

The clinical content of preconception care: care of psychosocial stressors

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In the period before conceiving, many women are under considerable psychosocial stress, which may affect their ability to conceive and to carry a pregnancy successfully to term. Thus, health care providers who interact with women in the preconception and interconception period should ask their patients about possible psychosocial risks. It is no longer sufficient to wait until the woman mentions a problem or seeks advice; the provider must be proactive, because many women do not realize the potential impact of stressors on their pregnancy outcomes nor are they always aware that their provider is interested in their psychosocial as well as their physical health.

An income that puts women below or near the federal poverty level is one such stress. If a woman's economic situation can be improved before the pregnancy, she is more likely to be healthy after conception, because increased income can reduce financial stress, improve food security, and improve well-being in other ways. Therefore, all women should be asked about their economic status and those who appear to be struggling financially should be referred to an agency that can check their eligibility for various types of financial assistance.

Many women of childbearing age have difficulty accessing the primary care services needed for preconception care. Usually this is due to lack of insurance, but it may also be caused by living in an area with an insufficient number of providers. Certainly all women who are uninsured, and possibly many who are on Medicaid and have difficulty finding providers who will accept Medicaid, have access problems. All women should be asked about their health insurance coverage and their usual source of care. If they do not have health insurance, they should be referred to an agency that can determine their eligibility. If they do not have a usual source of care, one should be established that will accept their insurance coverage or provide care free of charge or on a sliding fee basis.

Intimate partner violence, sexual violence outside of an intimate relationship (usually rape), and maltreatment (abuse or neglect) as a child or adolescent place a woman at elevated risk during a pregnancy, as well as having possible adverse impacts on the fetus, the infant, and the child. Studies show that women believe it is appropriate for health care providers to ask about interpersonal violence, but that they will not report it spontaneously. Therefore, screening for ongoing and historical interpersonal violence, sexual violence, and child maltreatment should be incorporated into routine care by all health care providers.

Key words: access to care, intimate partner violence, preconception care, psychosocial stress

A growing body of evidence suggests that chronic psychosocial stress may disturb the body's capacity to maintain *allostasis*, or stability through change. Examples of allostasis include feedback inhibition on the hypothalamic-pituitary-adrenal (HPA) axis to keep the body's stress response in check,¹ and modulation of the body's inflammatory response by the HPA axis.² In the face of chronic and

repeated stress, however, these systems may deteriorate. If a woman enters pregnancy with her allostatic system in a less than optimal state, she may be more susceptible to a number of pregnancy complications, including preterm birth. An important objective of preconception care is to restore allostasis by reducing chronic, unremitting psychosocial stress before pregnancy.

Thus, health care providers who interact with women in the preconception and interconception period should ask the women for whom they care about possible psychosocial risks. It is no longer sufficient to wait until the woman mentions a problem or seeks advice; the provider must be gently and sensitively proactive, because many women do not realize the potential impact of stressors on their pregnancy outcomes, nor are they aware that their pro-

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vider is interested in their psychosocial as well as their physical health.

Intimate partner violence, sexual violence outside of an intimate relationship (usually rape), and maltreatment (abuse or neglect) as a child or adolescent, all place a woman at elevated risk during a pregnancy; they also have possible adverse impacts on the fetus, the infant, and the child. This article will consider 3 types of psychosocial risks: inadequate financial resources, inability to easily access healthcare, and intimate partner and other types of violence. (Discrimination on the basis of race, ethnicity, sexual preference, and similar factors are also major psychosocial stressors, but this article is limited to those risks that can be affected by the healthcare provider.)

Inadequate financial resources

Burden of suffering

Approximately 13% of women ages 18-64 years have incomes that put them below the federal poverty level. Women in the prime childbearing years are even more likely to be poor: 21% of women ages 18-24 years and 15% of women ages 25-44 years are below the poverty level.³ In 2006, 29% of women ages 18-64 years were in the "low income" category (below 200% of the federal poverty level), including 42% of women ages 18-24 years and 34% of women ages 25-24 years.³ In 2006, 4 million (3/10) female-headed households with children were living in poverty.⁴ Poverty or low income status makes it difficult to obtain the food, shelter, and other necessities of life that make it possible to experience a healthy pregnancy.^{5,6} For example, in 2003-2004, 38% of poor women were food insecure (worried about food supplies, skipped meals, or did not eat during a day because there was not enough money for food), despite the fact that one third of food stamp recipients are women ages 18-35 years.⁷

How detectable is the condition?

A few simple questions allow a healthcare provider to ascertain a woman's economic status: is she receiving Medicaid, Temporary Assistance to Needy Families (TANF or "welfare"), food

stamps, or housing assistance? Are her children receiving free school lunches or breakfasts? However, not all women who could use economic assistance are receiving any or all of the benefits to which they are entitled. Moreover, undocumented women and those who have been in the country legally for less than 2 years are ineligible for some benefits. When providers suspect that a woman is not receiving the economic assistance that she needs, they need to probe gently. For example, they could ask whether she has problems paying her regular household expenses, or refer her to a social service agency that can make such a determination. Certain facilities, such as community health centers and WIC and food stamp offices, may also offer on-site assistance with applications for various benefits, including Medicaid.

How effective are the current treatments?

Federal, state, and local governments have programs to assist women with no earnings or very low earnings. Women who fall below 200% of the federal poverty level should be referred to the local welfare agency or a private social service agency to ensure that they are receiving all the benefits for which they are eligible. Unfortunately, benefit programs are seldom able to lift women out of poverty.

Impact of preconception care

It seems reasonable to assume that if a woman's economic situation can be improved before the pregnancy, she is more likely to be healthy after conception, because increased income can reduce financial stress, improve food security, and improve well-being in other ways. However, there are no data to prove this assumption.

Recommendation. All women should be asked about their economic status and those who appear to be struggling financially should be referred to an agency that can check their eligibility for various types of financial assistance. *Strength of recommendation:* C; *quality of evidence:* III.

Inability to easily access healthcare

Burden of suffering

An unknown percentage of women of childbearing age have difficulty accessing the primary care services needed for preconception care. Usually this is due to lack of insurance: national surveys indicate that uninsured women (67%) are less likely than women with either private (90%) or public insurance (Medicaid: 88%) to have had a provider visit in the past year.⁸ Difficulty in access, however, may also be due to living in an area with an insufficient number of providers. Certainly all women who are uninsured, and possible many who are on Medicaid and have difficulty finding providers who will accept Medicaid, have access problems. In 2004-2005, 19% of women ages 18-64 years were uninsured and 10% were on Medicaid.⁹

How detectable is the condition?

If asked, women are usually willing to admit difficulties in accessing care.

How effective are the current treatments?

Although most pregnant women are eligible for Medicaid (states differ in eligibility based on poverty status and on coverage of undocumented women and those who have been in the country legally for less than 2 years), in most states they lose their pregnancy-related eligibility by 60 days postpartum, unless the state has a federal waiver to expand family planning and sometimes other services. Some women remain Medicaid-eligible because they qualify for TANF or Supplemental Security Income benefits, or are so poor that they meet income eligibility guidelines. Because Medicaid covers a wide range of benefits, those who have Medicaid should be able to access preventive and primary care in community health centers, hospital outpatient departments, or health departments, if private providers refuse to accept them as patients. The problems of geographic access are not easily solved. Undocumented women and those who have been in the country legally for less than 2 years are not eligible for Medicaid and will have problems accessing care,

although many health departments, community health centers, and hospital outpatient departments will serve them.

Impact of preconception care

For a woman to receive preconception care or to obtain prenatal care early in her pregnancy, she must have access to a source of primary care. Thus, it is urgent that access be ensured before pregnancy occurs.

Recommendation. All women should be asked about their health insurance coverage and their usual source of care. If they do not have health insurance, they should be referred to a welfare office, Medicaid outstation site, or a private social service agency to determine their eligibility for public insurance. If they do not have a usual source of care, one should be established that will accept their insurance coverage or provide care free of charge or on a sliding fee basis. *Strength of recommendation: C; quality of evidence: III.*

Intimate partner violence, sexual violence, and childhood maltreatment

Burden of suffering

Intimate partner violence, sexual violence outside of an intimate relationship (usually rape), and maltreatment (abuse or neglect) as a child or adolescent all place a woman at elevated risk during a pregnancy, and also have possible adverse impacts on the fetus, the infant, and the child.

The Centers for Disease Control (CDC) and Prevention define interpersonal violence as physical abuse, sexual abuse, threats of physical or sexual abuse, and/or emotional abuse that occurs between 2 people in a close relationship, including current and former spouses and dating partners.¹⁰ The National Violence against Women Survey conducted in the late 1990s reported that 25% of surveyed women said that they were raped and/or physically assaulted by a current or former spouse, cohabitating partner, or date at some time in their lifetime, and 1.5% said that such an event had occurred in the previous 12 months. The survey estimated that approximately 4.8 million intimate partner

rapes and physical assaults are experienced annually by women in the United States.¹¹ The 2005 Behavioral Risk Factor Surveillance System found that more than 10,000 women 18 years or older (23.6%) had a lifetime history of interpersonal violence. Those who experienced interpersonal violence were more likely to report current adverse health conditions and health risk behaviors.¹²

Interpersonal violence is a critical reproductive health problem for women. If a physical assault occurs during pregnancy—as in an estimated 4% to 8% of pregnancies¹³—there is the possibility of harm to the fetus, as well as to the woman. Physical, sexual, and emotional abuse *before* a pregnancy can also take a significant toll. Abuse before a pregnancy puts a woman at risk for abuse during the pregnancy. A North Carolina study found that the prevalence of physical abuse before pregnancy was 6.9%; during pregnancy, 6.1%; and after a mean of 3.6 months postpartum, 3.2%. Almost three-fifths (59%) of those abused in the year before their pregnancy were abused during the pregnancy.¹⁴ Moreover, several literature reviews have found strong associations between interpersonal violence and a wide range of behaviors and conditions that could adversely affect a pregnancy, including inconsistent contraception use, unplanned pregnancies, sexually transmitted diseases, depression, and posttraumatic stress disorder.^{15,16} Although the literature linking interpersonal violence to poor pregnancy outcomes is less conclusive, it is likely that it is associated with low birthweight and preterm birth.^{17,18} If emotional abuse occurs before a pregnancy, there is the possibility of its continuing during the pregnancy and of psychological damage to the woman that may interfere with a healthy pregnancy and with positive parenting practices.

Sexual violence, which may occur within or outside a domestic situation, has also been associated with adverse effects on women's physical and mental health. According to 1 review, 27% of women in national surveys report a history of childhood sexual abuse and 15% report having experienced a rape at some

time in their life. Pregnant women who have experienced sexual violence are more likely to be severely depressed, as well as to use cigarettes, alcohol, or drugs during pregnancy. The risk of poor reproductive health outcomes may increase with the severity of the sexual violence.¹⁹

In 2005, an estimated 899,000 children in the United States were victims of abuse or neglect—51% of whom were girls.²⁰ Maltreatment as a child or an adolescent may have psychological consequences that reach into the reproductive years. A study of abuse found abuse in adolescent dating relationships to be associated with depression, substance abuse, and antisocial behavior among females.²¹

How detectable is the condition?

Screening for ongoing interpersonal violence and for a history of interpersonal violence, sexual violence, and child maltreatment should be incorporated into routine care by all healthcare providers.

Studies show that women believe it is appropriate for healthcare providers to ask about interpersonal violence but that they will not report it spontaneously.^{22,23} Thus, informal and formal screening tools are advised. The American College of Obstetricians and Gynecologists (ACOG) and the CDC and Prevention have developed a slide lecture on "Intimate Partner Violence during Pregnancy, A Guide for Clinicians," which can be downloaded from the CDC website.²⁴ ACOG recommends the following statement and questions:

Violence is a problem for many women. Because it affects health and well-being, I ask all my patients about it.

1. In the last year (since I saw you last), have you been hit, slapped, kicked, or otherwise physically hurt by someone? (If yes, by whom? Number of times? Nature of injury?)
2. Since you've been pregnant, have you been hit, slapped, kicked, or otherwise physically hurt by someone? (If yes, by whom? Number of times? Nature of injury?)
3. Within the last year, has anyone made you do something sexual that you didn't want to do? (If yes, who?)

4. Are you afraid of your partner or anyone else?

A randomized trial of screening instruments and procedures for interpersonal violence found that women preferred self-completed approaches, using either paper and pencil or a computer, to face-to-face questioning.²⁵ Despite the recommendations of several groups, and the availability of screening instruments, only a small percentage of providers actually screen routinely.^{26,27}

How effective are the current treatments?

Women who are currently being abused should be referred to appropriate agencies. Interventions to modify the behavior of batterers have not proven effective; however, healthcare providers can assist women who are currently being abused both by encouraging them to be safer, ie, have safety plans, and by suggesting separation of the woman from a current abuser by legal and other means. Psychological treatment should be sought for women who have experienced interpersonal violence, sexual violence, or child maltreatment in the past because of the possibility of sequelae that could impact a pregnancy.

Impact of preconception care

Identification and separation of a woman from a current abuser should take place before pregnancy to prevent the possibility of violence during pregnancy. Identification of a woman who has experienced interpersonal violence, sexual violence, or child maltreatment in the past should also occur before pregnancy so that any psychological trauma can be treated and possible adverse effects minimized. One study found that abuse assessment, providing information about sources of assistance and about safety plans, and a nurse case management protocol reduced the level of interpersonal violence and helped women to adopt safety behaviors.²⁸

Recommendation. All women should be asked about their experiences of physical, sexual, or emotional violence from any source (parents, intimate partners, or strangers) currently, in the recent past, or as children. For those who are being

abused, or have been abused in the recent past, the provider should express strong concern and willingness to assist in correcting the abusive situation. Appropriate evaluation, counseling and treatment for physical injuries, sexually transmitted infections, unintended pregnancy, and psychological trauma should be offered, including the provision of emergency contraception and empiric antimicrobial therapy in the case of sexual assault. Women should be offered information about community agencies that specialize in abuse for counseling, legal advice, and other services. Every clinician who sees women should have a list of such agencies easily available. Surprisingly, in 2004, the United States Preventive Services Task Force stated that it “found insufficient evidence to recommend for or against routine screening . . . of women for intimate partner violence . . .”²⁹ Clearly, additional research is needed to provide the evidence needed for a recommendation that would be in agreement with professional groups. Women should also be asked about abuse or sexual violence in their past and referred for appropriate counseling. *Strength of recommendation: C; quality of evidence: III.*

Conclusion

Most of the attention currently being paid to preconception care has focused on physical health and health behaviors, but in the absence of adequate financial resources and access to care, it is unlikely that women can obtain preconception care or achieve optimal preconception health. Thus, obtaining information about these factors during the preconception period is essential. In addition, physical or sexual abuse before pregnancy or a history of such abuse in the past has the potential to cause significant harm to the mother, the fetus, and the newborn infant. Thus, primary care providers should empathetically inquire about these psychosocial risks if they are present, and be prepared to provide or refer for assistance. ■

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