

Reverse Alchemy in Childhood: Turning Gold into Lead

By Vincent J. Felitti, MD

The Adverse Childhood Experiences (ACE) Study

The Adverse Childhood Experiences Study is a major piece of medical research that compares current adult health to childhood experiences decades earlier. The findings are important medically, socially, and economically. They provide a remarkable insight into how we become what we are as individuals and as a nation. The ACE Study reveals a powerful relationship between our emotional experiences as children and our adult emotional health, physical health, and mortality. Moreover, the time factors in the Study

make it clear that time does not heal some of the adverse experiences we found so common in the childhoods of a population of middle-aged, middle class Americans. One doesn't 'just get over' some things.



How does one perform reverse alchemy, going from a normal newborn with almost unlimited potential to a diseased, depressed adult? How does one turn gold into lead? The ACE Study was triggered by observations we made in the mid 1980s in an obesity program at Kaiser Permanente's San Diego Department of Preventive Medicine. This program had a high dropout rate, and the first of many counterintuitive findings was that the great majority of these dropouts actually were successfully losing weight. Detailed life interviews of almost 200 such individuals revealed that childhood abuse was remarkably common and antedated the onset of their obesity. Many patients spoke openly of an association between the two. The counterintuitive aspect was that for many people obesity was not their problem; it was their protective solution to problems that previously had never been discussed with anyone. An early insight was the memorable remark of a woman who was raped at twenty-three and gained 105 pounds in the year subsequent: "Overweight is overlooked and that's the way I need to be." The contrast was striking between this statement and her desire to lose weight.

Continued on page 2

With the increasing attention to examining the effects of witnessing domestic violence on children and the many complicated issues it presents for health care providers, domestic violence advocates, and policy makers, this issue of Health Alert is dedicated to discussing this critical issue. We begin by highlighting the groundbreaking Adverse Childhood Experiences (ACE) Study with this article by Vincent Felitti, MD, which shows a clear link between exposure to abuse or household dysfunction, including witnessing violence against mothers and multiple risk factors for several of the leading causes of death in adults, and calls us to engage in early screening and intervention in families for the sake of mothers and children. Betsy McAlister Groves, MSW, LICSW, then offers us insight for how these findings are important and cautions us on the complicated issues faced when responding to domestic violence in homes with children. We have included excerpts from the "Children: The Hidden Victims of Domestic Violence" plenary session from the 2000 National Conference on Health Care and Domestic Violence that also add valuable insight to this discussion.

—Peter Sawires, FVPF

Reverse Alchemy in Childhood...

Continued from previous page

Similarly, two men who were guards at the State Penitentiary became anxious after each losing over one hundred pounds. They made it clear that they felt much safer going to work looking big as a refrigerator rather than normal size. Overall, we found the simultaneous presence of opposing forces to be common; many of our weight program patients were driving with one foot on the brakes and one on the gas, wanting to lose weight but fearful of change.

In 1990 in Atlanta, I presented information about the frequent relationship of obesity and abusive childhood experiences to a largely skeptical audience at the North American Association for the Study of Obesity. Unexpectedly, this led to contacts with researchers at the Centers for Disease Control and Prevention who recognized the importance of what had been reported. They proposed a large epidemiological study to provide definitive evidence of our clinical observations. This was the beginning of the Adverse Childhood Experiences Study that was carried out in the Department of Preventive Medicine where we had been carrying out detailed biomedical, psychological, and social (biopsychosocial) evaluations of over 50,000 adult Kaiser Health Plan members each year. It was relatively easy to ask 30,000 adults coming through the Department if they would be interested in helping us understand how childhood events might affect adult health status. Seventy-one percent agreed to, understanding the information they provided about their childhoods would never be in their medical records.

The ACE Study compared the current adult health status of these many thousands of participants to seven categories of adverse childhood experience that we frequently identified in the weight program. Three categories were of personal abuse: recurrent physical abuse, recurrent emotional abuse, and sexual abuse. Four were categories of household dysfunction: growing up in a household with an alcoholic or a drug user; where someone was imprisoned; where someone was chronically depressed, mentally ill, or suicidal; and where the mother was treated violently.

In addition, we decided to follow this large cohort for at least five years into the future to compare childhood experiences against adult pharmacy utilization, doctor office visits, Emergency Department use, hospitalization, and death. For purposes of analyzing the huge mass of information we gathered, an ACE Score was constructed. An individual exposed to none of these categories had an ACE Score of zero; an individual exposed to any four had an ACE Score of four, etc.

Because the average participant was 57 years old, we actually measured the effect of these childhood experiences on adult health status a half-century later. The retrospective and prospective components of the Study were designed with great skill by Robert Anda MD, my co-principal investigator at CDC. Here I will only touch upon some highlights of our findings; details may be sought in the anchor article of a series of publications deriving from the ACE Study. The initial article was published in May 1998 in the *American Journal of Preventive Medicine*, v.14:245-258; full text is at their web site: http://www.meddevel.com/site.mash?left=/library.exe&m1=4&m2=1&right=/library.exe&action=search_form&search.mode=simple&site=AJPM&jcode=AMEPRE

Adverse Childhood Experiences are Common and Dramatically Affect Adult Health

Our first finding was that adverse childhood experiences are vastly more common than acknowledged. Of equal importance was our observation that they had a powerful correlation to adult health a half century later. It is this combination that makes them so important. Slightly more than half of our middle class American population experienced one or more of the categories we studied. One in four were exposed to two categories of abusive experience, one in sixteen to four categories. Given an exposure to one category, there is 80% chance likelihood of exposure to another. All this, of course, is well shielded by social taboos against obtaining this information. Furthermore, one may miss the forest for the trees if one studies these issues individually. They do not occur in isolation; for instance, a child does not grow up with an alcoholic or domestic violence in an otherwise ideal household.

The Family Violence Prevention Fund (FVPF) is a national non-profit organization focusing on domestic violence prevention, education and public policy reform. Founded in 1980, the FUND has developed pioneering strategies to address the problem of domestic violence in the justice, health care, child welfare, workplace and communication fields.



HEALTH ALERT PROJECT COORDINATORS
Fran Navarro and Peter Sawires

DESIGN AND LAYOUT
ZesTop

NATIONAL HEALTH INITIATIVE ON DOMESTIC VIOLENCE STAFF

Debbie Lee Director of Health

Lisa James, Anna Marjavi, Fran Navarro,
Erika Rodriguez, Peter Sawires,
Rebecca Whiteman and Parry Wu

This publication was funded by the U.S. Department of Health & Human Services and the Conrad N. Hilton Foundation.

How will these childhood experiences play out decades later in a doctor's office?

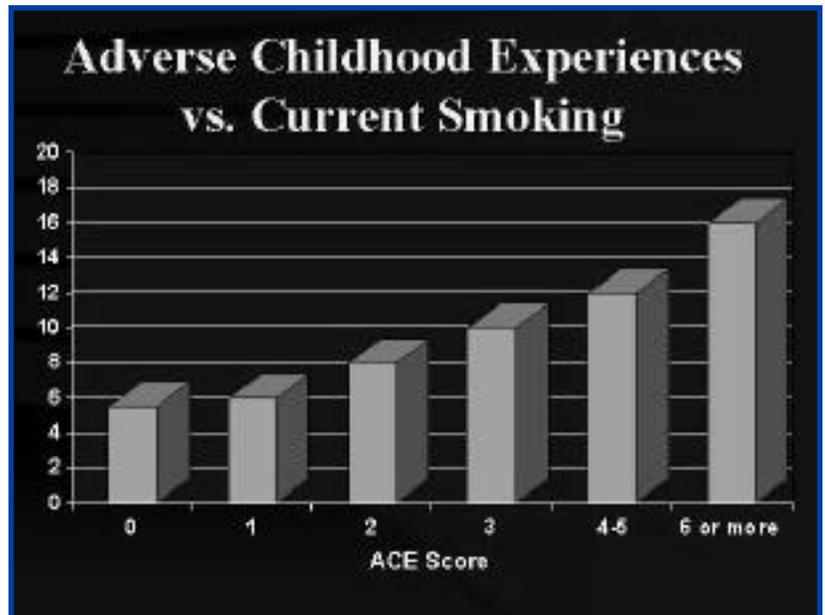
Smoking is a useful starting example to illustrate what we found; moreover, it provides us with a minimally threatening topic. In California there are now profound social pressures against smoking; persisting in the face of these is often attributed to 'addiction'. Did you know that current smoking has a high degree of association with what happened decades ago in childhood? Here is a graphic illustration of how the ACE Score has a graded, dose-response effect on the probability of current smoking. The higher the ACE Score, the

greater the likelihood of current smoking. This graded, dose-response effect is present for all the associations we found, although I will only present three. All the relationships have a p value of .001 or less.

Lest one doubt the significance of this, we found that chronic obstructive pulmonary disease (COPD, emphysema) has a strong relationship to the ACE Score. A person with a mid-range ACE Score of four is 390% more likely to have COPD than is a person with an ACE Score of zero. What does this do to the conventional concept of smoking that attributes addiction to characteristics that are intrinsic within nicotine? We instead found 'addiction' attributable to characteristics that are intrinsic in early life experiences. If early emotional stresses predict COPD, is COPD properly understood as a psychosomatic condition? Are certain common chronic diseases the result of attempts at self-treatment of concealed problems?

When we looked at self-defined current depression, we found that an individual with an ACE Score of four or more was 460% more likely to be suffering from depression than an individual with an ACE Score of zero. Should one doubt the reliability of this, we found that there was a 1,220% increase in the history of attempted suicide between these two groups. At higher ACE Scores, the prevalence of attempted suicide increases twenty-thirty fold. Using the analytic technique of population attributable risk, we found that about 80% of attempted suicides could be attributed to adverse childhood experiences.

Intravenous drug use is a major public health problem. In spite of massive efforts to curtail it, little progress has been made. We saw that iv drug use may properly be viewed as a personal solution to problems that are well concealed by social niceties and convention. For instance, a male child with an ACE Score of



six has a 4,600% increase in the likelihood of later becoming an iv drug user. This relationship to adverse childhood experiences is powerful and graded at every step; it provides an exemplary dose-response curve. Since no one shoots heroin to get endocarditis or AIDS, might it be used for relief of profound anguish dating back to childhood experiences; might it be the best coping device an individual can find? If so, is this a public health problem or a personal solution? How often are public health problems personal solutions? Is drug abuse self-destructive or is it a desperate attempt at self-healing, albeit at a significant future cost? This is an important point because primary prevention is far more difficult than anticipated. Is this because incomplete understanding of the benefits of so-called health risk behaviors leads them to be viewed as irrational and having solely negative consequences? Does this leave us mouthing cautionary platitudes instead of understanding the cause of our intractable public health problems?

Beyond these three examples, we found many other measures of adult health to have a strong, graded relationship to what happened in childhood: hepatitis, heart disease, fractures, diabetes, obesity, alcoholism, occupational health, and job performance. These are detailed in the original and subsequent articles and will further be reported in publications of the yet-to-be-analyzed prospective arm of the ACE Study.

Early Intervention and Prevention Must be Engaged

What do these findings mean for medical practice and for society? Clearly, we have shown that adverse childhood experiences are both common and

Continued on page 4

destructive. This combination makes them one of the most important, if not the most important, determinants of the health and well being of the nation. Unfortunately, these problems are painful to recognize and difficult to deal with. Most physicians would far rather deal with traditional organic disease. Certainly, it is easier to do so, but that approach also leads to treatment failures and the frustration of expensive diagnostic quandaries where everything is ruled out but nothing is ruled in.

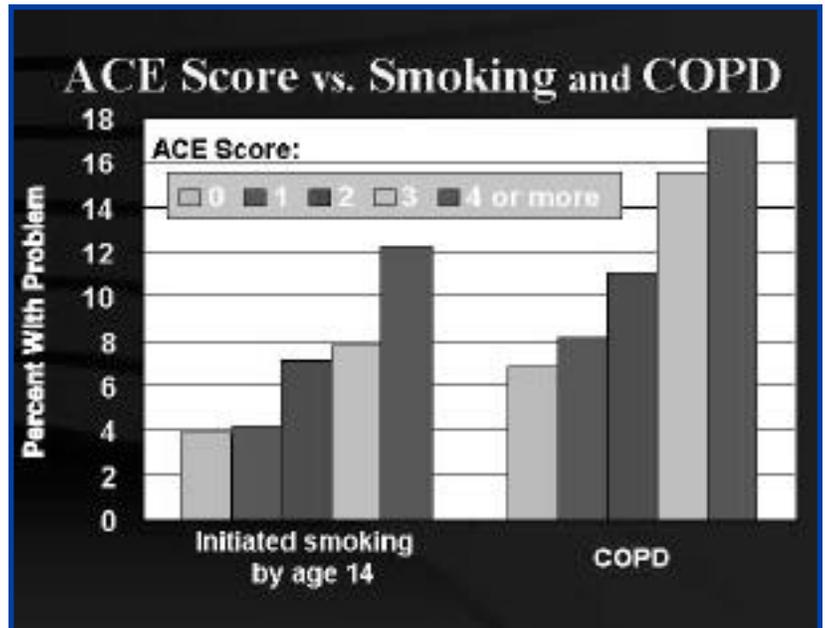
Our approach to many common adult chronic diseases reminds us of the relationship of smoke to fire. It is tempting initially to treat the smoke because that is the most visible aspect of the problem. What we have learned in the ACE Study represents the underlying fire. Fortunately, fire departments learned to distinguish cause from effect long ago; else, they would carry fans rather than water hoses to their work.

If the treatment implications of what we found in the ACE Study are far-reaching, the prevention aspects are positively daunting. The very nature of the material is such as to make one uncomfortable. Why would one want to leave the relative comfort of traditional organic disease and enter this area of threatening uncertainty that none of us have been trained to deal with? And yet, literally as I am writing these words, I am interrupted to consult on a 70 year old woman who is diabetic and hypertensive. The initial description given to me left out the fact that she is morbidly obese. Review of her chart shows her to be chronically depressed, never married, and, because we ask the question of 57,000 adults a year, to have been raped by her older brother six decades ago when she was ten. He also molested her sister who is said also to be leading a troubled life. We found that 22% of our Kaiser members were sexually abused as children. How does that affect a person later in life? That simple question is useful to ask patients, "How did that affect you later in life?"

What is this woman's diagnosis? Is she just another hypertensive, diabetic old woman or is there more to the practice of medicine? Here is the way we conceptualized her problems:

- Childhood sexual abuse
- Chronic depression
- Morbid obesity
- Diabetes mellitus
- Hypertension
- Hyperlipidemia
- Coronary artery disease
- Macular degeneration
- Psoriasis

This is not a comfortable diagnostic formulation because it points out that our attention is focused on tertiary consequences, far downstream. It reveals that the primary issues are well protected by social con-



vention and taboo. It points out that we have limited ourselves to the smallest part of the problem, that part where we are comfortable as mere prescribers of medication. Which diagnostic choice shall we make? Who shall make it? And, if not now, when?

Selected articles published from the ACE study include:

Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. Felitti, VJ, Anda, RF, Nordenberg, D, et al. *American Journal of Preventive Medicine* 1998 May; Vol 14 (4): 245-258

Adverse childhood experiences and smoking during adolescence and adulthood. Anda RF; Croft JB; Felitti VJ; et al. *JAMA* 1999 Nov 3; Vol 282 (17): 1652-1658

Unintended pregnancy among adult women exposed to abuse or household dysfunction during their childhood. Dietz PM; Spitz AM; Anda RF; et al. *JAMA* 1999 Oct 13; Vol 282 (14): 1359-1364

Adverse childhood experiences and sexually transmitted diseases in men and women: a retrospective study. Hillis SD; Anda RF; Felitti VJ; Nordenberg D; Marchbanks PA *Pediatrics* 2000 Jul; Vol 106 (1): E11

Vincent J. Felitti, MD is an internist, formerly doing infectious disease work, who created and ran for its first 25 years the Department of Preventive Medicine at Kaiser Permanente in San Diego.

ACE Study Offers Important Insights That Must be Approached Cautiously

Betsy McAlister Groves, MSW, LICSW

The Adverse Childhood Experiences (ACE) Study, authored by Vincent Felitti, Robert Anda, Dale Nordenberg, et. al. is important research, both because of the large cohort that was studied (drawn from a non-clinical sample of 30,000 members of the Kaiser Health Plan) and for its findings of a strong relationship between risk factors established in childhood and medical problems in later life. Felitti et al. also demonstrate the synergistic effect of these risk factors. Exposure to one adverse experience carries modest risk for adult health problems; exposure to four or more experiences carries a two-four-fold increase in smoking and poor self-rated health, and eight-twelve times the risk of alcoholism, depression and drug abuse. In addition, these risk factors often cluster in individuals: if a person had exposure to one experience, there is an 80% chance of exposure to another risk factor.

Of particular interest to those of us who work with families affected by domestic violence is the inclusion of exposure to violence against mother as one of the seven adverse experiences investigated. The study yields important data about the prevalence of childhood exposure to domestic violence and about the association of exposure to domestic violence with other risk factors for children. As we know, a child's exposure to domestic violence is highly correlated with direct physical abuse of the child, another factor included in Dr. Felitti's study. In his study, 12.5% of respondents indicated childhood exposure to domestic violence and 10.8% indicated a history of child abuse. This finding is an important addition to existing studies of childhood exposure to domestic violence, indicating that more than 10% of the adult population has grown up in homes in which women were the victims of physically assaultive behavior. The study also underscores the longer-term consequences of exposure to domestic violence and adult health and well-being. It reminds us that there are both direct and indirect victims of domestic violence: children suffer as the hidden victims of violence against women. It also reinforces what many advocates and survivors know

all too well: that children's exposure to violence reverberates into adult life.

Implications for the Field

The ACE study suggests several priorities for policy and practice. First, we should re-double our efforts at primary prevention of violence against women. The benefits of preventing domestic violence are obvious for women and for the future health and well-being of their children. Efforts to provide education to teenagers about healthy relationships, to raise awareness of the issue, to engage communities in addressing violence against women, to hold perpetrators accountable for the violence are of paramount importance and should be a priority in funding. Indeed, Felitti's study helps to frame the challenge of prevention in public health and mental health terms that broaden the base of professionals who should engage in prevention efforts.

Second, we must develop strategies for early identification of and support for children who are exposed to domestic violence. As with any of the adverse child experiences cited in Felitti's study, early identification has the potential to be early intervention, thereby decreasing the risk of adverse health outcomes in adult life. Health care systems are an important setting for such screening and response. Almost all children see health providers and young children and their parents have frequent intersection with health care systems. Screening and intervention protocols for partner violence are used in adult medicine and obstetrics/gynecology practice. However, there is no standard for screening and almost no funding for services in pediatric settings. The results of the ACE study make a strong case for the importance of screening and responding to children in pediatric practices. Implementing strategies for identifying children and families affected by domestic violence are a priority, but they should be done with careful thought of the potential consequences of identification such as the quandary

Continued on page 6

that providers may face about mandatory reporting of identified children to child protection services.

We Must Move Forward Cautiously

As with most research, there are certain cautions to consider before translating this study's findings into policy or practice. In his first publication of the results, Felitti reminds us that these results show correlation, not causation.ⁱ It is tempting to assume from this study that exposure to adverse childhood experiences directly causes health problems in later life. However, there are many intervening events and variables that mediate childhood exposure and later health problems in adults. Understanding more about the intervening variables is an important goal of continued research.

It is also important to consider that children are affected in a range of ways by exposure to adverse experiences, including domestic violence. There are factors in their genes, their temperaments and their environments that affect their ability to withstand stressful experiences. Both research and clinical experience demonstrate that not all children are doomed by growing up with domestic violence and that some children seem to withstand its effects better than othersⁱⁱ. The research agenda should focus on how and why some children are more resilient to adverse experiences.

A final caution should be reiterated about the use of the ACE study's findings about childhood exposure to domestic violence: in the zeal to protect children from the longer-term consequences of exposure to adverse childhood experiences, we are tempted to enact policies that are punitive to women and in the long run, not helpful to children. For example, there have been tendencies to use studies that focus on childhood exposure to domestic violence to argue for increased penalties against mothers for "failure to protect" children. This has been particularly true with protective services policies, and is increasingly problematic for African Americans and other people of color who are over-represented in the system because of potential racial bias.ⁱⁱⁱ A growing number of states have determined that exposure to domestic violence is

"Implementing strategies for identifying children and families affected by domestic violence are a priority, but they should be done with careful thought of the potential consequences of identification"

grounds for removal of children from both their parents.^{iv} In addition, some states are adding enhanced legal penalties for adults who commit assaults in front of a child. While these policies may be well intended, they have the troubling consequences of further punishing mothers, who are usually the direct victims of the violence, and they are not necessarily helpful to children. For example, children may be required to testify in court about what they witnessed in a domestic violence assault, or in cases of dual arrest, children may be separated from their mothers and unnecessarily placed in foster care further traumatizing the children. Additionally, with these policies in place many victims may be less willing to seek assistance for the violence, so that neither they nor their children receive much needed support and services.

In conclusion, the findings of the ACE study yield important confirmation of the prevalence of childhood exposure to domestic violence and to the association of this exposure with poor health and mental health outcomes for adults. The challenge for those who work with families affected by domestic violence is to renew our efforts to prevent violence against women and to advocate for implementation of policies that makes it easier to identify children who are at risk. At the same time, we must use caution in making certain that our practice and policy decisions do not ultimately create more harm than good.

Betsy McAlister Groves, MSW, LICSW, is the founding Director of the Child Witness to Violence Project at Boston Medical Center and Assistant Professor of Pediatrics at Boston University School of Medicine. She is the recipient of an Open Society Institute Fellowship and has lectured widely on children and violence. Publications include articles in the Journal of the American Medical Association, Pediatrics, Harvard Mental Health Letter and Topics in Early Childhood Special Education. She is a member of the Massachusetts Governor's Commission on Domestic Violence and has served as consultant to the Mass Department of Social Services, the Massachusetts Judicial Institute and Family Communications, Inc., producers of Mr. Rogers' Neighborhood.

i Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, Kiss MP, Marks JS. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, 14 (4), 245-258.

ii Edelson J. (2000). Is childhood exposure to adult domestic violence a form of child maltreatment? Paper delivered at the conference "Children and Domestic Violence", Washington DC, April 10, 2000.

iii Morton, T.D. (1999). The Increasing Colorization of America's Child Welfare System: The Overrepresentation of African-American Children. *Policy and Practice of Public Human Services* (formerly *Public Welfare*), 57(4), 23-30.

iv Sengupta S. (July 8, 2000). Tough Justice: Taking a child when one parent is battered. *New York Times*, p. A1 & A11.

Children: The Hidden Victims of Domestic Violence

Robert M. Reece, MD, Betsy McAlister Groves*, MSW, LICSW, Alicia Lieberman, PhD, Margaret McNamara, MD

Robert M. Reece, MD:

Dr. Vincent Felitti wrote in an editorial in *Pediatrics*, the journal of the American Academy of Pediatrics, "We are awash in a sea of violence in our society. There are over three million reported cases of child abuse in this country each year and up to 5,000 childhood fatalities resulting from child maltreatment. True statistics about domestic violence are a little harder to find because of a disparate reporting practice in the various reporting states, but a similar number is probable. It may even exceed that amount." This constitutes an epidemic in our society. We know that there are long and short-term effects secondary to family violence. We know that there are structural and functional changes to the brain itself. These come from the ravages of actual or threatened violence and increasingly we read scientific reports of similar changes in the brain from simply witnessing violence. We reviewed a paper just recently in the *Journal of the American Medical Association*, about home nurse visitation programs... This was a disturbing but also enlightening article in that it pointed out the fact that home health nurse visitation programs are not effective when there is domestic violence in the home... (Eckenrode, J., et al., "Preventing Child Abuse and Neglect With a Program of Nurse Home Visitation: The Limiting Effects of Domestic Violence," *JAMA*, 2000, Vol. 284, pages 1385 to 1391.)

The American Academy of Pediatrics has an official policy statement about domestic violence and the role of pediatricians in recognizing and intervening on behalf of abused women. It leads off by saying: "The abuse of women is a pediatric issue. The American Academy of Pediatrics and its membership recognizes the importance of improving the physician's ability to recognize partner violence as well as child abuse and other forms of family violence... The AAP recognizes that family and intimate partner violence is harmful to children." They go on to say that, "The AAP recommends that 1) Residency programs and continuing education program leaders incorporate education on family and intimate partner violence and its implications for child health into the curricula of pediatricians and pediatric emergency department physicians; 2) Pediatricians should attempt to recognize evidence

of family or intimate partner violence in the office setting; 3) Pediatricians should intervene in a sensitive and skillful manner that maximizes the safety of women and children victims; and, 4) Pediatricians should support local and national multidisciplinary efforts to recognize, treat and prevent family and intimate partner violence." (Full policy available at <http://www.aap.org/policy/re9748.html>)

I would like to suggest that education of medical personnel should be one of the major emphases. We need to make this a central objective for the curricula in medical and nursing schools and in our residency training programs. Perhaps more important, we need to assure that those who are already in primary care practice are given the necessary education and training to perform this most important task.

Alicia F. Lieberman, PhD:

Children who were exposed to domestic violence have more than double the rate of psychiatric problems than other children. This is the case even after children no longer are exposed to ongoing violence... And a child being exposed to domestic violence is the major predictor for adults engaging in domestic violence...

It has been long believed that very young children do not understand violence or forget about violence. That is not the case... The way children express their problems with witnessing aggression varies with age, but even babies under one year of age respond to violence with excessive crying, failure to gain weight, difficulty being soothed, exaggerated startle responses, frozen posture, stiffness, sad and withdrawn facial expression and lack of interest in exploration... Toddlers and preschoolers show aggression to adults and peers, defiance, noncompliance... Toddlers who witness violence also often have a very interesting characteristic, which is that they become reckless and accident-prone... As you know, toddlers do have temper tantrums but the ones that witness violence are intractable and they go on and on and on and on... They have night terrors, difficulty going to sleep, intense separation anxiety, hypervigilance, multiple fears, emotional withdrawal, and on and on. School

Continued on page 8

children and adolescents show all the same behaviors, but also early and excessive experimentation with sexuality and with illegal substances, anger at authorities, school failure and criminal behavior...

That leads us to the question of intervention. There is an unnecessary and regrettable gap between women's advocacy groups and children's advocacy groups... It is often overlooked that a very high percentage of battered women are also mothers and that their sense of self-esteem when they cannot relate to their children, when their children are having trouble at school, when their children are having intractable tantrums in the supermarket, their self-esteem, their sense of competence, their sense of being skillful suffers greatly. So our program helps the women become mothers with a higher sense of competence and a higher sense of understanding of what their children do. What we are finding is that many women who suffer domestic violence have also suffered abuse and neglect when they were growing up... As many as 70% fit criteria for post-traumatic stress disorder... So that we cannot just help the children. We have to be aware of the problems of the mothers.

I will give you a quick example of a child, a four-year-old who had intractable tantrums in which he would say, "Kill me, mom, kill me. I want to die..." One time the child jumped on a high shelf and threatened to fall down, the therapist took the child down and said, "I cannot let you jump. I don't want you to get hurt." The child started having a terrible intractable tantrum, which the therapist could not contain on her own. She said to the mother, "Let's hold him together. He really needs our help in knowing that we need him to be safe." And the child kept screaming, "Kill me, mom, kill me. You don't love me." And the mother would say, "I love you. You know I love you, don't you?" And the child would say, "No. You call me stupid. You don't love me." And the mother would be frozen, without knowing how to respond. The therapist said, "You know, you need to say to him really strongly, 'I love you, I won't let you get hurt.'" She kept repeating it as a mantra and as she kept repeating it the mother started to say it increasingly strongly. The child relaxed, cuddled up in her arms and fell asleep. The mother and the child were helped to rediscover their love for each other and the mother was helped to rediscover her competence in dealing with the child's fear and saying to the child "I do care about you..."

I want to get to the findings that we are getting when we look at about 70 mothers and children that we have treated this way, to tell you that the scores in cognitive tests for the children have gone up significantly, an average of 15 points. Their scores for social problems and emotional problems have gone down significantly, at the point of one statistical level. Equally exciting, the scores for maternal PTSD have gone down significantly, at the point of one level, so that in working with a mother/child relationship we

can make a difference not only for the children but for the mothers as well. It seems to me that it is a model. As we work on the relationship between mother and child, let us work on the relationship between child advocacy groups and mother advocacy groups and really find a joint language to speak to both of them.

Margaret McNamara, MD:

I do not have to convince anyone in this room about why pediatricians should routinely screen. We also know that routine screening is a more efficient way of going about this since specific indicators are not reliable. Additionally, routine screening serves to educate patients that domestic violence is a serious health issue for them and their children and to let them know that we can provide resources for them or their friends or family if they ever need it. Finally, as Betsy and Alicia have very eloquently told us, children are so often the silent victims, for whom pediatric healthcare providers can provide appropriate assistance.

As healthcare professionals who deal with children in our practices, we have a number of advantages when it comes to screening. We have very frequent visits with the family. We also, as pediatric healthcare providers, are in a trusted and privileged position to hear about family matters. Most parents understand that the health and well-being of their child is integrally connected with the health and well-being of the family. We routinely screen about a number of sensitive issues and so routine screening about domestic violence, just as with those other sensitive issues, is easier.

The screening that we use as pediatric healthcare professionals can be similar to an adult setting. Of course we face a number of challenges in a pediatric setting when we respond to domestic violence. Let us discuss the issues that are unique to the pediatric experience. The first is who is the designated patient. Domestic violence is not the only area in which we ask about parental behavior and how it might influence the child. We routinely ask about tobacco exposure, substance abuse, and many of us ask about the presence of firearms in the household. Many important issues affecting children are not specifically limited to questions about the child.

The second issue, which is the presence of children or other family members or friends in the room



Margaret McNamara, MD, Alicia Lieberman, PhD, Betsy McAlister Groves, MSW, LICSW and Robert Reece, MD at the National Conference on Health Care and Domestic Violence.

during screening, is a very difficult one and there is some difference of opinion in the literature in terms of how to deal with this. I would suggest that for the sake of the child, because we know the very profound effects that family violence has on the child growing up, that we are doing them a disservice not to screen, even with them in the room (excepting the perpetrator). More often than not, the child knows what is going on at home and if we simply decide not to ask about it, we send the message that we do not want to hear about it. Once children get to be about eleven or twelve years of age, I typically separate them from the parent during the physical exam anyway, for reasons of modesty and so that I can talk with them about other issues such as tobacco prevention. With these children I tend to not ask the parent directly and simply talk with the child about if they feel safe at home and how things go when people disagree at home. It takes the pressure off of the parent and the child if the child is in a situation where they might have allied themselves with one or the other of the parents.

Another major challenge is that there is a lack of resources available for providers if they uncover this kind of history in the home. This is a very difficult issue to tackle and I would simply suggest that if you do not ask and therefore do not find out about the incidence of this problem, we will never develop the resources that we need to help these children.

Robert Reece, MD:

I wanted to tell one little clinical experience that I had about ten years ago. It was sort of an epiphany for me because it brought home to me how important it is for a pediatrician to ask a mother about possible abuse in the family. It had to do with a little baby, four months old, who had been brought in at eighteen days of age with a what we call a hypoforengial perforation, which means just something had perforated the back of the throat. This baby was, for some unknown reason, returned to the parents and then came back at four months of age with a variety of skeletal fractures and other injuries. I talked with the mother and the father, both, and said, "Who takes care of the baby?" And they both said, "We do." I asked, "Is there anyone else who takes care of the baby? Is there a day-care provider, is there a babysitter or do you have one of the relatives watch the baby when you go out?" and so on. "No, we take care of the baby completely alone. Nobody else has ever had any contact with the baby but us." Well, that, in itself, was a little bit of a worry. Then I interviewed the mother alone and I said these injuries had to have been inflicted on the baby. They do not happen spontaneously or by accidents at four months of age and so either you or your partner has inflicted these on the baby. I just let the question sit there for oh, two minutes, with total silence in the room, and then I said, "Is he hitting you too?" And she broke down in a flood of tears, disclosed all that had gone on in this

baby's life. He had been rough with the baby, more than rough – fractured several of the bones – and had also injured her on several occasions.

So that was ten years ago or twelve years ago and it demonstrated to me more graphically than anything that I could read or hear about that this is the appropriate question in some instances to ask. The outcome of that was that the partner was removed from the family and the mother and the baby continued to live together and there was a much different outcome for that family as a result of the discovery.

I want to thank the panelists but I also want to say that we can work together as pediatricians and as people invested in the domestic violence field. As a matter of fact, we have to work together because the best interests of the child lies with the best interests of the mother and the family and until we get to a common ground on this, we are going to be fighting an uphill battle.

**Full transcripts from this plenary and all the other plenary sessions at the National Conference on Health Care and Domestic Violence will be available in late July on-line at www.fvpf.org/health or by calling 1-888-Rx-ABUSE. Betsy McAlister Groves' comments will be published in a special issue of Violence Against Women this fall.*

*Robert M. Reece, MD, is a Clinical Professor of Pediatrics at Tufts University School of Medicine and Director of the Institute for Professional Education at the Massachusetts Society for the Prevention of Cruelty to Children. Dr. Reece is also the Chairman of the Section on Child Abuse of the American Academy of Pediatrics. He is the editor of two books on child maltreatment, child abuse, medical diagnosis and management, including, *The Treatment of Child Abuse*. He was honored in 1997 as the outstanding professional in the field of child abuse.*

*Alicia F. Lieberman, PhD, is a Professor of Psychology, in the Department of Psychiatry at the University of California, San Francisco. She is Director of the Child Trauma Research Project and Senior Psychologist, Infant Program, at the San Francisco General Hospital. Dr. Lieberman is the author of *The Emotional Life of the Toddler*, and numerous articles on disorders of attachment, infant/parent psychotherapy and the role of cultural factors in early childhood mental health interventions.*

Margaret McNamara, MD, is an Assistant Clinical Professor, Department of Pediatrics at the University of California, San Francisco, and she practices at the UCSF/Mt. Zion Medical Center, where she serves as Chief of Pediatrics. Dr. McNamara has lectured and published widely on many issues related to pediatric primary care, including the effects of domestic violence on children and firearm injury prevention. She is a Fellow of the American Academy of Pediatrics, Executive Medical Board Member at Mt. Zion Medical Center and Chairperson of the Executive and Advisory Committees of the Violence Prevention Project.

Intimate Partner Homicide and Pregnancy

Homicide Rates

A recent study by Isabelle L. Horon, DrPH and Diana Cheng MD published in the *Journal of the American Medical Association* (Vol. 285, No. 11) finds that pregnant or recently pregnant women are more likely to be the victims of homicide than to die from any other cause. The study, Enhanced Surveillance for Pregnancy-Associated Mortality, expands the definition for maternal death to include deaths “not traditionally considered to be related to pregnancy such as accidents, homicide, and suicide.” The study compares the homicide rate of pregnant or recently pregnant women with that for women “aged 14 to 44 years who had not had a pregnancy in the year preceding death.” It finds that the homicide rate is significantly higher for women in the first group. Overall, homicide accounted for 11.2 % of deaths for women who were not pregnant (when adjusted for race and maternal age) compared with 20.2% of deaths for pregnant or recently pregnant women.

Additionally, homicide is the leading cause of death during pregnancy (43.4%) and during the 43 to 365-day period following delivery or termination of pregnancy (23.3%). Homicide accounted for 3.6% of deaths occurring within the first 42 days. The study does not distinguish whether a homicide was perpetrated by an intimate partner or by a non-intimate partner.

Homicide Prevention

The study is accompanied by a powerful editorial by Victoria Frye, MPH that expands on these findings and uses them to explore ways to prevent homicides, specifically those perpetrated by intimate partners, by focussing on the role health care providers can play in preventing the murder of pregnant women by their partners.

The editorial echoes the study’s call for further research to develop prevention strategies, and highlights the social risk factors for pregnancy-associated deaths, such as domestic violence. It notes that “homicide is the leading killer of young women, pregnant or not,” and that “much of the violence that women experience during pregnancy is perpetrated by intimate partners and that, for some, intimate partner violence begins during pregnancy.”

Seventy-two percent of reproductive age women receive reproductive care, yet only 17% of OB/GYNs screen for domestic violence at their first visit and only 10% thereafter. Because most pregnant women have a relationship with a health care

provider and many of these women come into contact with the health care system before their death, these providers are in a unique position to prevent intimate partner homicide of women by routinely screening for domestic violence.

Screening in the Pediatric Setting

Screening for Postpartum Abuse of New Mothers

Another recent study by Sandra L. Martin, PhD et al. published in the *Journal of the American Medical Association* (Vol. 285, No. 12) found that most women who were abused after pregnancy were injured (77%), but that only 23% of those received medical treatment for their injuries. This study also found that both abused and nonabused women utilized well-baby care and that the numbers did not differ significantly by maternal patterns of abuse. These findings show that while an abused woman may not seek health care for herself, she may access the health care setting on behalf of her children. This provides an opportunity for pediatricians and other health care providers to screen women for domestic violence who may never otherwise access health care services.

Routine Screening for Domestic Violence in Pediatric Practice

This guidebook focuses on the importance of routine screening for family violence in the pediatric setting. The guidebook is thorough in scope, addressing the impact on the mother, the child and the pediatrician when screening for domestic violence. It offers advice on preparing to screen, how to screen, follow-up strategies, coding and documentation, as well as training for health care providers. Also included is a Pediatrician Quick Reference Guide for Routine Screening. For more information call Melissa Strauss at 617/243-6522.

Shelter from the Storm: Clinical Intervention with Young Children Affected by Domestic Violence

Shelter from the Storm is a curriculum for training child mental health clinicians who work with families and young children affected by domestic violence. The curriculum, produced by the Child Witness to Violence Project at Boston Medical Center, provides information and case examples that illustrate the complexities of working with families affected by domestic violence. It contains six flexible training modules:

- **Domestic violence: principles of empowerment-based practice.**
- **The impact of domestic violence on children.**
- **Assessment of children affected by domestic violence.**
- **Individual and group treatment of children affected by domestic violence.**
- **Domestic violence, children and the court.**
- **Caring for the caregiver**

For more information contact the project at 617/414-4244.

Brake the Cycle: Domestic Violence is Everyone's Business

Last October 15 riders commemorated Domestic Violence Awareness month by participating in the Brake the Cycle of Violence bike tour in Northern California. Riders represented the California Clinic Collaborative on Domestic Violence, a project of the FVPF funded by the California Endowment, and succeeded in not only raising awareness, but also in raising over \$14,000 that went directly to their clinic's domestic violence programs. Participants, from beginners to more experienced riders, cycled an average of 40 miles per day on the three-day tour in the California wine country of Sonoma Valley. This year's ride, taking place September 22 -24, will be supported by Towanda Tours, a San Francisco based bike tour company specializing in tours to raise money for non-profit efforts. If you are interested in more information about this year's ride, or organizing a fundraising bike tour for your organization, contact Donna at 415/695-2726 or donnaluna@mindspring.com or visit their website at www.TowandaTours.com.

Breaking the Cycle of Domestic Violence, a resource for healthcare providers

Although the reporting guidelines and some resources listed are specific to Kansas, this video, developed by the Kansas Medical Society Alliance, with its accompanying resource manual contains the basic information needed to screen, document, and refer victims for additional assistance. The video is available from Fanlight Productions at 800/937-4113; Kansas residents can contact Becky Collier at the KMSA at 316/838-1410.

Available from the Health Resource Center 888-Rx-ABUSE, www.fvpf.org/health

Teen Dating Violence

This new packet for health care providers offers both informational and practical tools to improve their outreach to battered teens in the clinical setting. The packet includes: fact sheets on teen dating violence; a clinical overview of the problem; adolescent safety plan; resource sheet for health care providers and teens; bibliography; and information on barriers of adolescent disclosure including dynamics of battered pregnant teens and battered gay/lesbian/transgendered and queer youth.

Violence Against Women with Disabilities

Available Fall 2001

This packet will provide health care providers with a starting point in recognizing and addressing the specific concerns of women with disabilities who are also the victims of domestic violence. The packet will include a fact sheet, ideas for safety planning, a resource list and bibliography.

Voices of Survivors

This video, developed by Christina Nicolaidis, MD, MPH addresses the dynamics of domestic violence, prevalence of the issue, and the need for provider screening. The video is distinctive in that it addresses these issues from victims' perspective. It offers specific step by step instructions on how to screen for domestic violence, give support to victims, assess for safety, and give effective referrals. In addition, it describes the hidden costs and hidden physical and mental health issues that could be addressed sooner if screening were to occur. Running time: 31 minutes, cost: \$10.00. Available at www.fvpf.org/store or 415/252-8900.



Health Cares About Domestic Violence Day



Wednesday, October 10th, 2001

Help the health care system identify and prevent domestic violence. Join health care professionals and domestic violence advocates by taking part in the Family Violence Prevention Fund's third annual Health Cares About Domestic Violence Day on October 10th, 2001.

GET INVOLVED!

To learn more about this event and what you can do, visit the Family Violence Prevention Fund's website: www.fvpf.org/health for on-line resources, free materials and up-to date information about national involvement on the issue, or if you don't have access to the web, call the National Health Resource Center on Domestic Violence toll-free: **(888) Rx-ABUSE**

WE HAVE RESOURCES TO HELP GET YOU STARTED:

- National guidelines on how to screen for domestic violence.
- Simple steps health care providers can take to improve their response to domestic violence.
- Free patient & provider educational materials.
- Organizing ideas for October 10th activities and more!

www.fvpf.org/health



Family Violence Prevention Fund
383 Rhode Island Street, Suite 304
San Francisco, CA 94103-5133
fund@fvpf.org
www.fvpf.org

Non-Profit Organization
U.S. Postage
PAID
Permit No. 2788
San Francisco, CA

Yes, gold was beautiful but lead would go on to be used in countless tasks that improved life such as constructing baths, repairing roof conduits, manufacturing stained glass, constructing drainpipes, and many more. In fact, lead would play a significant role in bringing piped water to public sewers and individual homes in early 19th-century Britain, resulting in a massive reduction of deaths from infectious diseases. This was long before the dawn of pharmaceuticals, antibiotics, or even vaccines. Choosing to look deeper into a problem is a difficult choice to make, especially when all you want to do is run away from it or point the finger at someone else. The good news is that you don't have to have all the answers up front or even know what to do. How does this happen, this reverse alchemy, turning the gold of a newborn infant into the lead of a depressed, diseased adult? The study makes it clear that time does not heal some of the adverse experiences we found so common in the childhoods of a large population of middle-aged, middle-class Americans. One does not just get over some things, not even fifty years later. Perhaps then caring for these heart-sick children "these innocents trapped and vulnerable in their own families" would lead to a society that works to reduce the toxic stew drains, strains, and causes the death of childhood when children are supposed to be children, and the early death of so many still-terrified adults. The old alchemical experiment of turning lead into gold was later performed successfully by altering objects at the atomic level. One of the supreme quests of alchemy was to transmute (transform) lead into gold. Lead (atomic number 82) and gold (atomic number 79) are defined as elements by the number of protons they possess. Changing the element requires changing the atomic (proton) number. The number of protons cannot be altered by any chemical means. However, physics may be used to add or remove protons and thereby change one element into another. Because lead is stable, forcing it to release three protons requires a vast input of energy, such that the cost of transmuting it greatly surpasses the value of the resulting