance and attentiveness in the classroom can be harmed when children do not have enough healthy foods to eat.

According to the 2002-2003 Los Angeles County Health Survey, more than one in four households in the County experience food insecurity. Food insecurity is defined as limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire foods in socially acceptable ways.

One of the paradoxical and most concerning consequences of food insecurity is obesity. Results from the Survey indicate that the rate of obesity is higher among food insecure adults (31%) than among adults who were food secure (23%). As the

obesity rate for County adults continues to rise, promoting access to healthy foods through participation in the Food Stamp program may be one part of the overall solution.

How Health Care Professionals Can Help

Health care professionals can encourage individuals or families to apply for benefits by completing an application form. Food Stamps have similar eligibility requirements to Medi-Cal, Healthy Families, and the Child Health and Disability Prevention Program (CHDP). The amount of food stamp benefits is dependent on income and family size.

Your patients may be able to receive an average of \$200 per month from the Food Stamp Program to purchase healthy foods. Benefits are provided on an electronic card that is used like an ATM card and accepted at most grocery stores and some farmers’ markets. The toll-free number for assistance in L.A. County is (877) 597-4777. More information is available through the L.A. County Department of Public Social Services. Log on to <http://dpss.co.la.ca.us>, and click on Food & Nutrition.

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Frequently Asked Questions about the Food Stamp Program

Q. Who is eligible?

A. U.S. citizens, U.S. nationals, citizen children of noncitizen parents, and immigrants. Because of similar qualification levels, talk to your Medi-Cal, CHDP and Healthy Families patients about the Food Stamp Program.

Q. What amount of Food Stamp benefits can patients qualify for?

A. The amount varies by household depending on income, expenses, assets, and household size. The average amount of Food Stamp benefits received per household is \$200 per month.

Q. How can patients use Food Stamps?

A. Food Stamps can be used for any foods for human consumption, as well as seeds or plants to grow food for household consumption.

Q. Where can patients use Food Stamps?

A. Food stamps are accepted in many retail food outlets, including a growing number of farmers’ markets.

Physician Registry

Become a Member of the Health Alert Network

The Los Angeles County Department of Public Health urges all local physicians to register with the Health Alert Network (HAN). By joining, you will receive periodic email updates alerting you to the latest significant local public health information including emerging threats such as pandemic influenza. Membership is free. All physician information remains private and will not be distributed or used for commercial purposes.

Registration can be completed online at www.lahealthalert.org or by calling (323) 890-8377.

Be aware of public health emergencies! Enroll now!

This Issue...

Adult Manifestations of Childhood Sexual Abuse. 7

A Link Between Smoking and STDs. 7

Promoting Health Through the Food Stamp Program. 7

THE PUBLIC'S HEALTH

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COUNTY OF LOS ANGELES

Public Health

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Selected Reportable Diseases (Cases)¹ — November 2008

Disease	THIS PERIOD NOV 2008	SAME PERIOD LAST YEAR NOV 2007	YEAR TO DATE – NOV		YEAR-END TOTALS		
			2008	2007	2007	2006	2005
AIDS ¹	155	165	1,600	1,339	1,406	1,332	1,497
Amebiasis	5	10	102	111	122	94	114
Campylobacteriosis	74	43	983	782	827	775	725
Chlamydial Infections	3,065	3,334	39,758	37,926	40,935	39,876	38,862
Encephalitis	1	3	66	56	65	46	72
Gonorrhea	561	752	7,594	8,626	9,319	10,430	10,494
Hepatitis Type A	4	2	71	72	78	364	480
Hepatitis Type B, acute	4	6	62	51	52	62	57
Hepatitis Type C, acute	0	0	2	1	6	4	3
Measles	0	0	1	0	0	1	0
Meningitis, viral/aseptic	41	29	571	361	395	373	527
Meningococcal Infect.	0	0	30	22	24	46	37
Mumps	0	0	7	4	5	10	10
Pertussis	9	0	69	53	69	150	439
Rubella	0	0	1	0	0	0	1
Salmonellosis	129	85	1,503	1,017	1,081	1,217	1,085
Shigellosis	30	24	469	442	463	524	710
Syphilis (prim. and sec.)	30	72	617	799	846	789	644
Syphilis Early Latent	29	57	647	745	794	764	570
Tuberculosis	68	58	624	604	816	885	906
Typhoid fever, Acute	1	3	14	15	17	17	12

1. Case totals are provisional and may vary following periodic updates of the database.