The Effects of Domestic Abuse on the Unborn Child

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Full Text: Headnote ABSTRACT: This paper explores the relationship of domestic violence toward a pregnant mother on the subsequent behavior of her child. Through examination of the literature on physical abuse during pregnancy a picture emerges of the fetal environment. Exposure to this environment was consistently shown to have detrimental effects in infancy and childhood and in later adult life particularly evidenced by emotional and behavioral disorders, and increased evidence of criminal and violent behavior and suicide. INTRODUCTION In recent years, the issue of domestic violence has received much attention in scientific literature. While violence against women has been pervasive throughout human history, it is only recently that Western society openly rejected this behavior and created preventive laws. Domestic violence has several components which increase in severity over time. Verbal abuse, emotional abuse, physical abuse and sexual abuse occur in a specific order that are all designed to gain control of the victim by the perpetrator. It is characterized by a pattern of control, coercion, and assaults that an adult or an adolescent, most frequently male, uses to dominate or force compliance from a partner or spouse. (Helton, McFarlane, &Anderson, 1987). Studies report that 7% (Helton, et al., 1987; McGrath, et al., 1991) to 17% (McFarlane, et al., 1992; Gazmararian, et al., 1996; Parker, et al., 1993) of pregnant women are currently in abusive relationships, and 21%-30% (Helton, et al., 1987) of all women have been abused at some point. Detailed personal interviews and interviews done later in pregnancy show even higher prevalence rates of such abuse (Petersen, et al., 1997). During pregnancy, physical assault is more likely to begin or escalate (DHHS Publication PHS 91-500212). A review of the literature shows clearly what the physical and emotional effects are on the pregnant woman and the neonate. Because the unborn child experiences everything the mother experiences, i.e. yelling voices, and physical and emotional trauma, he or she will be affected on every level-physiologically and psychologically. These data suggest that the majority of children of abused mothers will exhibit higher than normal levels of emotional disturbance or aggressive behavior. THE GENESIS OF VIOLENCE AND ABUSE Battering relationships start out magically. The abuser-to-be is romantic, thoughtful, and attentive. For the first several months or year, he is like a dream come true-whatever the woman has been looking for in a partner. Abusive behavior starts slowly, so that a woman's belief about her partner formed in these early months is not easily confronted. Abusers begin the mistreatment with sleep deprivation, interruption of eating patterns, complaints about the victim's worthlessness and faults, isolation from family and friends, and control over her finances. The perpetrator will have terrorizing rages that can erupt at any moment without warning. He may threaten the things she loves or destroy them. After a pattern of verbal and emotional abuse has been established and accepted by the victim, physical assault begins to occur. Women may be hit, slapped, punched, kicked, burned or injured with knives and guns. Sexual abuse begins after physical abuse. The women is forced to participate in sexual acts that she objects to, which further her feelings of shame and degradation (Brown, 1997). Sexual abuse is almost always accompanied by physical abuse. In the first study to make this association, sexual abuse is highly correlated with a risk of homicide or being killed by the abuser (McFarlane, 1998). Pregnant women who are abused before pregnancy are likely to continue to be abused during the pregnancy. In fact, of women assaulted during pregnancy, 21%-33% report an increase in violence during that period (Campbell, et al., 1992; Stewart &Cecutti, 1993; etc.). Only a small minority of women, 3% reported a decrease in physical violence during the pregnancy (Amaro, et al., 1990). EFFECTS OF DOMESTIC ABUSE ON THE PREGNANT WOMAN Victims of violence were at greater risk of experiencing depression, attempting suicide, reported less happiness about being pregnant, and received less

emotional support from others during the pregnancy. The pregnancy is more likely to be unintended (Gazmararian et al., 1995). Comparisons of victims and non-victims shows that victims are more likely to be users of alcohol, illegal and prescription drugs, and to smoke cigarettes during pregnancy (Amaro, et al., 1990; Stewart &Cecutti, 1993; Webster, et al., 1996). One study showed that abused women are more likely to have epilepsy and asthma, have a higher incidence of miscarriage, two or more pregnancy terminations, and experienced a neonatal death (Webster, et al., 1996). Consequences of physical abuse include abdominal trauma resulting in placental abruption, fetal death independent of the abruption, prêterai labor and delivery, direct fetal injury, and fetomaternal hemorrhage. Maternal complications include hypovolemic shock, and rupture of the uterus, spleen and liver (Petersen, et al., 1997; McDonald, 1968). Carlson, Gielen, and O'Campo (1994) found that moderate or severe violence is experienced in the postpartum period by 41% of the women who had been abused prenatally. Moreover, 17% of the women who were not abused during the pregnancy reported moderate to severe physical abuse postpartum. It seems obvious to assume that women who are victims of domestic violence experience a great deal of distress in their lives. They more commonly experience higher levels of anxiety, depression and demoralization (Petersen, et al., 1997). Battered women are more than twice as likely as non-battered women to experience emotional problems, job loss, legal problems, and parenting problems. They were 20% more likely to have experienced undesirable life changes and the added stress of the death of a friend or family member (Bullock &McFarlane, 1989). THE EFFECTS OF MATERNAL ANXIETY ON BIRTH Numerous studies have reported on the levels of maternal anxiety and its effects on the birth process and the neonate (Ferreira, 1960; Istvan, 1986; Carlson, 1979; Farber, 1981; Field, et al., 1985; Van Den Bergh, 1990). In a summary of studies of perinatal complications the strongest associated factor was occurrence of recent stressful life events (Paykel ES, Emms EM, et al., 1980). Nuckolls found that women who had high life change scores both prior to and during pregnancy were twice as susceptible to pregnancy complications if their test scores indicated the presence of psychosocial liabilities rather than assets (Nuckolls, et al., 1972). Gorsuch and Key (1974) found the pregnancy and birth complications were positively associated with high to average levels of state anxiety in the third and fourth months of pregnancy and also with life change in the second and third trimesters of pregnancy. They also found that contemporary life experiences seemed more important than past events in predicting reproductive outcome. McDonald and Parham (1964) found that birth complications were more likely to occur with women who tested as using "denial, rationalization, and sublimation defenses to deal with their feelings." These women "emphasized strength through power and aggression". In a review of the literature, the main findings were that patients with obstetric complications had higher anxiety levels than women with normal gestations and deliveries (Istvan, 1986). An association of domestic violence with low birth weight of infants was found in four studies (Bullock &McFarlane, 1989; Webster, et al., 1996; Parker &McFarlane, et al., 1993; Petersen, et al., 1997). Also, mothers who experience high levels of anxiety gave birth to infants of lower birth weights. The incidence of life changes and current nature of the abusive relationship seems to have an effect on the anxiety level of the mother, which might correlate with the low birth weight. The effect was ameliorated when the abused mother had a high level of social support (McLean, et al., 1993). However most abused women lacked social connection with others. Maternal anxiety and significant life stress has also been shown to correlate with premature birth (McDonald, 1968). PHYSIOLOGICAL EFFECTS ON THE FETUS Women assaulted during pregnancy are more likely to experience preterm labor even if it does not directly follow a physical attack. They are also more prone to chorioamnionitis. This condition is associated with sexually transmitted diseases which tend to accompany illicit drug use (Berenson, et al., 1994). Several possible indirect physiological consequences have been noted. Myers (1975), in experiments with rhesus monkeys, argued that neuroendocrines released as part of the stress response to exposure to adverse events, particularly epinephrine and norepinephrine, tend to reduce uterine blood flow, resulting in fetal hypoxia. Other laboratory experiments have demonstrated that exposure to Stressors is associated with increases of catecholamine secretion and reports of increased anxiety. The

increased catecholamines in the mother's system whenever she was verbally, emotionally, physically or sexually abused would be an unusual effect on the fetus's uterine environment. As Carlson (1979) points out, in a literature review of maternal emotionality and reproductive outcome, "the duration and intensity of the stress" are probably among the most critical factors. It seems likely F; that continuation of the stress situation affects reproduction via chronic overactivity of the adrenocortical system and ultimately results in a reduction of the organism's ability to cope adequately. Although Carlson's article did not specifically examine domestic violence, the situation described seems to fit that of the chronically battered woman and her unborn baby. Maternal anxiety scores, both trait anxiety and state anxiety, were positively correlated with fetal behavior and movement and neonatal behavior and movement by Van Den Bergh (1990). So there is a high correlation between the baby's movements and behavior both before and after birth due to anxiety in the mother. Babies born to the more anxious mothers had more gastrointestinal problems, cried more frequently, and were perceived as having a difficult temperament. The anxious women also had more pregnancy and delivery complications. Farber (1981) examined anxious mothers and found that motherinfant interaction differed when compared with non-anxious mothers, but only with female infants. However Farber only gave one anxiety scale test during the third trimester, while Van Den Bergh (1990) gave seven test batteries, and also tested during each trimester. Gorsuch and Key (1974) found that testing close to the stressful or anxious event made a difference in their results. The timing of the test seems to be important in ascertaining whether there is an anxiety effect. Reduced fetal activity and increased neonatal activity is also shown as a result of maternal anxiety in primiparous women. Mothers with less anxiety experienced fewer obstetrical complications, had higher birth weight infants, and their infants performed better on the Brazelton neonatal behavior assessment scale. These neonates were also less irritable and less active after birth (Field, et al., 1985). A relationship has also been shown between pre-eclampsia, also known as toxemia, and maternal anxiety. In 1963, Glick and others interviewed 40 patients who had previously experienced toxemia. There may also be a direct relationship between continued exposure to distressing situations and pre-eclampsia. As mentioned previously, women exposed to stress were more likely to produce increased catecholoamines in response. Noradrenaline, one of the main catecholamines, has been shown to have a major role in the development of pre-eclampsia. Since abused women are exposed to repeated violating events, it is possible that they are at higher risk for pre-eclampsia (Manyonda, Slater, et al., 1998). The women who later developed the condition in a subsequent pregnancy were more likely to be single, or become separated, divorced or widowed during pregnancy. They were more likely to be habitual aborters or to be characterized as "accident prone". Domestic violence victims were frequently assessed as "accident prone" in medical records because of the shame and stigma associated with wifebeating 35 years ago when this study was done. Separation, divorce or the death of a spouse rank as one of the highest anxiety producers on the life stress index (Barnett, Hanna, et al., 1983). These women are also shown to be habitual aborters (Webster, et al., 1996). The consequences to the mother of high stress events such as habitual abortions, and "accident proneness" are similar to the effects of domestic violence on its victims. EFFECTS ON THE PERSONALITY OF THE UNBORN CHILD According to Garbarino, Guttmand and Sealey (1986), psychological maltreatment is a concerted attack by an adult on a child's development of self and social psychologically destructive behavior, and takes five forms. Utilizing this formulation, the prenatal effects of the five types of abuse may also be observed. The first category of abuse is rejecting. The adult refuses "to acknowledge the child's worth and the legitimacy of the child's needs." In the prenatal period, this would include not allowing the child's mother to have adequate rest and food. Unwanted and mistimed pregnancies account for over 70% of babies conceived by domestic violence victims while for non-abused women, the figure is 43% (Gazmararian, Adams, et al., 1995). Rejecting the pregnancy and anger at the conception is common for most abusers. They are likely to psychologically reject the child and may even accuse the mother of conceiving the baby by someone else. The second form of mistreatment is isolating. The adult separates the child from normal social experiences, prevents the child from forming friendships, and makes the child believe that he or she is alone in

the world. By segregating the mother from social contact with other pregnant women, the abuser also isolates the child. By physically and emotionally abusing the mother and creating stress and anxiety, the child's primitive system is bathed in catecholamines. The physical stress system of the mother detaches the child from her in vital ways. The mother's emotional stress and her focus on the needs of her attacker, rather than the unborn child, also alienates the pregnant women from her fetus-even though they occupy the same body. The third form of harassment is terrorizing. "The adult verbally assaults the child, creates a climate of fear, bullies and frightens the child, and makes the child believe that the world is capricious and hostile." By yelling at the unborn baby, calling it names and rejecting it as his own, the abuser frightens the fetal child. The frequent verbal and sometimes physical attacks are scary and possibly terrorizing. When those attacks are mixed in with periods of affection, the unpredictability of mood may be even more overwhelming for the prenate, than they are for the mother. The fourth form of misuse is ignoring. "The adult deprives the child of essential stimulation and responsiveness, stifling emotional growth and intellectual development." The basic emotional and intellectual needs of the unborn have not been clearly defined. However it has been shown that music, language programs, and other forms of stimulation affect children's intellectual and behavioral capacity beyond the usual (Blum, 1993). By not allowing the basic conditions of a quiet, peaceful environment, and security in the emotional caretaking abilities of his parents, the baby is deprived and his needs ignored. The fifth form of negativity is corrupting. "The adult stimulates the child to engage in destructive antisocial behavior, reinforces that deviance, and makes the child unfit for normal social experience." The whole environment for the unborn child of a battered woman is toxic. The child lives in a world of imminent physiological stress, bathed in more stress hormones than usual. The vocative environment is one of loud voices, yelling, the sounds of slapping and possible physiological pain. The feeling states of the mother are communicated to the child, along with the probable feeling of being unwanted. Nine months in such a toxic environment may create a child who is unfit for normal social experience, and who will grow to engage in self destructive or antisocial behavior. LONG TERM EFFECTS OF DOMESTIC VIOLENCE ON THE UNBORN Children gestates under conditions of domestic abuse are more likely to have emotional disorders, commit violent crimes and kill themselves. Mothers found to be highly anxious during pregnancy were found to exert more control over their children and to parent in an authoritarian manner. They reveal greater dissatisfaction with the role of being a mother and evidence more marital conflict and irritability in relations with their children and partners. Children tended to receive lower developmental quotients in both the mental and motor areas and, in general, present a less favorable picture of emotional adjustment (Davids, Holden &Gray, 1963). The mother's perception of her child as an infant has a significant impact on that child's later development. Mothers who were noted prenatally to have poor self-esteem, lack of confidence in themselves as mothers, and view their environmental support systems as less helpful, reported more trouble in caring for their infants and often seem depressed and anxious. All other factors of the baby's behavior and health being equal, these infants were considered to be high risk, at one month of age, based solely on their mother's perception of them. At 4^-5 years of age and 10-11 years of age, significantly more children who were originally classified high risk as infants were diagnosed as having an emotional or psychosocial disorders (Broussard, 1979). The qualities associated with pregnant women who are in abusive relationships are also associated with infants at high risk of an emotional or psychosocial disorder later in life. Batchelor, et al., (1991) found emotional and behavioral disorders in children correlated highly with certain prenatal risk factors. Younger maternal age, more cigarettes smoked, prior problem pregnancies, increased maternal stress during pregnancy, increased use of medication during pregnancy, and lower birth weight of the infant correlated with emotional disturbance in the child. When these factors were present, a child was 2.5 times more likely to have a behavioral disturbance. Emotionally disturbed children also showed a higher frequency of most perinatal complications. This is the same list of factors that correlate with physical domestic abuse during pregnancy. In one study, Kandel and Mednick (1991), found that 80% percent of violent offenders in their prospective case controlled study had experienced complications at birth. Only 8.5% of the whole group

who experienced complications at birth committed a violent crime. But 80% of the group who were violent offenders had experienced a major birth complication. No pregnancy risk factors experienced by domestic violence victims were tested for individually in this study. Raine, Brennan and Mednick (1994), found a high correlation between maternal rejection and birth complications. Ninety percent of the male group experiencing both factors committed violent offenses before the age of 18 years. Maternal rejection was defined by the mother's negative attitude to pregnancy and either attempted abortion or institutionalization of the child by the mother. Jacobson and Bygdeman (1998), discovered in their case control study that birth complications and use of interventions are associated with an increased risk of suicide by violent means by adult men. For multiple birth trauma, the infant is 4.9 times more likely to commit suicide as an adult. Suicides by non-violent means were not included in this study. The other evidence for suicide by male youth is less direct. Of those committing suicide, 25-40% are known to have personality disorders, and 25%-75% are known to have emotional disorders (Hollinger, et al., 1994). Emotional disorders that are implicated in those experiencing birth complications, correlated with emotional conditions of the mother are the same as those experienced by domestic violence victims. CONCLUSION Domestic violence is a horrific experience for victims who are entrenched in the cycle of abusive behavior. Unborn children, trapped in their mother's wombs, are also victims. Mothers are more likely to smoke, use alcohol, prescription and illicit drugs as a coping mechanism for the abuse. Their sleep and nutrition is more likely to be poor, and they may have aborted one or more babies before this one was conceived. The unborn child may experience direct physical trauma from the father's blows to the abdomen. Because of the emotional stress of arguments and fear of abuse, the mother's body creates more stress hormones more often than normal and the baby is bathed in adrenaline and noradrenaline. This becomes a part of the child's normal experience of living. Mothers are more likely to be anxious and stressed, which has been shown to correlate with pregnancy complications, birth complications, pre-eclampsia, premature labor and birth, low birth weight, and infection of the amniotic membrane. Because of the stress hormones, the fetus receives less blood volume which carry nutrients and oxygen. Ultimately, the mother's whole body can become toxic and go into shock, resulting in the death of the mother and baby if not treated. Pre-eclampsia or toxemia is associated with maternal anxiety, domestic abuse during pregnancy, and overstimulation of stress hormones. Babies, in turn, are more likely to be irritable, cry more often, exhibit motor and learning difficulties, perform less well on the Brazelton scale, and have gastrointestinal problems. Battering during pregnancy is associated with emotional and behavioral disorders during childhood and severe psychological problems later in life. These children are truly at risk even before emerging from the birth canal. References REFERENCES Amaro, H., Fried, L. E., et al. (1990). Violence during Pregnancy and Substance Use. American Journal of Public Health, Vol 80(5), 575-579. Barnett, B., Hanna, B., et al. (1983). Life Event Scales for Obstetric Groups. Journal of Psychomatic Research, Vol. 27(4), 313-320. Batchelor, E. S., Dean, R. S., Gray, J. W., et al. (1991). Classification Rates and relative risk factos for perinatal events predicting emotional behavioral disorders in children. Pre and Perinatal Psychology Journal, Vol. 5(4), 327-341. Berenson, A., Wiemann, C., et al. (1994). 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