

Reproductive Health and Intimate Partner Violence

By Melissa Moore

A growing body of research is beginning to document associations between experiences of violence and the status of women's reproductive health. The data still are largely preliminary, but they suggest a need for further inquiry into these relationships, as well as the potential for reproductive health care providers to play a key role in responding to violence against women. With this in mind, the Centers for Disease Control and Prevention (CDC), along with other government agencies and private organizations, cosponsored a national conference in June 1999 that brought together experts and advocates in violence prevention and reproductive health.¹

This conference was the first national attempt to understand and address the relationships between specific reproductive health concerns and violence directed at women. The work presented at the conference demonstrated that while there is increased awareness of intimate partner violence as a public health issue,² there has been limited research on the potential association of violence to women's reproductive health beyond pregnancy and childbearing outcomes, such as the risk of HIV and sexually transmitted disease (STD) infection, reproductive decision-making and contraceptive use. Further, there are few consistent findings that can be used to aid in the development and evaluation of effective interventions to reduce intimate partner violence as part of an overall strategy of improving women's reproductive health.³

While violence occurs to women of all ages, national data indicate that women are

at the greatest risk of intimate partner violence during their reproductive years.⁴ Intimate partner violence, then, may be of particular concern to women of reproductive age and their health care providers. Violence may be linked to poor reproductive health behavior and negative pregnancy outcomes through a variety of events: Unintended pregnancy, STD and HIV transmission, the exacerbation of chronic health problems from stress related to trauma, risky health behaviors and negative pregnancy outcomes are a few of the less obvious issues that may be indirectly connected to violent experience.

Women may feel or be rendered powerless by abusive experiences, which could make it difficult for them to negotiate condom use and other protective health behaviors within their sexual relationships and during their pregnancies. Experiences of violence may also be associated with drug use and abuse, which is itself associated with other risk-taking behaviors and poor pregnancy outcomes, but this has also not been conclusively established.

The long-term physical and psychological consequences of violence still need to be documented, including the role these experiences may play in increasing stress, which has been associated with a variety of poor health outcomes. Furthermore, it is unclear whether and how the severity or frequency of violence experienced by abused women changes during pregnancy.

Defining Partner Violence

Domestic violence, dating violence, intimate partner violence, partner abuse, spousal abuse and battering are all terms that have been used to describe violence that occurs between partners in a current or previously intimate relationship.* Violent acts between partners have been categorized as verbally abusing the partner, threatening violence, throwing an object, throwing an object at someone, pushing, slapping, kicking, hitting, beating up,

threatening with a weapon and using a weapon. Definitions of intimate partner violence may also include sexual assault, stalking, psychological abuse, enforced social isolation, intimidation and the deprivation of key resources, such as food, clothing, money, transportation or health care.⁵ The absence of a standardized definition of violence, as well as the lack of a standard method of measurement, has made it difficult for researchers to establish precisely how many women experience violence.

The CDC is in the process of pilot testing, in five states, uniform definitions and recommended data elements that researchers and public health officials could use in conducting research or public health surveillance on intimate partner violence. The definitions of intimate partner violence that are being tested include physical violence, sexual violence, the threat of physical or sexual violence, and psychological or emotional abuse.⁶

The proportion of U.S. women who have ever experienced any type of violence from an intimate partner has been estimated to range from 10% to 30% of the general population. Three percent of women aged 18 and older, an estimated 1.8 million, are severely physically assaulted each year, and 1.3 million of these women are assaulted by an intimate partner.⁷ A national survey commissioned by The Commonwealth Fund found that 31% of women reported having ever experienced violence or physical abuse from a spouse or partner and 21% reported having ever been raped or assaulted, but only 8% said that they had ever discussed violence or safety in the home with their doctor.⁸ These data may suggest that many women do not feel comfortable discussing abuse with their doctors or that abusive experiences may not necessarily be interpreted as a health issue by many women or their doctors.

*Sometimes these terms are used interchangeably, but their useage may have different implications. For example, the term "battered woman" frequently implies an experience of repeated physical or psychological abuse. Definitions of "domestic violence" often include child abuse and may be limited to violence occurring in the home. The CDC uses "intimate partner violence" to refer to violence between current or formerly intimate partners more generally.

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Abused women are most commonly injured in the head, face, neck, breasts or abdomen; one study has noted that the breasts and upper extremities may frequently be injured when women attempt to defend or protect themselves.⁹ Physical injuries can include black eyes, lacerations, contusions, bite and knife wounds, joint damage, fractures, burns, concussions and loss of hearing or vision.¹⁰

Measuring Violence

As there is no standard method used to describe the frequency of abuse during pregnancy and at other times, it is difficult to compare the incidence of violence and the prevalence of violence over time. This also makes it difficult to draw persuasive conclusions from research that often differs in terms of definitions, methods and populations used to measure the incidence of violence or to evaluate interventions designed to assist abused women.¹¹

While current research is not definitive, preliminary data suggest that for most abused women, physical violence does not seem to be initiated or to increase during pregnancy.¹² While some women experience abuse for the first time while they are pregnant, the majority of abused women seem to already be in a pattern of violence. Some data even support the idea that the period of pregnancy may be less risky than other times, although not for all women; moreover, abuse may resume postpartum.¹³ Linda Koenig of the CDC notes, "Another factor that limits our ability to understand the association between pregnancy and violence or to be certain that there is less abuse during pregnancy may be that women in abusive relationships with unwanted or unplanned pregnancies could be more likely to terminate their pregnancies. Data from the Pregnancy Risk Assessment Monitoring System (PRAMS)* or other studies of pregnancy outcomes are only telling us about women who carried their pregnancies to term."¹⁴

Violence During Pregnancy

Different studies have estimated the prevalence of violence during pregnancy at 1% to 20% in the general population, with the majority of researchers reporting estimates of between 4% and 8%.¹⁵ Even this more limited range implies that about 156,000–332,000 pregnant women in the United States are subjected to violence during their pregnancies each year. If such estimates are accurate, this would mean that violence is a more common experience during pregnancy than preeclampsia, gestational diabetes and placenta previa.¹⁶

Despite the apparent prevalence of violence during pregnancy, the majority of popular books available to expectant parents do not mention intimate partner violence.¹⁷ For more than 10 years, however, the American College of Obstetrics and Gynecology (ACOG) has recommended routine screening of all women for domestic violence. ACOG has developed guidelines for such screening[†] and includes questions on the subject in written and oral board examinations for physicians.¹⁸ Yet, health care providers are inconsistent about screening on this issue: In a survey of California doctors, 79% of primary care physicians reported that they routinely screen injured patients for abuse, but only 10% reported routinely screening clients at new patient visits and 9% reported regularly screening them during periodic check-ups. Only 11% reported doing so as part of prenatal care.¹⁹ The study also found that obstetricians and gynecologists were more likely to screen for intimate partner violence at a first visit than doctors who specialized in internal medicine (17% vs. 6%), but screened for violence during regular check-ups at the same approximate rate as other primary care doctors (10%). The relatively small numbers of primary care doctors who routinely screen women for intimate partner violence compared with the estimated number of women who experience such violence suggests that many opportunities to identify and offer assistance to abused women are being missed.

Another study, among obstetricians only, reported higher rates of screening, albeit with a relatively low response rate: Thirty-nine percent reported regularly screening patients for abuse during an initial prenatal visit, and 27% said that they routinely screen nonpregnant patients at their initial visit. Thirty percent of surveyed doctors had received medical school training on domestic violence, and 67% had received continuing education on domestic violence.²⁰ Overall, doctors appear more likely to screen for intimate partner violence when they suspect abuse than to inquire routinely about it.

While abused women are found in every racial and ethnic group, region and socioeconomic class, women who are physically abused are more likely to be relatively young, unmarried, nonwhite, less-educated and with low household incomes.²¹ Some of these characteristics have also been associated with poor pregnancy outcomes and other negative reproductive health experiences, which complicates the ability of researchers to

identify clear and consistent relationships between violence and poor pregnancy outcomes.

An analysis of data from the PRAMS survey found that women who reported having been physically hurt by their husband or partner during the 12 months prior to delivering their baby were more likely to be nonwhite, to be younger than 20, to have completed fewer than 12 years of education, to be currently single and to have either participated in the Special Supplemental Food Program for Women, Infants and Children (WIC) during the pregnancy or received delayed or no prenatal care.²² About 45–59% of mothers of abused children are estimated to have themselves been abused. One study found that 52% of mothers with young children in a pediatric emergency room had a history of adult physical abuse, and 10% reported being in an abusive relationship in the year prior to the study.²³

Violence and Reproductive Health STDs and HIV

Approximately 15 million cases of STDs, including new cases of HIV, are thought to occur in the United States each year.²⁴ Generally, STDs are associated with poor birth outcomes, ectopic pregnancy, infertility, cancer of the genital tract and other

*PRAMS is an ongoing system initiated by the CDC in 1988 to conduct a state-specific, population-based surveillance of selected maternal behaviors before and during pregnancy. It is currently funded in 23 states, although five states do not yet collect data.

†ACOG recommends that practitioners use some variation of the following language to screen for domestic violence: "Because violence is so common in many women's lives and because there is help available for women being abused, I now ask every patient about domestic violence: 1. Within the past year (or since you have been pregnant), have you been hit, slapped, kicked or otherwise physically hurt by someone? 2. Are you in a relationship with a person who threatens or physically hurts you? 3. Has anyone forced you to have sexual activities that made you feel uncomfortable?" In addition, health care providers can screen adolescents for rape and sexual assault by using a variation of the following language (ACOG also recommends consulting state laws on child abuse, child sexual assault and statutory rape reporting requirements): "Because sexual violence is an enormous problem for women in this country and can affect a woman's health and well being, I now ask all my patients about exposure to violence and about sexual assault: 1. Do you have someone special in your life? Someone you're going out with? 2. Are you now—or have you been—sexually active? 3. Think about your earliest sexual experience. Did you want this experience? 4. Has a friend, a date, or an acquaintance ever pressured or forced you into sexual activities when you did not want them? Touched you in a way that made you uncomfortable? Anyone at home? Anyone at school? Any other adult? 5. Although women are never responsible for rape, there are things they can do that may reduce their risk of sexual assault. Do you know how to reduce your risk of sexual assault?"

reproductive health problems. Further, HIV infection can be transmitted from mother to child during pregnancy or delivery. It is unclear how much increased risk of STD or HIV infection is associated with experiences of violence. But while regular condom use is frequently recommended as a primary method of STD prevention (as well as contraception), condom use also requires the active participation of the male partner, who may be uncooperative.

Women who are infected with HIV, or who are considered to be at high risk for HIV infection, report high rates of both lifetime and adult physical and sexual abuse relative to the general population.²⁵ Data from a study in North Carolina found that women who reported having experienced both physical and sexual abuse were more likely to have had an STD than were women who had not had both experiences.²⁶ There are a variety of possible explanations for the apparent relationship between STDs and abuse: Men who abuse their partners may be more likely than other men to have multiple sex partners, thus increasing their chances of contracting and passing on an STD; women may be unwilling or unable to negotiate or demand condom use when they are in an abusive relationship.²⁷ It is not yet possible to draw definitive conclusions.

Abused women may also be more likely than other women to engage in behaviors that increase their risk of being exposed to STDs. Data from the Massachusetts Behavioral Risk Factor Surveillance Survey and the Massachusetts Youth Risk Behavior Survey found that young women who reported violent experiences were more likely to report engaging in risky behaviors such as using drugs, engaging in sex work, initiating sexual activity at a younger age, drinking alcohol before having intercourse or having intercourse with multiple partners than young women who did not report having experienced violence.²⁸ Other research has found that compared with nonabused women, abused women report more sexual partners over their lifetime, have more STDs and are less likely to report using condoms during their last sexual encounter.²⁹

Birth Outcomes

There are many ways in which violence experienced by a pregnant woman might be related to the development of poor health or injury for her infant. Direct risk could be posed by an experience of physical trauma, such as a blow to the ab-

domen or the development of a chronic condition in the mother due to physical violence. Potential indirect relationships between abuse and poor birth outcomes include elevated stress levels, delay in seeking prenatal care, poor nutrition or substance abuse, all of which can be associated with low birth weight or preterm delivery.³⁰ Substance abuse during pregnancy, in particular, may complicate an abused pregnant woman's situation, as illegal drug use may deter such women from seeking medical or legal assistance.

While several studies have found more direct associations between abuse during pregnancy and preterm labor, cesarean delivery, low birth weight and miscarriages, no negative birth outcomes have been found to be consistently associated with violence during pregnancy. Severe physical trauma to the abdomen of a pregnant woman (and subsequent placental damage) can lead to poor pregnancy outcomes directly, but a significantly increased prevalence of this kind of trauma has not been conclusively documented, and more minor trauma does not seem to be *consistently* associated with poor pregnancy outcomes.³¹ Similarly, some research has suggested an association between stress and poor pregnancy outcomes,³² but it is not yet clear how particular stressors operate during pregnancy, and violence during pregnancy has not been analyzed definitively as one type of stressor.

When pregnant women do not receive prenatal care or when they delay seeking prenatal care, their infants are more likely to experience a variety of poor birth outcomes. While a range of circumstances are associated with a delay in receiving prenatal care, several studies have identified abuse as one factor affecting delayed entry into prenatal care. In one instance, among women aged 25 and older and women of higher socioeconomic status, abused women were 1.8 times more likely to delay seeking prenatal care than women who did not report having experienced violence.³³

Unintended Pregnancy

Unintended pregnancy may result directly from sexual abuse, as coercive or non-consensual intercourse leaves women little room to make or negotiate contraceptive choices, or indirectly, as abused women may be more likely than other women to engage in risky sexual behavior.

Unintended conception may also be a risk factor for violence during pregnancy. Unintended pregnancy may be a greater risk factor for violence for women who have a higher household income and are

at less initial risk for violence. One study found that the prevalence of physical violence during pregnancy ranged from 12% among women with unwanted pregnancies to 3% among women with intended pregnancies. Overall, women with unwanted and mistimed pregnancies account for almost 70% of women who reported physical violence during pregnancy.³⁴

There is substantial evidence that adolescents with a history of abuse are at a greater risk for becoming pregnant as a teenager than are girls who are not abused.³⁵ Studies of young women aged 12–18 suggest that one in four have been physically or sexually abused or have been forced to have sexual intercourse with someone they know.³⁶ Young women who reported these experiences were more likely than other adolescents to demonstrate signs of depression and to participate in risky behaviors like smoking, drinking, drug-taking and failure to practice contraception, all of which are associated with an increased risk for unintended pregnancy as well as for poor birth outcomes.

Another study found that female adolescents who reported having been sexually abused (defined as “when someone in your family or someone else touches you in a sexual way in a place you did not want to be touched or does something to you sexually which they shouldn't have done”) were three times as likely as other young women to have been pregnant.³⁷ Young women with a history of abuse have also been more likely than other adolescents to report having had sex before age 15, to report not having practiced contraception during their last sexual encounter and to report having had intercourse with multiple partners.³⁸

There is some evidence to suggest that unintended pregnancy among adult women may be associated with exposure to abuse as a child or to household dysfunction (such as physical abuse of one's mother) more generally. One study found that women who experienced four or more types of childhood abuse were 1.5 times as likely to report that their first pregnancy was unintended than women who were exposed to less, or no, abuse.³⁹

Preventing Partner Violence

The Role of Providers

Regardless of their pregnancy status, abused women use health services, sometimes more often than nonabused women. For example, abused women make frequent clinical visits for somatic complaints, including headaches, insomnia, choking sensations, hyperventilation, gas-

trointestinal symptoms, and chest, pelvic and back pain.⁴⁰

Providers of reproductive health care, however, may be in a unique role to screen for intimate partner violence: Almost three-quarters of U.S. women aged 15–44 received at least one reproductive health care service in 1995.⁴¹ For some women, their obstetrician-gynecologist serves as their primary doctor. For other women, pregnancy may be the only time during which they seek out regular contact with a health care provider: In 1996, there were almost four million births in the United States, and 82% of those women began receiving prenatal care during their first trimester of pregnancy. Each prenatal visit is an opportunity for providers to screen for violence and to communicate key prevention and intervention messages about violence.⁴² Experts have suggested that providers should screen for violence at least once during each trimester of pregnancy.⁴³

Others argue that this is not often enough: "Screening must be universal: every woman, every time," according to Anne Flitcraft, of the University of Connecticut Health Center.⁴⁴ If screening is to be effective, she notes, it must also be carried out in sensitive and culturally competent ways if it is to elicit honest answers. One screening concern is privacy, both from other patients and staff in a busy clinic and from the partners of abused women. The latter is a particular concern if partners are occasionally or always allowed to accompany patients, particularly pregnant women, throughout their examinations.

Abused pregnant teenagers may have different needs than abused pregnant adult women, and there may also be variations in relevant laws and reporting requirements, as well as in access to services for women under the age of 18. Experts recommend that providers be aware of any such distinctions in rules and resources and accommodate them. As abused pregnant teenagers may be being assaulted not only by their sexual partner, but possibly by a parent or other adult family member, it is important that any violence screening of adolescents allow them to reveal this circumstance.⁴⁵

Once women are screened, providers need to know how to advise and treat women who report having been abused. Ideally, doctors would be able to provide referrals to services immediately, both within a particular health plan and in the local community. An abused woman may need access to such resources as shelters, victim assistance support, transportation, substance abuse counseling, independent

housing, child care, legal services, reproductive and other health services, counseling, education, job training or retraining and job placement. Some doctors may be reluctant to screen patients for abuse, however, because of the amount of time that it takes to screen women for violence, the range of services that an abused woman might need and the fact that most physicians do not personally offer those services.

Possible Approaches

Patricia O'Campo of The Johns Hopkins School of Hygiene and Public Health notes that, "It is time that we stop thinking about violence as a woman's problem."⁴⁶ Certainly, the prevalence, response and prevention of violence against women in the United States might be affected by changes in a variety of public policy areas, including but not limited to child welfare and custody, gun control, criminal justice, welfare regulation, abuse reporting requirements and the level of funding for relevant research and social services.⁴⁷ At the individual level, there are additional approaches available to health care providers and researchers.

There is a need for improved and continued surveillance of the incidence of violence against women before, during and after pregnancy. The PRAMS data represent an excellent supplement to vital records data, and are the first source of population-based prevalence estimates regarding violence and pregnancy. However, only 23 states are currently funded to use this survey to produce such estimates. Similarly, research that can consistently document the connections between violence and women's health, and the mechanisms through which intimate partner violence may harm pregnant women and their infants, is greatly needed.

Healthy People 2000, the national set of preventive goals to improve the health of Americans, includes objectives to reduce rates of unintended pregnancy and abuse of children and women, but does not set any objectives for reducing rates of violence against pregnant women or for screening for violence in any setting other than an emergency room. "Emergency rooms may be one of the least desirable primary places to screen for violence, in part because of their lack of privacy," said Sandra Martin, of the School of Public Health at the University of North Carolina at Chapel Hill, "Additionally, emergency room interventions generally occur in the aftermath of injuries substantial enough to warrant a hospital visit."⁴⁸ With this in mind, many experts encourage uni-

versal screening for violence at family planning clinics, abortion clinics and during prenatal care. The associations between unintended pregnancy and violence suggest that abortion clinics may be particularly useful locations for violence screening.

Because universal screening has not been widely adopted by doctors, it is possible that physicians need additional or improved training about the prevalence and consequences of intimate partner violence. The process of screening for violence can be promoted if it is institutionalized as a normal part of the daily routine in hospitals and offices. To this end, Sara Buel, of the National Training Center on Domestic and Sexual Violence, notes that "hospitals should have councils or task forces that are responsible for developing a formal policy on violence and procedures for screening and treatment,"⁴⁹ a recommendation that is consistent with the standards on violence in health care settings established by the Joint Commission on Accreditation of Health Care Organizations.

Resources are not currently available for all women who experience violence, including adolescents, pregnant women and women with infants. According to Gail Wyatt, of the AIDS Institute at the University of California at Los Angeles, "not all shelters are able to accommodate all populations. Moreover, other populations vulnerable to intimate partner violence who have not been targeted by researchers and antiviolence programs include prisoners, homeless women and mentally ill women."⁵⁰

While there is no intervention that currently prevents abuse, there are crisis and support services available for abused women, as well as some programs designed to educate women directly about minimizing their risk for violence and harm during pregnancy and at other times; however, information about such programs is not always widely disseminated. Resource information for abused women can be made available through health care practitioners and can be targeted at other locations frequented by mothers of young children, such as WIC and Head Start programs and day care providers. However, public information about intimate partner violence has unique presentation requirements in order to be accessible to abused women in a way that allows them to preserve their privacy. Information regarding the risk factors and warning signs of abuse, as well as the options and resources available to abused women in local communities, can be presented in ordinary

brochures and posters, and also on small "safety cards" that fit in a pocket. These ideally would include a local or toll-free phone number that women can use to seek further assistance. In addition to being put in practitioners' waiting rooms, the Family Violence Prevention Fund suggests that safety cards can be placed in bathrooms and examination rooms.

Experts have also noted that effective antiviolence programs need to target men, particularly young men. Antiviolence education for young men can be offered as routinely as health messages about the dangers of STDs, early pregnancy, drinking and driving or illicit drug use. Programs can also be comprehensive: The issue of violence during pregnancy may be addressed in the context of programs that try to prevent unintended pregnancy and programs that prevent violence and abuse. Many such programs can be funded through the Violence Against Women Act of 1999, an omnibus package (not yet signed into law) to reauthorize and enhance antiviolence programs initiated under the Violence Against Women Act of 1994.

Very few studies follow up on the effectiveness of particular interventions, and those evaluations that are done tend to focus on institutions and providers, assessing, for example, what or how often doctors are asking about intimate partner violence. While this is useful information, experts have noted the need to evaluate how abused women are doing after they have been screened and referred to additional services. This kind of reorientation could improve knowledge about which strategies can effectively prevent and protect women from intimate partner violence. One recent study conducted among women in public prenatal clinics who reported having been abused in the year before or during their pregnancy, found that an intervention of three educational referral sessions resulted in an increase in the adoption of key "safety behaviors" among clients, such as removing weapons from their home.⁵¹

Conclusion

While the most recent information suggests potential associations between violence and a variety of reproductive health indicators, the nature of these associations remain unclear and require further investigation. The investigation of the associations between violence and a variety of reproductive health issues, such as HIV and STD infection, is only beginning, and it is thus not surprising that findings about

these relationships are not yet definitive. But because research on violence and reproductive health has focused on pregnancy, it is notable that so little conclusive evidence about violence during this period is available. While some recent information suggests that pregnancy may not be a particular risk period for abuse, this has not been definitively documented for all groups, and abuse can also resume postpartum. No matter what is proven about the relationship between violence and reproductive health issues, physical abuse at any time is damaging to a woman's health and well-being, and it is her health and safety (and, if she is pregnant, that of her fetus) that is at risk in an abusive situation.

As more comprehensive data about the association between violence and reproductive health issues are obtained, additional approaches may be suggested that reproductive health care providers can use to incorporate or improve violence surveillance and intervention in their practices. Further, a broad-based perspective that incorporates key factors such as social inequality, racism, poverty, unique cultural perspectives and male power and control may be necessary in order for health care providers to adequately understand and respond to violence against women. "We need to be clear and inclusive about the forms of violence that we refer to [in our research and our programs]," remarked Jacqueline Campbell, a member of the National Advisory Committee on Violence Against Women, "and we must respond with culturally specific programs that reflect an integration of resources within and across disciplines and communities."⁵²

References

1. National Conference on Violence and Reproductive Health: Science, Prevention and Action, Atlanta, June 14-16, 1999.
2. Foegen WH, Rosenberg ML and Mercy JA, Public health and violence prevention, *Current Issues in Public Health*, 1995, 1(1):2-9.
3. Peterson R et al., Key scientific issues for research on violence occurring around the time of pregnancy, prepared for the National Center for Chronic Disease Prevention and Health Promotion, and the National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (CDC), Atlanta, April 1997.
4. Tjaden P and Thoennes N, Prevalence, incidence and consequences of violence against women: findings from the national violence against women survey, *Research in Brief*, Washington, DC: National Institute of Justice and Atlanta: CDC, 1997.
5. American College of Obstetricians and Gynecologists (ACOG), *Technical Bulletin: Domestic Violence*, No. 209, Washington DC: ACOG, Aug. 1995.
6. Saltzman LE et al., Intimate partner violence surveil-

lance: uniform definitions and recommended data elements, version 1.0, Atlanta: National Center for Injury Prevention and Control and CDC, 1999 (in press).

7. U.S. Department of Justice, Violence by intimates: analysis of data on crimes by current or former spouses, boyfriends, and girlfriends, March 1998, cited in Family Violence Prevention Fund, *Domestic Violence Is a Serious Widespread Social Problem in America: The Facts*, Dec. 29, 1998.
8. Collins KS et al., *Health Concerns Across a Woman's Lifespan: The Commonwealth Fund 1998 Survey of Women's Health*, New York: The Commonwealth Fund, 1999.
9. ACOG, 1995, op. cit. (see reference 5).
10. Ibid.
11. Petersen R et al., 1997, op. cit. (see reference 3).
12. Gazmararian J et al., Prevalence of violence against pregnant women, *Journal of the American Medical Association*, 1996, 275(24):1915-1920.
13. Ballard TJ et al., Violence during pregnancy: measurement issues, *American Journal of Public Health*, 1998, 88(2):274-276.
14. Koenig L, CDC, Atlanta, personal communication, Nov. 2, 1999.
15. Gazmararian J, 1996, op. cit. (see reference 12).
16. Ibid.
17. Guard A, *Violence and Teen Pregnancy: A Resource Guide for MCH Practitioners*, Newton MA: Children's Safety Network, National Violence Prevention Resource Center and Educational Development Center, May 1997.
18. ACOG, 1995, op. cit. (see reference 5).
19. Rodriguez M, Screening and intervention for intimate partner abuse: practices and attitudes of primary care physicians, *Journal of the American Medical Association*, 1999, 282(5):468-474.
20. Horan D et al., Domestic violence screening practices of obstetrician-gynecologists, *Obstetrics & Gynecology*, 1998, 92(5):785-789; and Zorza J, Most therapists need training in domestic violence, *Domestic Violence Report*, 1996, 1(6):1-2 & 15.
21. Stark E and Flitcraft A, *Women at Risk: Domestic Violence and Women's Health*, Thousand Oaks, CA: Sage Publications, 1996; and Collins KS et al., 1999, op. cit. (see reference 8).
22. Gazmararian J et al., 1996, op. cit. (see reference 12).
23. Duffy SJ et al., Mothers with histories of domestic violence in a pediatric emergency department, *Pediatrics*, 1999, 103(5):1007-1013.
24. Cates W Jr, Estimates of the incidence and prevalence of sexually transmitted diseases in the United States, *Sexually Transmitted Diseases*, 1999, 26(4 Suppl):52-57.
25. Vlahov D et al., Violence against women with or at risk for HIV infection, *AIDS and Behavior*, 1998, 2:53-60.
26. Martin SL et al., Domestic violence and sexually transmitted diseases: the experience of prenatal care patients, *Public Health Reports*, 1999, 114(3):262-268.
27. Martin SL, Women in prenatal care/substance abuse treatment program: links between domestic violence and mental health, *Maternal and Child Health*, 1998, 2(2):85-94.
28. Silverman J, Intimate partner violence, sexual and reproductive health and health behavior: findings from two Massachusetts surveys, paper presented at the National Conference on Violence and Reproductive Health, Atlanta, June 14-16, 1999.
29. Greenberg J, Childhood sexual abuse and risk of

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STDs in women: intervention strategies, paper presented at the National Conference on Violence and Reproductive Health, Atlanta, June 14–16, 1999.

30. Campbell J et al., Physical and nonphysical partner abuse and other risk factors for low birth weight among full term and preterm babies: a multiethnic case-control study, *American Journal of Epidemiology*, 1999, 150(7): 714–726.

31. Petersen R et al., Violence and adverse pregnancy outcomes: a review of the literature and directions for future research, *American Journal of Preventive Medicine*, 1997, 13(5):366–373.

32. Cokkinides VE et al., Physical violence during pregnancy: maternal complications and birth outcomes, *Obstetrics & Gynecology*, 1999, 93(5):661–666.

33. Dietz PM et al., Delayed entry into prenatal care: effects of physical violence, *Obstetrics & Gynecology*, 1997, 90(2):221–224.

34. Gazmararian JA et al., The relationship between pregnancy intendedness and physical violence in mothers of newborns, *Obstetrics & Gynecology*, 1995, 85(6):1031–1038; American Medical Association (AMA) Council on Scientific Affairs, *Recognition of Childhood Sexual Abuse as a Factor in Adolescent Health Issues*, Chicago: AMA, Department of Adolescent Health, 1989; and Hutchinson J and Langlykke K, Adolescent maltreatment: youth as victims of abuse or neglect, *Maternal and Child Health Technical Information Bulletin*, Arlington, VA: National Center for Education in Maternal and Child Health, November 1997.

35. Guard A, 1997, op. cit. (see reference 17).

36. Ibid.

37. Berenson AB, San Miguel V and Wilkenson GS, Prevalence of physical and sexual assault in pregnant adolescents, *Journal of Adolescent Health*, 1992, 13(6): 466–469.

38. Boyer D and Fine D, Sexual abuse as a factor in adolescent pregnancy and child maltreatment, *Family Planning Perspectives*, 1992, 24(1):4–11 & 19.

39. Dietz PM et al., Unintended pregnancy among adult women exposed to abuse or household dysfunction during their childhood, *Journal of the American Medical Association*, 1999, 282(14):1359–1364.

40. National Institute of Justice (NIJ), *Victim Costs and Consequences: A New Look*, NIJ Research Report, Washington DC: NIJ, U.S. Department of Justice, 1996; and The Commonwealth Fund, *Addressing Domestic Violence and Its Consequences: Policy Report of The Commonwealth Fund Commission on Women's Health*, New York: The Commonwealth Fund, 1998.

41. Abma J et al., Fertility, family planning and women's health: new data from the 1995 National Survey of Family Growth, *Vital and Health Statistics*, 1997, 23(19).

42. Parker B, McFarlane J and Soeken K, Abuse during pregnancy: effects on maternal complications and birth weight in adult and teenage women, *Obstetrics & Gynecology*, 1994, 84(3):323–328.

43. Guard A, 1997, op. cit., (see reference 17).

44. Flitcraft A, remarks made at The National Conference of Violence and Reproductive Health: Science, Prevention and Action, Atlanta, June 14, 1999.

45. Parker et al., Physical and emotional abuse in pregnancy: a comparison of adult and teenage women, *Nursing Research*, 1993, 42(3):173–177.

46. O'Campo P, Johns Hopkins School of Hygiene and Public Health, Baltimore, personal communication, Oct. 15, 1999.

47. O'Campo P and Baldwin K, Abuse against women by their intimate partners, in Grason HA, Hutchins JE and Silver GB, eds., *Charting a Course for the Future of Women's and Perinatal Health: Volume II Reviews of Key Issues*, Baltimore, MD: Women's and Children's Health Policy Center, Johns Hopkins School of Public Health, 1999, pp. 167–181.

48. Martin S, remarks made at The National Conference of Violence and Reproductive Health: Science, Prevention and Action, Atlanta, June 16, 1999.

49. Buel S, remarks made at The National Conference of Violence and Reproductive Health: Science, Prevention and Action, Atlanta, June 14, 1999.

50. Wyatt G, remarks made at The National Conference of Violence and Reproductive Health: Science, Prevention and Action, Atlanta, June 14, 1999.

51. McFarlane J et al., Safety behaviors of abused women after an intervention during pregnancy, *Journal of Obstetric, Gynecologic and Neonatal Nursing*, 1998, 27(1):64–69.

52. Campbell J, remarks made at The National Conference of Violence and Reproductive Health: Science, Prevention and Action, Atlanta, June 16, 1999.

Statement of Ownership, Management and Circulation

Title of publication: Family Planning Perspectives. Publication no.: 0804-70. Date of P'ing: Oct. 1, 1999. Frequency of issue: Bimonthly. No. of issues published annually: Six (6). Annual subscription price: Individuals, \$42.00; institutions, \$52.00. Complete mailing address of known of'ce of publication: 120 Wall Street, New York, NY 10005. Complete mailing address of the headquarters or general business of'ces of the publisher: Same as above. Publisher: The Alan Guttmacher Institute, same address as above. Editor: Patricia Donovan, same address as above. Owner: The Alan Guttmacher Institute. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None.

The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes have not changed during preceding 12 months.

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