Psychosocial Dynamics of Child Abuse

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ABSTRACT: The problem of child abuse warrants steadfast social concern and attentive study by social scientists, forensic scientists, and mental health professionals. What moves adults to physically abuse children entrusted to their care? In the present inquiry, an overview of a substantial body of the literature is organized by exploring three dimensions of abuse: the parental relationship, the psychopathology of abusive parents, and the psychodynamics of motivation. None of these dimensions taken alone provides a satisfactory understanding of the phenomenon of abuse. An integrative model is offered wherein child abuse is regarded as a function of three general factors: stresses on the parent, ego weaknesses of the parent, and vectors that direct the parent's violent impulses against the child.

KEYWORDS: psychiatry, child abuse, parent child relations

Within little more than two decades, a vast literature has appeared on the characteristics and dynamics of abusive parents. The many books and articles can be overwhelming to anyone who merely seeks some practical insights. Two questions are of special importance: What social factors are associated with abusive parents in general? And, how can one understand abusive behavior in a given parent? This review will first consider social factors that may be associated with abusers collectively and then examine three dimensions: the parental relationship, individual psychopathology, and psychodynamics of motivation. From this overview a model is offered wherein abuse is regarded as a function of three general factors: (1) *stresses* upon the parent, (2) *ego weaknesses* of the parent, and (3) *vectors* that direct violent impulses against the child.

Some difficulties in interpreting relevant literature on child abuse should first be appreciated. Studies of abusive parents do not uniformly yield the same results because of differences in definitions of abuse, sample selection, and methods of data collection. With few exceptions [1] study cohorts are not randomly selected; they are not representative of large populations. Likewise, differences in theoretical orientation and focus of research design contribute to dissimilar interpretive conclusions. If certain characteristics are associated with abusive parents in study cohorts, it does not follow that most abusers have such characteristics, or that they are uncommon in nonabusive parents. Specific or pathognomonic psychosocial factors have not been identified. Finally, abusive parents, who have the most direct knowledge of abuse, tend to be unreliable historians, as they are often, though not always, more interested in evading detection than obtaining help.

For purposes of our discussion, we adopt a modification of Gil's [2] definition of abuse: "nonaccidental physical attack (with) physical injury, including minimal as well as fatal in-

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jury, inflicted upon children by persons caring for them." Other forms of abuse that do not result in physical injury, such as neglect, sexual molestation, and harsh but noninjurious punishments are not included in this definition, though such mistreatments can occur together with child assaults or child killings. Some studies use this general definition of child abuse, whereas others concern more specific subtypes such as infanticide or baby battering. The present review pertains to physical abuse in general, and so is not limited to any particular subtype(s).

Social Characteristics of Abusive Parents

Sex

Though some studies report near equal incidence of fathers and mothers who abuse [3], many show a greater percentage of abusive mothers [1,4-15]. Mothers evidently kill their young children more often than fathers do [16-19]. A study by Gil found that more women than men admitted involvement in fatal accidents [2]. Simons found that parents were more apt to abuse a child of the same sex [3].

In examining this apparent sexual differential of abusive parents, one must remain mindful of possible sampling bias in reported studies. Men are more established in the formal social structure and so may be better protected from incriminating disclosures. Women may be more disposed to use social services and to bring their children to medical attention. For a variety of reasons, women may be more inclined to admit their own abuses and cover up abuses by their husbands or partners.

Several studies indicate the nonabusive parent often passively or actively colludes in child abuse [5.15.20-23] or child killing [16], so designation of one parent as the abuser may in many cases create a partial truth. Since studies of child killing and abuse tend to select young children who come to medical or legal attention [7], abuse of older children by their fathers may be underrepresented in the literature. Schloesser found that fathers were more frequently responsible for beating older children, whereas mothers were usually the abusers of infants [12]. More frequent abuse of young children by their mothers would not be surprising, since mothers are usually their primary caretakers.

If more mothers than fathers head one-parent families, the increased stresses of lone parenthood can be a factor in the higher incidence of abusing mothers. Fergusson's study of child abuse in New Zealand showed a higher incidence of abusive mothers; many of the families he studied lacked a father figure [10]. Gil, who studied a sample cohort which included more older children in comparison with other studies, found 29.5% of the families lacked a father figure [7]. Of those families with a father figure, he was responsible for abuse in nearly two thirds of the cases. Johnson and Morse found the numbers of abusive mothers and fathers in two-parent families to be about the same, but 23 abusive mothers and no abusive fathers belonged to one-parent families [9]. A number of authors reported abusive men within the context of reversed traditional sex roles [3, 7, 24-28]. Kempe reported that the ratio of mother to father battering was 1:1 in a Denver hospital that served a population with high paternal unemployment, whereas the ratio was 4:1 at another hospital that served a highly employed population [23].

The apparent preponderance of mothers who abuse or kill their children may be due more to their maternal role than biological sex alone, though biological sex can affect this role, since pregnancy, childbirth, and suckling contribute to the early parent-child relationship [29-31]. Certain altered physiologic states that may be stressful to some women are sexspecific. There is evidence that some women experience more aggressive impulses against their children in the paramenstruum [32]. A number of mothers in Elmer's study were pregnant at the time of the abused child's hospitalization [33]. She also found abuse to be associated with birth of a sibling less than one year before or after the abused child was admitted.

Age

Parents who abuse their children tend to be young. Although several studies presented data on older parents [4,7,21], most studies support an association with youthful parenthood [4-6, 12, 13, 34-40]. Like women, youthful parents as a group may be less established in the formal social structure and so less protected from detection and reporting. If severe injuries and death of the child, more than minor injuries, are criteria for selection in studies of child abuse, this may contribute to the association with youthful parenthood. In most studies the preponderance of abused children are quite young, under three, and therefore more susceptible to serious injuries; and perhaps they are more stressful and burdensome to their parents.

Smith, who studied 134 cases of battered children, found their mothers had a mean age of 22 years and their fathers, 24; a preponderance of both mothers and fathers were under 30 [41]. Is it not true, however, that most parents have children in their early twenties? The average age of mothers in Smith's study at birth of their first child was 19.7 years, whereas the national average for England and Wales, where the study was conducted was 23.3 years. Could the lower age of primipara batterers be a function of their lower socioeconomic backgrounds? This explanation is unsatisfactory, because the average age of primipara mothers of the lowest social class was 22.6 years.

According to a number of studies, the risk of child abuse diminishes with increasing age of parents [41, 42]. Brutal beatings of older children that do not result in hospital treatment are not represented in most studies of child abuse, so it is unclear whether physical abuse of older children is also associated with youthful parenthood. Gil's study, which included large numbers of older children, had a greater number of older parents [7]. Certain patterns of child abuse in association with specific mental illnesses may be more specific to older age groups. There is evidence, for example, that psychotically depressed parents who kill their children tend to be older than most abusive parents [43.44].

Some young adults may be at greater risk for having unplanned and unwanted children. They may be less emotionally mature, less able to cope with stresses of parenthood, and less able to exercise parental responsibilities in comparison with their older counterparts.

Social Class

In recent years the apparent association between child abuse and low socioeconomic status (SES) has been discredited. The argument against this association asserts that an artifactual skewing toward low SES is created by two biases in sample selection. First, early studies were done in hospitals and social service agencies that served predominantly populations of low SES. And second, people of middle and upper classes were likely to have their medical needs met in the private sector by professionals who desired their patronage and had no interest in reporting opprobrious conduct. Therefore, it is reasoned, there is no known association between SES and abuse.

The issue is an important one for several reasons. If there is an association between abuse and low SES, it may well point to social factors that aggravate the potential for abuse in some families. An association with low SES would have important implications for allocation of resources to combat the problem. On the other hand, since popular opinion attaches moral turpitude to child abuse, an erroneous association would unfairly stigmatize the underprivileged. If there is substantial occult abuse among middle- and upper-class families, attention should be given to penetrating barriers of secrecy so that remedial measures can be taken. Finally, aside from the question of whether socioeconomic stresses foster abuse, adverse effects of abuse on the child may be compounded by socioeconomic stresses on the family and by the relative unavailability or underutilization of social and medical resources [45].

There is general agreement that abuse is not limited to any single SES [8, 20, 23, 37, 45-57]. Many empirical studies, however, indicate that child abuse that comes to the attention of social service agencies and hospitals tends to be associated with low SES [1.2, 4-7, 9-12, 20, 21,

33,36,41,45]. This also appears to be the case for parents who kill their children [16,18,43]. Some studies show that many abusive parents have other features that can affect social assignment. Many are of low educational achievement [7,9,20]. Many change residences frequently [6,7,11,12,36]. Many receive or have received public assistance [11,20,33,36]. Many have been unemployed [1,11,36] and frequent changes in jobs is a common finding [20,36]. Many families live in substandard housing [20,36,55,58]. Most of these factors can constitute stresses, and it may be more meaningful to examine particular social stresses than SES [38].

Some reports indicate nonwhite populations are disproportionately represented among abusive families in the United States [4, 7, 51, 59], but others do not support this finding [1.8, 12, 20, 23, 60]. A major study in New Zealand found a high percentage of Maori and Polynesian parents in comparison with those of European descent [10]. The authors hypothesized that any apparent relationship with certain racial or ethnic groups is actually a function of social or economic variables. If such variables affect sample selection, reported cases of child abuse would not be truly representative.

Aside from child abuse studies, other findings are consistent with an association between child abuse and low SES. Parents of low SES make greater use of corporal punishments in comparison with parents of middle and upper classes [1.14, 33, 61, 62]. Studies that support this conclusion compare samples of different SES levels. Assaultive behaviors in general tend to be associated with low SES [63]; unless, as is suggested for child abuse, other forms of assault among middle and upper classes simply do not come to attention. The apparent increased incidence of assaults and corporal punishments does not establish an association with child abuse, but in many individual families all three behaviors occur together and appear to be related. Certainly, if there is a relationship between other forms of assault, corporal punishments, and child abuse, this could have useful implications for prevention and correction of child abuse. In any case, it cannot be concluded that most parents of low SES are assaultive in general or abusive to their children in particular.

Without child abuse studies that are truly representative, an association with SES cannot be proven. The present author is inclined to accept that abuse likely bears some relationship with social class, but the apparent association in many studies with low SES is artifactually exaggerated by sampling bias. This interpretation of the literature should permit resources and services to be directed to where needs are established. Attention can be given to penetrating the barriers of secrecy and attending to the problem wherever it exists. In any given case of child abuse, specific social stresses can be assessed. Certain social conditions, such as crowded and inadequate housing, may be more stressful for some families than others.

Social Isolation

Abusive parents tend to be socially isolated from the community about them [1, 3, 12, 20, 21, 23, 33, 37, 40, 41, 54, 56, 64, 65]. Moreover, they often lack supportive relationships with extended family members [1, 12, 21, 23, 33, 37, 66]. In Smith's study, the majority of mothers had no social relationships with friends or neighbors [41]. A high percentage of mothers enjoyed no social activities whatsoever. Nearly one half of these mothers had no babysitting arrangements. A number of reports suggest that abusive parents as a rule do not make use of social agencies for help or support [20, 21, 41, 65].

Social isolation may be related to lack of fraternal, religious, recreational, or civic involvements outside of the home [3, 21, 33]. It may be related to geographic mobility. It may be related to unhappy childhoods with poor relationships with parents. Nurse postulated that social isolation is "one result of the failure of these parents to mature and develop emotionally [21]."

Parental Relationships

Several patterns of relationships between parents of abused children are repeatedly described in the literature. Separation and lone parenthood are simply conditions of absence that may play a part in the stresses and dynamics of some abusive families. Similarly, unstable and chaotic relationships are vaguely but frequently reported. Other patterns involve pairing of partners with corresponding psychological traits or an ongoing way of relating between parents that may contribute to the dynamics of child abuse. Any given pair of parents may manifest several of the patterns described here, and an abused child often comes under the care of a succession of caretakers.

Separation

In many cases of child abuse, parents are separated [4.7, 10.11.21, 25.36, 45.64.67]. In Smith's study, one third of the battered children were living with only one natural parent [41]. The New Zealand study by Fergusson and others showed that nearly one half of abusive families lacked one or both natural parents [10]. Several factors that have been associated with marital breakdown and divorce have been found in association with child abuse: brief premarital courtships [41], premarital conceptions [3.12.33.37.41.51], youthful marriages [3.12.41], serious disagreements about child rearing practices [41], and neurotic and character disorders [41].

While many parents survive separation without resorting to abuse, the role of separation should be examined where it is attended by abuse. Are separation and abuse functions of other factors such as character defects? Is abuse promoted, in part, by the separation? Is it, for example, motivated by displaced hostility at the abandoning partner onto the child [21]? Or, does one partner leave the other because the latter has abused family members? In any case, separation can be an important event in the economy of family stress.

Lone Parenthood

A disproportionate number of abusive families are headed by a lone parent, usually a mother figure [7,9-11,33], either because of separation without subsequent partner replacement or because lasting cohabitation never occurred. Morton found that 51 of 64 women charged with killing a young child were single [68]. Abuse may be related to the dynamics attending separation, or it may be due in part to the burden of a lone parent having to single-handedly support a family and rear the children. Some parents may be more impulsive when left to their own devices without the inhibiting presence of another adult. Some mothers with murderous obsessions towards their children find reassurance in the presence of their husbands [32].

Unstable and Chaotic Relationships

When two parental figures live together, one or both of whom are abusive, their relationship is often a disturbed one [1,3,4,9-11,16,20,33,40,51,64,69]. Abusive mothers in Green's study complained of marital discord and beatings by their husbands [59]. Johnson and Morse reported that a majority of abusive parents in their study had severely discordant relationships with much quarrelling and reciprocal berating [9]. In most of the 112 cases of child killing studied by Kaplun and Reich (71%), mothers had a number of brief extramarital affairs [16]. Although Steele and Pollock concluded that abusive parents tend to have stable relationships [8], many studies show a lack of parental cohesiveness [4, 7, 9, 41, 70], a finding consistent with the high incidence of separations.

Passive-Aggressive Relationships

Nurse, whose study identified one parent as the primary abuser and the other as a passive partner, reported that more than one third of child abusers also physically abused their partners [21]. Yet, abused parents sympathized most strongly not with their abused children, but

with the abusive parent. Nonabusive parents who were themselves abused, rationalized, minimized, or denied their partner's violence; they demonstrated much more concern about "protecting" the abuser than assuring safety for themselves or their children.

Young described a parental relationship in which one parent dominated the other and tyrannized the entire family [20]. The domineering parent abused the children and often the other parent as well. Some aggressive parents inspired fear not by physical abuse, but by threats, accusations, and angry beratings that caused the passive partner to question her/his own judgement. While demanding total authority over the family, the domineering partner assumed no responsibility for his/her actions and projected blame for any adverse consequences onto the conciliatory partner, who had fallen into a pattern of accepting blame.

Although most killed children in Kaplun's study were victims of their mother's aggression, when men, usually paramours with criminal or assaultive histories, were responsible, mothers provided them with access to the child and protected them from apprehension [16]. These mothers were described as "gentle and loving."

One adolescent boy whom the author had occasion to treat for mental illness associated with multiple violent behaviors reported that his father frequently beat him brutally [71]. As his father pounded him to near unconsciousness, mother would laugh or tell him to go ahead and kill the boy. All three—father, mother, and son—initally denied physical punishments and brutality. The complete history came only after months of individual psychotherapy and family work.

For some passive parents, their "gentle and loving" demeanor may defend against a cauldron of aggression. They may gain vicarious gratification without guilt when their partner serves as the proverbial monkey's paw for their own aggressive impulses. Some may identify with the aggressor out of fear that not to do so would risk violence to themselves. Another possible mechanism is a need to be punished that is met by identification with the child victim.

Paired Impulsive, Aggressive Parents

While this pattern is not well described in the literature, it is suggested by the frequent reports of cases wherein both parents repeatedly abuse the child. If one parent is submissive to the other, it does not follow that she/he is necessarily innocent of active abuse. Noting that one half of the mothers in her series of abusive families expressed fear of the father figure, Elmer hypothesized a mutual attraction between some impulsive women and some impulsive men [33]. Several mothers in her series had prior histories of physical aggression against another woman, sexual promiscuity, and compulsive spending. All of these women were frightened of their male partner.

Role Reversal

Several authors suggest that reversal of traditional roles between spouses can be a factor in some cases of child abuse [3.24-28.72]. An unemployed father who is charged with caring for his children so that mother can provide financial support is faced with responsibilities and stresses for which cultural traditions and his own upbringing have not well prepared him. These men have been described as young, intelligent, and vocationally skilled but rendered unfit for full employment because of a physical disability [3, 24].

Gil described a temporary situation in which the mother figure is briefly absent from the home to shop or work, and the child is placed under the care of a male caretaker who then abuses the child [7]. The man's abusive behavior may be associated with intoxication, sadistic gratification, or sexual abuse. Another category suggested by Gil is the situation wherein mother leaves the child briefly with a female caretaker who abuses the child.

Both of Gil's categories are defined by a situation in which the parent briefly relinquishes care to an abusive substitute. Does "role reversal" have explanatory value beyond the mere

labeling of a situation that gives an abuse-prone individual opportunity to abuse? Surely many couples manage partial or total reversal of roles without child abuse. Reversed roles per se, like separation or lone parenthood, do not explain interpersonal dynamics. In addition to understanding how reversed roles serve to facilitate a given abuser's misconduct, one must inquire to what extent the original primary caretaker was aware of repeated abuse.

Paired Parents with Neurotic and Character Disorders

Frequent descriptions of mothers as anxious, depressed, or neurotic and fathers as characterologically disturbed or psychopathic suggest the pairing of two individuals with corresponding psychopathologic conditions or tendencies. Scott reported a study in which mothers of children who were battered and killed tended to be young, unhappy, and unstable, whereas fathers were psychopathic [25]. In Smith's study, over one half of mothers of battered children had neurotic disorders, and two thirds of the fathers had character disorders [41]. This combination may overlap with some passive-aggressive relationships described above.

Shared Paranoid Disorder

Shared paranoid disorder is a *Diagnostic and Statistical Manual* (DSM) III diagnosis [73] where the disturbed relationship is as integral to the disorder as the individual psychopathology; hence its inclusion under relationships. It is not mentioned in studies of child abuse, presumably because of its rarity. One caretaker in the household passively accepts a delusion about the child that the dominant member espouses. The passive caretaker, who would not be so deluded were it not for a passive, dependent relationship with the dominant member, unquestionably accepts the directive to abuse or kill his/her own child. Murdering parents of certain cult groups demonstrate this phenomenon on a large scale, but similar dynamics involving child abuse or child killing in socially isolated families are occasionally reported in the newspapers.

Individual Psychopathology

A variety of mental disorders and character defects are found in abusive parents [9, 41, 72]. Some abusive parents are below average intelligence [48, 74] or mentally retarded [9, 20, 64, 69, 75], but many intellectually subnormal parents are not abusive. A number of abusive parents drink alcohol to excess [9, 20, 33, 48, 64, 74]. Steele asserted abusive parents "have about the same kinds and degrees of neuroses and emotional problems as the rest of the population [76]." The present author is of the impression that significant ego weaknesses are more commonly associated with abusive parents in general and some forms of abuse are more likely to be related to certain mental illnesses or ego defects. Mental illness may, in some cases, reduce an individual's capacity to cope with the stresses of parenthood. Nonetheless, mental illness alone should not raise suspicion or stigma of abuse: most mentally disturbed parents do not physically abuse their children.

There is general agreement that injurious abuse of young children is often associated with character defects in one or both parents [4, 8, 10, 21, 25, 48, 51, 72, 77, 78]. Different character weaknesses have been cited: feelings of inadequacy and inability to function as adequate parents [9, 49, 75, 79, 80], unmet dependency needs [37], immaturity [34, 37, 64, 81], impulsivity [37, 53, 64], and self-centeredness [82-84].

A comprehensive list of character disorders or traits that have been reported in connection with child abuse would be lengthy and unwieldy. Nonetheless, a few character patterns will be mentioned because they are described repeatedly. One character pattern is marked by diffuse impulsivity and aggression [10, 20, 22, 24, 72, 85, 86]. Bryant et al found these individuals to be characterized by "hostility and aggressiveness [3]." Skinner and Castle used the term "ag-

gressive-antisocial" to describe them [6]. Many of these parents probably have antisocial personality disorders or borderline personality disorders according to DSM III criteria, though some authors believe "true sociopathy" is rare among abusive parents [15]. Vocational and social inadequacies are common. Disorder and discontinuity epitomize their lives. Frequently reported impulsive behaviors include drug or alcohol abuse, sexual promiscuity, prostitution, destruction of property, criminal involvements, explosive arguments, and physical fights. Impulsive-aggressive individuals who create turmoil in their secondary families often come from chaotic family backgrounds [21]. Abuses of children by aggressive-impulsive parents represent "specific manifestations of generalized tendencies toward violent or assaultive behavior [10]."

It is reported that abusive fathers in particular tend to have character disorders; many are psychopathic [25, 41, 48]. Men who kill young children not infrequently have psychopathic traits [16, 18]. While specific criteria for antisocial personality disorders are not usually mentioned in articles on child abuse, there is frequent mention of other aggressive and criminal behaviors [2, 3, 7, 9, 11, 20, 21, 25, 34, 48, 51, 64]. Abusive fathers often have a high incidence of other violent behaviors, including assaults on their wives [10]. Male abusers have a higher incidence of prior criminal involvements in comparison with female abusers [10].

A second pattern, which can be termed "rigid-exacting" [3, 8, 10, 24, 37, 72], corresponds to the "emotionally impoverished" type of Skinner and Castle [6], or that of Bryant et al, which is manifested by "rigidity, compulsiveness, and lack of warmth [3]." Some features of this pattern conform to the diagnosis of compulsive personality disorder. Steele and Pollock believe an obsessive compulsive character structure, though not essential, is a "potent accessor[y] in instigating abuse [8]." These parents are unable to express warm, affectionate feelings. They place high expectations on themselves and others and demand perfection according to their own standards. They may be highly successful in academic or vocational pursuits. What distinguishes the rigid-exacting individual from most compulsive people is that his/her orderliness and exaggerated tendencies to control self and others thinly and brittley defend against intense hostility that can erupt episodically in the form of family abuse. Rageful brutality can be triggered by the child, who in some trivial way threatens the parent's sense of control, falls short of unreasonable expectations, or fulfills unconscious projected expectations of failure or rejection of the parent (compare Ref 20).

Some authors discuss the absence of qualities that are needed for effective parenting. From a structural viewpoint such deficiencies represent ego weaknesses or defects. Steele has written expansively and articulately on this view [15, 54, 66]. From a genetic viewpoint, if violent parents beget violent parents, nonempathic parents beget nonempathic parents. According to Steele, the abuser's own childhood was devoid of "empathic mothering" and oppressed by excessive parental demands and control. The most common finding in the backgrounds of abusers is a history of emotional deprivation, with or without physical abuse. The individual who did not enjoy a nurturing relationship with his/her parents is unlikely to develop a healthy level of self-esteem, ability to trust, and capacity to empathize [15, 23, 66, 76]. Low self-esteem, inability to empathize [75], and inability to identify with the child in a caring and protective way [75, 87] have been offered as significant deficiencies in abusive parents.

Depressive reactions are common among abusive parents [15, 40, 41, 58]. Depression is especially common among mothers who kill their children [18, 30, 43, 68, 88-90]. In Resnick's review of the literature, a majority of murdering mothers and one third of murdering fathers were considered to be depressed [17]. Batt used the term *depressed psychosis* [88]. Hopwood reported that 22 out of 166 mothers who killed their children suffered from manic-depressive illness [43]. Most (117) of his subjects were diagnosed "exhaustive psychosis," his description of which conformed with major depressive episode with psychotic features of DSM III [73]. McDermaid described a child-centered obsessional depression, wherein the mother is troubled with obsessional worries about the child's health and safety, feels incapable of providing proper

care, and suffers from depressed mood with suicidal thoughts or impulses [30]. Many parents who kill their children attempt suicide, often seriously [18,44,60,90]. This appears to be especially true of child-killing mothers [18,43,44,89].

A small minority of parents who abuse young children have a psychotic disturbance [8, 9, 20, 22, 23, 41, 49, 59, 75]. Injuries inflicted on children by psychotic parents tend to be bizare [23, 41]. Several [10, 17, 18, 43, 44, 48, 49, 60, 68, 90, 91] but not all [16] studies of parents who kill their children show that many of them are psychotic. The proportion of psychotic disturbances among parents who kill their children appears to be higher than that for those who abuse them nonfatally. Infanticide that is not associated with a history of prior maltreatment is often done by a psychotic parent [76]. Resnick's review showed schizophrenia to be the most common diagnosis of murdering mothers [17]. Most murdering mothers were psychotic, while less than one-half of murdering fathers were psychotic. There may be a differential based on sex of the abuser. Scott's study of father figures who killed their children revealed that none of them were psychotic during the murderous act [25]. It appears that fathers who attempt to kill every member of their family, rather than just one child, are more apt to be afflicted with a psychotic disorder. Adelson reported seven psychotic fathers who made serious or successful attempts to slaughter their entire family [60].

The apparent higher incidence of psychosis among nurdering parents, especially mothers, in comparison with those who abuse their children nonfatally probably represents an actual increase. But it may be somewhat exaggerated because both psychotic disorders and child killings are more apt to come to attention of mental health professionals and to be reported in the psychiatric literature as single or multiple case studies. The insanity defense is raised more frequently when the charge is murder. Visher reported a case of a disturbed but nonpsychotic woman who killed two of her three children [92]. Her insanity defense, which was based on amnesia for the event, was successful.

In summary, neurotic and character disorders are common among abusive parents. Character traits reflecting ego weaknesses are frequently reported: inadequacy, immaturity, impulsivity, dependency, egocentricity, low self-esteem, and inability to empathize with the child. Some parents are chronically angry; their aggressive behaviors are impulsive and diffuse. Others are compulsive, rigid, lacking in affection, intolerant, and harbor unreasonably high expectations for their children. Some abusive parents drink to excess. Depressive reactions are not infrequent among abusers; parents who kill their children are often depressed. A minority of abusive parents are psychotic, but psychotic disorders, like affective disorders, are more common among parents who kill their children.

Psychodynamics of Motivation

The psychodynamic mechanisms that lie behind abuse are not always apparent, so empirical studies with large samples of abusive parents do not generally explore this aspect of abuse in depth. Case reports that describe psychodynamic complexities do not lend themselves to generalization. Stresses on the parent and irritability or low tolerance to stress [10] are worth noting, but have limited explanatory value about the vector of aggression against the child. Likewise, specific precipitants and provocations, or the relative lack of appreciable incitement by the child, suggest specific stresses but beg further understanding. Self-reported motivations or explanations for abuse may or may not correspond with the psychological content and impetus behind abuse. Several psychodynamic patterns that are reported in the literature are discussed here. Knowledge of these patterns can further understanding of individual cases of abuse, but psychodynamics, it should be stressed, do not fully explain etiology. Many nonabusive parents with similar psychodynamics do not cross the threshold of serious physical assaults.

Inadvertence

Though not a psychodynamic in itself, inadvertence should be included in a classification of psychodynamics of motivation. A dead child can result when the intent is abuse but not murder [17, 22, 76]. Physical mistreatment can lead to injuries far more serious than was ever conceived. Apart from accidental excess, some parents kill or harm a child as a result of psychotic confusion. It is useful to distinguish deliberate from accidental injuries and killings, but inadvertence is not always absolute. The mother reported by Hopwood [43], who placed her infant in the fire and the kettle in the cradle, may have been moved to action by something more than just mistaken identity associated with "epileptic automatism." Identification of inadvertence may be only a partial explanation and hard to establish when intent has implications in criminal law.

Inseparable Identification

The most common apparent motive in Resnick's review of 131 cases of child killing in the literature was altruistic, often done in conjunction with a serious suicide attempt [17]. The suicidal parent may kill the child out of fear that someone else would take custody of the child or that the parent will lose the child through death [90]. In assuring that they die together, the parent hopes to maintain possession of the child after death [60, 92, 93]. The suicidal-homicidal mother regards her child as an inseparable extension of herself [19, 90, 91]. Bender explained, "child murder is a suicidal act; as a result of identification processes ... in both schizophrenics and manic-depressive psychotics there is a tendency for mothers, especially, to project their symptoms into their children, so that the child may become the hypochondriacal organ [94]." A father who kills wife, children, and himself regards family members as possessions who belong with him after death. The threat of unwanted temporal separation from loved ones, as through divorce, custody proceedings, or imprisonment, may precipitate combined suicide-homicide attempts [88].

Protection from Cruelties of Life

Another form of "altruistic" child killing described by Resnick is sufficiently different that it can be considered as a class, separate from though often related to inseparable identification. The parent believes killing the child is for its own good, as only death can spare it the cruelties of life [68, 76, 95]. A psychotic parent may falsely believe the child is persecuted by demons or evil forces. Parents who kill a child to protect the child from suffering may also be inseparably identified with it. They are often depressed. If they do not suicide, they seek help or report their crime to authorities immediately afterwards [88]. When examined more closely some apparently altruistic child killings may be based on other motives, such as rejection of the child or displacement of hostility from the other spouse onto the child [45].

"Beneficial Beatings"

Delsordo used the term "disciplinary excess" to describe brutal beatings that were intended to have positive effects on the child's psychological development. Some parents believe that severe beatings build character or eliminate traits that would ill serve the child [54, 66]. The saying "spare the rod and spoil the child" typifies this type of thinking. Excessive discipline may reflect parental overpossessiveness and serve to bind the child tightly and dependently to the parent [60]. A more extreme form of "beneficial beatings" is demonstrated by the parent who believes exorcism is necessary to rid the child of the devil. In all cases of "beneficial beatings," one must search further for psychological mechanisms, since favorable explanations may serve as excuses or rationalizations.

Rejection

Many parents probably kill their young children because they did not want them in the first place [88, 93]. A number of murdered children are born out of wedlock [30, 51, 87, 94]. Men are more apt to kill children who are not believed to be their biological offspring [17]. In one study, paramours generally killed sons of the lovers they replaced and only rarely their own children [16]. In some couples, men beat their pregnant wives [96]. Particularly when blows are directed at the wife's swollen abdomen, this behavior may represent rejection of the child, a father's attempt to abort an unwanted child. In some cases of killing a defective child, the parent may offer altruism as an excuse or rationalization to veil rejection.

Rejection, not an uncommon motive in child killing, is often associated with child abuse in general [7, 8, 11, 21, 45, 49, 51, 58, 72, 97]. Many abused children are conceived [21, 33, 48, 74] and some are born [36] out of wedlock. Adopted children and stepchildren may be more vulnerable to abuse than the parent's biological offspring [23]. Many children who are killed were abused or neglected before the fatal act [16, 51]. Many are the result of unwanted and unplanned conceptions [48, 98]. Green described a pattern of abuse wherein an individual marries someone with a child from an earlier union and then resents the child, who is regarded as a rival for dependency satisfaction from his/her spouse [59].

Gil found the coupled motive of rejection-resentment in over one third of the cases he studied [7]. The child was not appreciated as a whole person, but was rejected because of a single feature such as sex, physical appearance, or circumstances attending the child's birth. Some authors report a higher incidence of congenital anomolies among abused children [74]. Rejected children of Gil's study tended to be battered repeatedly. When abuse and neglect occurred together, Gil observed, it was associated with rejection-resentment.

The reported high incidence of male abusers who are not biologically linked to their child victims [6, 7, 25] can be compared with the abovementioned preponderance of men who kill nonconsanguineous children. Acceptance of children by some men may be more difficult if they lack paternity. Abusive parents were often emotionally rejected by their own parents, and this, too, may leave them ill prepared to accept their own children.

Several investigators reported a high incidence of early mother-infant separation [10, 35, 38], which may impede early bonding and acceptance by the mother [31, 38]. Studies of several nonhuman mammalian species demonstrate that timing and duration of a mother's first interactions with newborn infants affect subsequent bonding and maternal behaviors [99-105]. It has been suggested that partial or total interactional deprivation in the postpartum period will cause human mothers to be less responsive to their infants [104, 106-109]. The reported association between child abuse and low birth weight may be due to the increased incidence of neonatal isolation and separation of infants with low birth weight [52, 110].

Displaced Hostility from Parent's Parent to Child

Several authors report that many abusive parents were emotionally rejected or neglected by their own parents [7, 21, 40, 51, 54, 59, 90, 97]. Komisaruk noted a high incidence of "emotional loss" of a parent figure when the abusive parent was a child [75]. Lasting hostility against a parent for emotional rejection can be displaced onto the child. In their discussion of psychodynamics of infanticidal acts, McDermaid and Winkler invoke mechanisms of introjection, identification, and displacement [30]. The murderous parent, who has internalized a resented parent figure, identifies with the child, who becomes the object of an obsessional depression. Hostility against the parent eventually breaks through and is displaced onto the child, who thereby falls victim to its parent's murderous rage.

Reversal of parent-child roles [8, 54, 111] is a mechanism that involves displacement of feelings and expectations from the parent's parent to the child. The parent expects the child to satisfy dependency wishes that were frustrated by her/his parent, then reexperiences privative rage that is unleashed against the child. Another variant of the role reversal dynamic occurs

when the parent perceives rejection from the child and then reexperiences early rejection from his/her parent.

Object of Aggression Becomes the Aggressor

A significant number of abusive parents were abused themselves in childhood [11, 12, 14, 25, 48, 54, 66, 69, 74, 76, 112-114]. Etiological importance is explained by the psychodynamic mechanism of identification with the aggressor [22, 37, 48, 66, 112, 115] or the social learning concept of modeling. The high incidence of head blows and head trauma to individuals who show diffuse, impulsive aggression [58, 71, 116] raises the possibility that subclinical central neurological trauma may result in diminished control over aggressive impulses.

Displaced Hostility from Partner to Child

Several authors describe displacement of hostility from the parent's spouse or partner onto the child [21, 49, 59, 72]. Delsordo used the term "misplaced abuse" and offered several variations of this dynamic [49]. A child may serve as a "pawn" in conflicts between partners, because it is less of a "formidable adversary" in comparison with the other partner. A stepfather may beat his wife's child, sometimes illegitemate, from an earlier union who is regarded as a "bad part" of her. Child victims in these situations may be objects of both displaced hostility and rejection.

Gil described a category of child abuse that arises out of arguments between parental figures [7, 11]. The child may be the focus of argument. An older child may side with one parent against the other. The abusive parent is sometimes intoxicated with alcohol. In any event, one should look for displaced hostility whenever child abuse occurs within the context of quarrelling between partners.

Revenge against a spouse or lover has been suggested as an apparent motive for child killing [17,117]. Killing the child is intended to bring grief and suffering to the bereft parent. Vengeful child killing or nonfatal abuse can represent displacement of hostility when fear, inconvenience, or the positive feelings of dependency and attachment prevent the aggressor from attacking his/her partner.

Scapegoating

Some abusive parents, though not all [82], abuse one child repeatedly and spare the others [3.20,21,23,48,51,54,69,98,118]. Parents describe the child victim vaguely as different or evil [58]. Their negative image of the child is more reflective of subjective attitudes than actual behaviors of the child that might have provoked abuse. Conceivably, these children can become hyperactive [36], irritable [57,113], aggressive [39,116] enuretic, mentally retarded [36,119], poorly responsive [36], or dull and withdrawn [36,39,113] as a result of psychological or neurological trauma from physical abuse; hence, adverse effects of abuse can render them even more suitable for continued scapegoating [36]. Resentment and abuse can remain at a stable level or escalate until the child is either killed or removed from the household. Once the child scapegoat is removed, there is a risk that another child will take his/her place as the veritable whipping boy [21].

Projective identification is a psychological mechanism that is helpful in understanding many examples of scapegoating. The parent projects a negative aspect of his/her own identity (hatred, inadequacy) onto the child in order to preserve a purely favorble view of himself/ herself (kind, competent). This stable, ongoing view of the child as inherently bad, inadequate, or the source of all troubles then supports the parent in feeling justified in brutalizing the child.

Visher suggests that scapegoating involves displacement of hostility from the parent's parent

onto the child [92]. In contrast to scapegoating based specifically on projective identification, a more general understanding of the phenomenon is that it is due to any continuous displacement or projection of negative affects and images. Additive effects of several defence mechanisms may account for contagious qualities of scapegoating in group and family settings.

Psychotic Imperative

Some parents apparently kill their children as a direct result of hallucinatory commands or compelling delusions [19.30, 90.94, 95]. An example would be a mother who throws her infant into the fire for no other discernable reason than that God told her to do so. Similar psychotic motivations may lie behind a small minority of nonfatal brutalizations. The parent who kills or harms a child as a result of psychotic confusion, on the other hand, does so inadvertently. Psychosis may be a factor in disturbed behavior without providing motivation.

Conclusions

Social factors do not provide adequate explanation for why child abuse occurs. Social factors may suggest certain stresses or sociopsychological interactions that foster abuse, but they do not by themselves explain why one parent abuses and another does not. Most parents of any one social characteristic, or even a combination of social factors, that have been associated with abuse do not abuse their children [1]. There is the nagging question of whether undetected cases of abuse correspond to those that come to attention and are included in published studies. Similarly, patterns of parental relationships, psychopathology, and psychodynamics do not fully explicate etiology. Most suicidally depressed parents do not kill or

TABLE 1-Factors in child abuse.

A. Stresses

- 1. Youthful parenthood
- 2. Unwanted or unplanned parenthood
- 3. Low SES and related variables such as crowded and inadequate housing
- 4. Social isolation
- 5. Lone parenthood
- 6. Partner dischord
- 7. Responsibilities and frustrations of parenthood (maternal role, role reversal)
- 8. Altered physical or physiological states such as paramenstruum
- 9. The child itself (for example, infantile colic)

B. Ego Weaknesses

- 1. Character disorders
 - a. Implusive-aggressive
 - b. Rigid-exacting
 - c. Immaturity, passive dependency, or inadequacy
- 2. Depressive disorders
- 3. Psychotic disorders
- 4. Alcoholism
- 5. Nonspecific ego defects
 - a. Low self-esteem
 - b. Inability to empathize
 - c. Inability to trust

C. Vectors

- 1. Stresses created by child
- 2. Specific individual psychodynamics
- 3. Collusion or facilitation by partner
- 4. Culture-bound disciplinary practices and beliefs
- 5. Relative absence of other need-satisfying, need-frustrating objects (social isolation)

abuse their children. Displacement of hostility is common in families that lack violent interactions. So why does one parent cross the threshold of physical brutality while another does not?

A model that incorporates many observations reported in the literature holds that child abuse is a function of three general factors: (1) *stresses* upon the parent, (2) *ego weaknesses* of the parent, and (3) *vectors* that direct the parent's violent impulses against the child.

Types of stresses, ego weaknesses, and vectors are listed in Table 1. With several exceptions, stresses correspond to certain social factors, ego weaknesses to psychopathology, and vectors to psychodynamics. Stresses caused by the child both add to the burdens of parenthood and potentiate the vector against the child. The nature of the relationship between parents may generate stress or it may enhance the vector against the child. In any given case of child abuse, the strength of each of the three factors need not be equal. For example, the stress required to precipitate abuse can be relatively negligible if ego weaknesses are severe and the vector is strong. Early etiological factors in the background of the abusive parent can affect all three factors. An emotionally deprived individual may be unable to form an enduring, stable relationship with a suitable partner, (hence, the stress of no relationship or a chaotic one), may be unable to empathize with the child (ego weakness), and may displace filial frustrations onto the child (vector).

References

- [1] Straus, M., "Family Patterns and Child Abuse in a Nationally Representative American Sample," Child Abuse and Neglect, Vol. 3, No. 1, 1979, pp. 212-225.
- [2] Gil, D. G., "Incidence of Child Abuse and Demographic Characteristics of Persons Involved," in *The Battered Child*, R. E. Helfer and C. H. Kempe, Eds., University of Chicago Press, Chicago, 1968.
- [3] Bryant, H. D., Billingsley, A., Kerry, G. A., Leefman, W. V., Merrill, E. J., Senecal, G. R., and Walsh, B. G., "Physical Abuse of Children in an Agency Study," *Child Welfare*, Vol. 42, No. 3, March 1963, pp. 125-130.
- [4] Simons, B., Downs, E. F., Hurster, M. M., and Archer, M., "Child Abuse: Epidemiologic Study of Medically Reported Cases," *New York State Journal of Medicine*, Vol. 66, No. 21, Nov. 1966, pp. 2783-2788.
- [5] Lukianowicz, N., "Battered Children," Psychiatric Clinics, Vol. 4. No. 5-6, 1971, pp. 257-280.
- [6] Skinner, A. E. and Castle, R. L., Seventy-Eight Battered Children: A Retrospective Study, National Society for the Prevention of Cruelty to Children, London, 1969.
- [7] Gil, D. G., Violence Against Children: Physical Abuse in the United States, Harvard University Press, Cambridge, MA, 1970.
- [8] Steele, B. F. and Pollock, C. B., "A Psychiatric Study of Parents Who Abuse Infants and Small Children," in *The Battered Child*. R. E. Helfer and C. H. Kempe, Eds., University of Chicago Press, Chicago, 1968.
- [9] Johnson, B. and Morse, H. A., "Injured Children and Their Parents," Children, Vol. 15, No. 4, July-Aug. 1968, pp. 147-152.
- [10] Fergusson, D., Fleming, J., and O'Neill, D. R., Child Abuse in New Zealand, Research Division, Department of Social Welfare, Wellington, New Zealand, 1972.
- [11] Gil, D. G., "Physical Abuse of Children: Findings and Implications of a Nationwide Survey, Part II," *Pediatrics*, Vol. 44, No. 5, Nov. 1969, pp. 857-864.
- [12] Schloesser, P. T., "The Abused Child," The Bulletin of the Menninger Clinic, Vol. 28. No. 5, Sept. 1964, pp. 260-268.
- [13] Heins, M., "Child Abuse—Analysis of a Current Epidemic," Michigan Medicine, Vol. 68, No. 17, Sept. 1969, pp. 887-891.
- [14] Straus, M. A., Gelles, R. J. (principal investigators), and Yahraes, H. (author), "Physical Violence in Families," in *Families Today: Family Violence and Child Abuse*, Science Reports Branch, Division of Scientific and Public Information, NIMH, Rockville, Maryland, Vol. 2, 1979, pp. 553– 576.
- [15] Steele, B. F., "Parental Abuse of Infants and Small Children," in *Parenthood: Its Psychology and Psychopathology*, E. J. Anthony and T. Benedek, Eds., Little, Brown, and Co., Boston, 1970, pp. 449-477.

- [16] Kaplun, D. and Reich, R., "The Murdered Child and His Killers," The American Journal of Phychiatry, Vol. 133, No. 7, July 1976, pp. 809-813.
- [17] Resnick, P. J., "Child Murder By Parents: A Psychiatric Review of Filicide," The American Journal of Psychiatry, Vol. 126, No. 3, Sept. 1969, pp. 325-334.
- [18] Harder, T., "The Psychopathology of Infanticide," Acta Psychiatrica Scandinavica, Vol. 43, No. 2, Feb. 1967, pp. 196-245.
- [19] Podolsky, E., "The Psychodynamics of Filicide and Matricide," Diseases of the Nervous System, Vol. 19, No. 11, Nov. 1958, pp. 475-477.
- [20] Young, L., Wednesday's Children: A Study of Child Neglect and Abuse, McGraw-Hill, New York, 1964.
- [21] Nurse, S. M., "Familial Patterns of Parents Who Abuse Their Children," Smith College Studies in Social Work, Vol. 15, No. 1, Oct. 1964, pp. 11-25.
- [22] Steele, B., "Psychodynamic Factors in Child Abuse," in *The Battered Child*, third edition, C. H. Kempe and R. E. Helfer, Eds., The University of Chicago Press, Chicago, 1980.
- [23] Kempe, C. H., "Pediatric Implications of the Battered Baby Syndrome," Archives of Diseases in Childhood, Vol. 46, No. 2, Feb. 1971, pp. 28-37.
- [24] Merrill, E. J., "Physical Abuse of Children: An Agency Study," in Protecting the Battered Child, V. De Francis, Ed., Children's Division, American Humane Association, Denver, CO, 1962.
- [25] Scott, P. D., "Fatal Battered Baby Cases," Medicine, Science, and Law, Vol. 13, No. 3, July 1973, pp. 197-206.
- [26] Greengard, J., "The Battered Child Syndrome," American Journal of Nursing, Vol. 64, No. 6, June 1964, pp. 98-100.
- [27] Galdston, R., "Observations on Children Who Have Been Physically Abused and Their Parents," The American Journal of Psychiatry, Vol. 122, No. 4, Oct. 1965, pp. 440-443.
- [28] Nathan, H., "Abused Children," The American Journal of Psychiatry, Vol. 122, No. 4, Oct. 1, ..., p. 443.
- [29] Mead, M., Male and Female: A Study of the Sexes in a Changing World, William Morrow and Co., New York, 1949.
- [30] McDermaid, G. and Winkler, E. G., "Psychopathology of Infanticide," Journal of Clinical and Experimental Psychopathology, Vol. 16, No. 1, March 1955, pp. 22-41.
- [31] Klaus, M. H. and Kennell, J. H., "Mothers Separated From Their Newborn Infants," Pediatric Clinics of North America, Vol. 17, No. 4, Nov. 1970, pp. 1015-1037.
- [32] Anthony, E. J. and Kreitman, N., "Murderous Obsessions in Mothers Toward Their Children," in *Parenthood: Its Psychology and Psychopathology*, E. J. Anthony and T. Benedek, Eds., Little, Brown and Co., Boston, 1970, pp. 479-498.
- [33] Elmer, E., Children in Jeopardy: A Study of Abused Minors and Their Families, University of Pittsburgh Press, Pittsburgh, 1967.
- [34] De Francis, V., Child Abuse: Preview of a Nationwide Survey, Children's Division, American Humane Association, Denver, CO, 1963.
- [35] Lynch, M. A. and Roberts, J., "Predicting Child Abuse: Signs of Bonding Failure in the Maternity Hospital," British Medical Journal, Vol. 1, No. 6061, 5 March 1977, pp. 624-626.
- [36] Baldwin, J. A. and Oliver, J. E., "Epidemiology and Family Characteristics of Severely Abused Children," British Journal of Preventive Social Medicine, Vol. 29, No. 4, Dec. 1975, pp. 205-221.
- [37] Court, J., "The Battered Child: Part I: Historical and Diagnostic Reflections," Medical Social Work, Vol. 22, No. 1, 1968, pp. 11-15.
- [38] Lynch, M. A., Roberts, J., and Gordon, M., "Child Abuse: Early Warning in the Maternity Hospital," Developmental Medicine and Child Neurology, Vol. 18, No. 6, Dec. 1976, pp. 759-766.
- [39] Kent, J. T., "A Follow-Up Study of Abused Children," Journal of Pediatric Psychology, Vol. 1, Spring 1976, pp. 25-31.
- [40] Oumsted, Z., Oppenheimer, R., and Lindsay, J., "Aspects of Bonding Failure: The Psychopathology and Psychotherapeutic Treatment of Families of Battered Children," *Developmental Medicine and Child Neurology*, Vol. 16, No. 4, Aug. 1974, pp. 447-456.
- [41] Smith, S. M., The Battered Child Syndrome, Butterworths (Publishers) Inc., Reading, MA, 1975.
- [42] Bennie, E. H. and Sclare, A. B., "The Battered Child Syndrome," The American Journal of Psychiatry, Vol. 125, No. 7, Jan. 1969, pp. 975-979.
- [43] Hopwood, J. S., "Child Murder and Insanity," Journal of Mental Sciences, Vol. 73, No. 1, Jan. 1927, pp. 95-108.
- [44] Baker, J., "Female Criminal Lunatics: A Sketch," Journal of Mental Science, Vol. 48, Jan. 1902, pp. 13-28.
- [45] Martin, H. P., Beezley, P., Conway, E. F., and Kempe, H., "The Development of Abused Children," Advances in Pediatrics, Vol. 21, 1974, pp. 25-73.

- [46] Helfer, R. E. and Pollock, C. H., "The Battered Child Syndrome," Advances in Pediatrics, Vol. 15, 1968, pp. 9-27.
- [47] Oettinger, K. B., Foreword to The Battered Child, R. E. Helfer and C. H. Kempe, Eds., University of Chicago Press, Chicago, 1968.
- [48] Kempe, C. H., Silverman, F. N., Steele, B. F., Droegemueller, W., and Silver, H. K., "The Battered Child Syndrome," Journal of the American Medical Association, Vol. 181, No. 1, July 1962, pp. 17-24.
- [49] Delsordo, J. D., "Protective Casework for Abused Children," Children, Vol. 10, No. 6, Nov.-Dec, 1963, pp. 213-218.
- [50] Boardman, H. E., "A Project to Rescue Children from Inflicted Injuries," Social Work, Vol. 7, No. 1, Jan. 1962, pp. 43-51.
- [51] Cameron, J. M., Johnson, H. R. M., and Camps, F. E., "The Battered Child Syndrome," Medicine, Science, and the Law, Vol. 6, No. 1, Jan. 1966, pp. 2-21.
- [52] Segal, J., "Child Abuse: A Review of Research," in Families Today: Family Violence and Child Abuse, Vol. 2, Science Reports Branch, Division of Scientific and Public Information, NIMH, Rockville, MD, 1979, pp. 577-606.
- [53] Krige, H. N., "The Abused Child Complex and Its Characteristic X-Ray Findings," South African Medical Journal, Vol. 40, June 1966, pp. 490-493.
- [54] Steele, B. F., Working with Abusive Parents from a Psychiatric Point of View, DHEW Publication OHD 75-70, U.S. Government Printing Office. Washington, DC, 1975. [55] Beswick, K., Lynch, M. A., and Roberts, J., "Child Abuse and General Practice." British Medi-
- cal Journal, Vol. 2, No. 6039, 2 Oct. 1976, pp. 800-802.
- [56] Zalba, S. R., "The Abused Child: I. A Survey of the Problem," Social Work, Vol. 11, No. 4, Oct. 1966, pp. 3-16.
- [57] Barta, R. A. and Smith, N. J., "Willful Trauma to Young Children: A Challenge to the Physician," Clinical Pediatrics, Vol. 2, No. 10, Oct. 1963, pp. 545-554.
- [58] Holman, R. R. and Kanwar, S., "Early Life of the Battered Child," Archives of Diseases in Childhood, Vol. 50, No. 1, Jan. 1975, pp. 78-80.
- [59] Green, A. H., Gaines, R. W., and Sandgrund, A., "Child Abuse: Pathological Syndrome of Family Interaction," The American Journal of Psychiatry, Vol. 131, No. 8, Aug. 1974, pp. 882-886.
- [60] Adelson, L., "Slaughter of the Innocents," New England Journal of Medicine. Vol. 264, No. 26, June 1961, pp. 1345-1349.
- [61] Lefkowitz, M. M., Huesmann, L. R., and Eron, L. D., "Parental Punishments: A Longitudinal Analysis of Effects," Archives of General Psychiatry, Vol. 35, No. 2, Feb. 1978. pp. 186-191.
- [62] Newson, J. and Newson, E., Patterns of Infant Care in an Urban Community, George Allen and Unwin, Ltd., London, 1963,
- [63] Tardiff, K. and Sweillam, A., "Assault, Suicide, and Mental Illness," Archives of General Psychiatry, Vol. 37, No. 2, Feb. 1980, pp. 164-169.
- [64] McHenry, T., Girdany, B. R., and Elmer, E., "Unsuspected Trauma with Multiple Skeletal Injuries During Infancy and Childhood," Pediatrics, Vol. 31, No. 6, June 1963, pp. 903-908.
- [65] Davoren, E., "The Role of the Social Worker," in The Battered Child, R. E. Helfer and C. H. Kempe, Eds., University of Chicago Press, Chicago, 1968, pp. 153-168.
- [66] Steele, B. F., "Violence Within the Family," in Child Abuse and Neglect: The Family and the Community, R. E. Helfer and C. H. Kempe, Eds., Ballinger Publishing Co., Cambridge, MA. 1976, pp. 3-23.
- [67] Lynch, M. A., "Ill-Health and Child Abuse." The Lancet, Vol. 2, No. 7928, 16 Aug. 1975, pp. 317-319.
- [68] Morton, J. H., "Female Homicides," Journal of Mental Science, Vol. 80, No. 328, Jan. 1934, pp. 64-74.
- [69] Fontana, V. J., and Besharov, D. J., The Maltreated Child: The Maltreatment Syndrome in Children: A Medical, Legal, and Social Guide, 3d ed., Charles C Thomas, Springfield, IL, 1977.
- [70] Fontana, V. J., The Maltreated Child: The Maltreatment Syndrome in Children, Charles C Thomas, Springfield, IL, 1971.
- [71] Felthous, A. R., "The Urge to Kill: A Case Study of Aggressive Drives in an Adolescent Boy," McLean Hospital Journal, Vol. 7, No. 1, 1982, pp. 49-60.
- [72] Zalba, S. R., "The Abused Child: II. A Typology for Classification and Treatment," Social Work. Vol. 12, No. 1, Jan. 1967, pp. 70-79.
- [73] Diagnostic and Statistical Manual of Mental Disorders, 3d ed., (DMS III), The American Psychiatric Association, Washington, DC, 1980.
- [74] Birrell, R. G., and Birrell, J. H. W., "The Maltreatment Syndrome in Children: A Hospital Survey," The Medical Journal of Australia, Vol. 2, No. 23, 7 Dec. 1968, pp. 1023-1029.
- [75] Komisaruk, R., "Clinical Evaluation of Child Abuse: Scarred Families: A Preliminary Report,"

Juvenile Court Judge Journal (Wayne County, Michigan), Vol. 17, No. 2, Summer 1966, pp. 66-70.

- [76] Steele, B. F., "Psychology of Infanticide Resulting from Maltreatment," in Infanticide and the Value of Life, M. Kohl, Ed., Prometheus Books, Buffalo, NY, 1978.
- [77] Wasserman, S., "The Abused Parent of the Abused Child," Children, Vol. 14, No. 5, Sept.-Oct. 1967, pp. 175-179.
- [78] Spinetta, J. J., and Rigler, D., "The Child-Abusing Parent: A Psychological Review," Psychological Bulletin, Vol. 77, No. 4, April 1972, pp. 296-304.
- [79] Cohen, M. I., Raphling, D. L., and Green, P. E., "Psychological Aspects of the Maltreatment Syndrome of Childhood," *Journal of Pediatrics*, Vol. 69, No. 2, Aug. 1966, pp. 279-284.
- [80] Silver, L. B., "Child Abuse Syndrome: A Review," *Medical Times*. Vol. 96, No. 8, Aug. 1968, pp. 803-820.
- [81] Woolley, P. V., Jr. and Evans, W. A., Jr., "Significance of Skeletal Lesions in Infants Resembling Those of Traumatic Origin," *The Journal of the American Medical Association*, Vol. 158, No. 7, 18 June 1955, pp. 539-543.
- [82] Ten Bensel, R. W., "The Battered Child Syndrome." Minnesota Medicine. Vol. 46. No. 10, Oct. 1963, pp. 977-982.
- [83] Jacobziner, H., "Rescuing the Battered Child," American Journal of Nursing. Vol. 64, No. 6, June 1964, pp. 92-97.
- [84] Cochrane, W. A., "The Battered Child Syndrome," Canadian Journal of Public Health, Vol. 56, No. 3, May 1965, pp. 193-196.
- [85] Nurse, S. M., "Parents Who Abuse Their Children," Smith College Studies in Social Work, Vol. 35. No. 4, Oct. 1964, pp. 11-25.
- [86] Curtis, G., "Violence Breeds Violence-Perhaps," The American Journal of Psychiatry, Vol. 120, No. 4, Oct. 1963, pp. 386-387.
- [87] Melnick, G. and Hurley, J. R., "Distinctive Personality Attributes of Child-Abusing Mothers." Journal of Consulting and Clinical Psychology, Vol. 33, No. 6, Dec. 1969, pp. 746-749.
- [88] Batt, J. C., "Homicidal Incidence in the Depressive Psychosis," Journal of Mental Science, Vol. 94, No. 397, Oct. 1948, pp. 782-792.
- [89] Sullivan, W. C., Crime and Insanity, Longmans, Green, and Co., New York, 1924.
- [90] Tuteur, W. and Glotzer, J., "Further Observations on Murdering Mothers." Journal of Forensic Sciences, Vol. 11, No. 3, July 1966, pp. 373-383.
- [91] Tuteur, W. and Glotzer, J., "Murdering Mothers," The American Journal of Psychiatry, Vol. 116, No. 5, Nov. 1959. pp. 447-452.
- [92] Visher, J. S., "Successful Therapy in a Case of Infanticide," Archives of Criminal Psychodynamics, Vol. 4, No. 1, Winter 1960, pp. 76-90.
- [93] Scott, P. D., "Parents Who Kill Their Children," Medicine. Science and the Law, Vol. 13. No. 2, April 1973, pp. 120-126.
- [94] Bender, L., "Psychological Mechanisms in Child Murders," The Journal of Nervous and Mental Disease. Vol. 30, No. 1, July 1934, pp. 32-47.
- [95] Neustatter, W. L., "The State of Mind in Murder," *The Lancet*, Vol. 1, No. 7397, 17 April 1965, pp. 861-863.
- [96] Gelles, R. J., "Violence and Pregnancy: A Note on the Extent of the Problem and Needed Services," *The Family Coordinator*, Vol. 24, No. 1, Jan. 1975, pp. 81-86.
- [97] Gluckman, L. K., "Cruelty to Children," New Zealand Medicine Journal. Vol. 67, No. 1, Jan. 1968, pp. 155-159.
- [98] Mintz, A. A., "Battered Child Syndrome," Texas State Journal of Medicine. Vol. 60, No. 2, Feb. 1964, pp. 107-108.
- [99] Rosenblatt, J. S. and Lehrman, D. S., "Maternal Behavior of the Laboratory Rat," in *Maternal Behavior in Manumals*. H. L. Rheingold, Ed., John Wiley and Sons, New York. 1963, pp. 8-57.
- [100] Schneirla, T. C., Rosenblatt, J. S., and Tobach, E., "Maternal Behavior in the Cat," in *Maternal Behavior in Mammals*, H. L. Rheingold, Ed., John Wiley and Sons, New York, 1963, pp. 122-168.
- [101] Hersher, L., Richmond, J. B., and Moore, A. V., "Maternal Behavior in Sheep and Goats." in Maternal Behavior in Mammals, H. L. Rheingold, Ed., John Wiley and Sons, New York, 1963, pp. 203-232.
- [102] Hersher, L., Moore, A. V., and Richmond, J. B., "Effect of Postpartum Separation of Mother and Kid on Maternal Care in the Domestic Goat," *Science*, Vol. 128, No. 3335. 18 Nov. 1958, pp. 1342-1343.
- [103] Collias, N. E., "The Analysis of Socialization in Sheep and Goats." *Ecology*, Vol. 37, No. 2, April 1956, pp. 228–239.
- [104] Klaus, M. H. and Kennell, J. H., "Mothers Separated from Their Newborn Infants," The Pediatric Clinics of North America, Vol. 17, No. 4, Nov. 1970, pp. 1015–1037.

- [105] Klopper, P. H., Adams, D. K., and Klopfer, M. S., "Maternal 'Imprinting' in Goats," Proceedings of the National Academy of Sciences, Vol. 52, No. 10, Oct. 1964, pp. 911-914.
- [106] Barnett, C. R., Leiderman, P. H., Grobstein, R., and Klaus, M., "Neonatal Separation: The Maternal Side of Interactional Deprivation," *Pediatrics*, Vol. 45, No. 2, Feb. 1970, pp. 197-205.
- [107] Kennell, J. H., Jerauld, R., Wolfe, H., Chesler, D., Kreger, N. C., McAlpine, W., Steffa, M., and Klause, M. H., "Maternal Behavior One Year After Early and Extended Post-Partum Contact," *Developmental Medicine and Child Neurology*, Vol. 16, No. 2, April 1974, pp. 172-179.
- [108] Leifer, A. D., Leiderman, P. H., Barnett, C. R., and Williams, J. A., "Effects of Mother-Infant Separation on Maternal Attachment Behavior," *Child Development*, Vol. 43, No. 4, Dec. 1972, pp. 1203-1218.
- [109] Kennell, J., Voos, D., and Klaus, M., "Parent-Infant Bonding," in *Child Abuse and Neglect: The Family and the Community*, R. E. Helfer and C. H. Kempe, Eds., Ballinger Publishing Co., Cambridge, MA, 1976, pp. 25-53.
- [110] Klein, M. and Stern, L., "Low Birth Weight and the Battered Child Syndrome." American Journal of Diseases of Children, Vol. 122, No. 1, July 1971, pp. 15-18.
- [111] Morris, M. G. and Gould, R. W., "Role-Reversal: A Concept in Dealing with the Neglected/Battered-Child Syndrome," in *The Neglected/Battered-Child Syndrome*, Child Welfare League of America, New York, 1963, pp. 26-46.
- [112] Silver, L. B., Dublin, C. Z., Lourie, R. S., "Does Violence Breed Violence? Contributions from a Study of the Child Abuse Syndrome," *The American Journal of Psychiatry*, Vol. 126, No. 3, Sept. 1969, pp. 404-407.
- [113] Morris, M. G., Gould, R. W., and Matthews, P. J., "Toward Prevention of Child Abuse." *Children*, Vol. 11, No. 2, March-April 1964, pp. 55-60.
- [114] Milowe, I. D., and Lourie, R. S., "The Child's Role in the Battered Child Syndrome," abstract, The Journal of Pediatrics, Vol. 63, No. 6, Dec. 1964, pp. 1079-1081.
- [115] Corbett, J. T., "A Psychiatrist Reviews the Battered Child Syndrome and Mandatory Reporting Legislation," Northwest Medicine, Vol. 633, No. 12, Dec. 1964, pp. 920–922.
- [116] Felthous, A. R., "Childhood Antecedents of Aggressive Behaviors in Male Psychiatric Patients," Bulletin of the American Academy of Psychiatry and the Law, Vol. 8, No. 1, 1980, pp. 104-110.
- [117] Stern, E. S., "The Medea Complex: The Mother's Homicidal Wishes to Her Child," The Journal of Mental Science (The British Journal of Psychiatry), Vol. 44, No. 395, April 1948, pp. 321-331.
- [118] Fontana, V. J., Donovan, D., and Wong, R. J., "The 'Maltreatment Syndrome' in Children," New England Journal of Medicine, Vol. 269, No. 26, Dec. 1963, pp. 1389-1394.
- [119] Elmer, E., and Gregg, G. S., "Developmental Characteristics of Abused Children." *Pediatrics*, Vol. 40, No. 4, Part I, Oct. 1967, pp. 596-602.

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