

Depression in women is a significant public health problem due to its relatively high prevalence, its high rate of recurrence, and its often profound effect on functioning. Recent demographic changes which impact women's ability to support their families and reconcile conflicting work and family roles -- rising numbers of single mothers, increasing participation in the workforce, and decreases in welfare caseloads -- may increase the prevalence of depression in women.

Depression affects twice as many women as men. Estimates of prevalence among women range from 6 percent for one-month risk of a major depressive episode to 11 percent for depressed mood. About 10 percent of pregnant women¹ and 15 percent of women in the postpartum period experience depression.²⁻⁴ The lifetime risk of major depression among women may be as high as 21 percent.^{2,3,5} Since World War II, rates of depression have risen and the average age of onset has dropped. Rates of depression are highest among women under the age of 25.²

Current and Lifetime Prevalence of Major (Clinical) Depression in Women, by Race²

Race	One-Month (%)	Lifetime (%)
White	5	22
African-American	6	16
Hispanic	11	24

Risk Factors for Depression in Women

Depression is analogous to fever, in that it is the singular manifestation of multiple disease processes.⁵⁻⁷ No one risk factor will sufficiently explain its origin; it is more likely that depression results from an interaction between biological and environmental, or psychosocial, factors, with the contribution of each varying by case.^{5,6,8}

• **Psychosocial:** Many of the factors associated with depression in women speak to the mental health effects of marginalization and a devaluing of women's roles:

- sex-role stereotypes which foster passivity and "learned helplessness," and sex-role expectations which limit women's opportunities and contribute to low self-esteem;
- minority ethnic or racial group or low social class, which may be associated with discrimination, acculturative stress, and increased likelihood of poverty-related life stressors;
- physical or sexual abuse, both highly prevalent among women;
- sexual orientation, which entails stressors related to both disclosure (e.g. job discrimination) and non-disclosure (e.g. secrecy, threat of exposure); and
- degree of parental responsibility and conflicting work and family roles.

Current and Lifetime Prevalence of Major (Clinical) Depression in Women, by Age²

Age	One-Month (%)	Lifetime (%)
15-24 years	8	21
25-34 years	4	19
35-44 years	6	24
45-54 years	5	22
Total	6	21

Marriage and employment seem to be protective factors, with some exceptions. An unsupportive spouse and employment in traditionally male-dominated professions have both been associated with increased risk of depression in women.⁹⁻¹¹ A sense of control over one's environment is also important for positive mental health.^{9,12}

• Biological: Several biological factors have been implicated in the etiology of depression:

- genetics;
- abnormalities in neurotransmitter activity, particularly norepinephrine and serotonin; and
- malfunctions or fluctuations in the endocrine system, such as impaired neurological control of cortisol secretion, decreased thyroid-stimulating hormone and growth hormone, and changes in female sex hormones associated with reproductive events.

Before puberty, there is no gender disparity in rates of depression, possibly lending weight to an endocrinological explanation for the disproportionate burden of depression in women.^{13,14} However, puberty entails both biological and psychosocial changes which may contribute to depression.

Pregnancy and childbirth may be also "triggers" for onset in women already vulnerable to depression¹⁵. Postpartum depression is associated with personal or family history of depression, although for most cases there is no such history. Postpartum depression is not wholly biological in origin; emotional and instrumental support following delivery is related to the risk of depression.^{4,16,17}

The risk factors for prenatal depression are similar to those for postpartum depression and include personal or family history of depression, marital problems, and unwanted pregnancy.¹⁸

Consequences and Costs of Depression

Depression tends to be recurrent. At least half of those who experience a single episode of depression will experience another, and the likelihood of recurrence rises with each subsequent episode.¹⁹ Moreover, depressive episodes often occur in the context of chronic subclinical symptoms.²⁰

Depression can severely impair both social and occupational functioning and is associated with increased physical illness.^{5,19,21} Moreover, the death rate from suicide is as high as 15 percent among the severely depressed.¹⁹

Untreated, depression during pregnancy can lead to poor nutrition, poor sleep, substance abuse, and inadequate prenatal care.²²

The economic repercussions of depression on a societal level are great and should lend urgency to the need for public policy addressing its prevention and treatment.

- Costs associated with depression and related affective disorders, including both the direct costs of treatment and the indirect costs of lost productivity due to impaired functioning or premature death, totaled as much as \$30.4 billion in 1990.²³
- Currently, about two-thirds of cases of depression go untreated; another \$6 to \$10 billion would be added to the direct costs of treatment if all of the estimated 25 million people with affective disorders received treatment. However, because people with depression use more medical services,⁵ the costs of treatment would be offset by a 20 percent decrease in per capita health care expenditures, saving nearly \$4 billion.²⁴

Interventions

Increasingly, pharmacologic treatments are being used to combat depression.²⁵ Although a small body of evidence suggests that antidepressants are less efficacious in women than in men,^{26,27} most antidepressant prescriptions are written for women.⁷ While antidepressants provide a powerful remedy for women experiencing clinical depression, the need to address structural/environmental issues remains, both in individual treatment and on a population level.

Successful interventions will address women's multiple roles and responsibilities and take into account cultural differences in the expression and management of depression.^{28,29}

Given the role of sex-role socialization and low self-esteem in the etiology of depression, interventions aimed at stemming the risk of depression before the onset of symptoms might involve building a healthy and resilient self-image in young girls and helping them to exert positive control over their environments.^{11,30} On a broader level, efforts to alleviate the effects of poverty, of gender and racial discrimination, and of conflicting work and family roles should favorably impact both women's mental and physical health.

Most incident cases of clinical depression are preceded by subclinical depressive symptoms, suggesting the opportunity for early intervention and prevention of some of the more disabling forms of illness.²⁰ Currently, about half of all cases of depression go undetected by primary care physicians.^{25,31-32} These providers, who treat the majority of cases of depression, would benefit from improved training in the detection and treatment of mental health disorders.

Issues for Policy, Practice, and Research*

The financing of mental health services is an increasingly important policy issue.

- Medicaid and Medicare reimbursements for mental health services are lower than private insurers' rates.³³
- The most severely ill and the most financially disadvantaged may be the most negatively affected by cost-containment strategies in health care financing and delivery.³²
- With the increasing prevalence of managed care organizations, referrals for mental health services may be limited and pharmacologic interventions may be used inappropriately to reduce the scope and costs of treatment.^{25,31,33,34}
- Although insurance plans are prohibited by law from setting caps on mental health benefits lower than caps on medical benefits, most fee-for-service insurance plans have greater restrictions and higher co-payments for mental health services than for medical services.³³
- Many plans also exclude coverage of mental disorders as "preexisting conditions."³³ Recent legislation restricts the exclusion of preexisting conditions to 12 months after enrollment, including time enrolled in a previous plan for individuals who have had continuous coverage. However, for women who have not had continuous insurance coverage, a 12 month break in treatment can have serious ramifications.

- Greater restrictions on "mental" versus "medical" therapies are particularly burdensome for pregnant and lactating women, for whom pharmacologic treatments may be contraindicated.³⁵
- Mental health "carve-outs" may pose a threat to coordination of enrollees care through the primary care provider.^{31,33}

These financing issues point to the need for policies addressing the lack of parity in coverage of medical and mental health care services and the threats to access imposed by cost-containment strategies in both managed care and traditional indemnity insurance plans.

Areas of research which remain to be explored include:

- the mechanisms through which social factors contribute to depression in women;
- which factors or processes are most amenable to intervention;
- the effect of gender on the outcomes of treatment, including the efficacy and side effects of antidepressants; and
- the effect of pregnancy on dose requirements, the effect of changes in treatment during pregnancy and lactation, and the long-term effects of exposure to antidepressants in utero and via breastmilk.

* Given the formative nature of our research on this topic, this material does not reflect an exhaustive list of potential issues of concern. Rather, the material below reflects selected preliminary ideas generated to stimulate dialogue and further study. In addition, certain issues may have been intentionally omitted from this section in favor of their incorporation in other materials prepared as part of a broader initiative to review the state of the field of perinatal and women's health.

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This **Issue Summary** is one in a set of thirteen, prepared as part of an initiative -- Perinatal and Women's Health: Charting a Course for the Future -- sponsored by the Maternal and Child Health Bureau in partnership with the Women's and Children's Health Policy Center at the Johns Hopkins School of Public Health. The intent of this work is to highlight policy and program areas needing to be addressed to ensure the continuous improvement of health care and services related to perinatal and women's health over the coming decade.

Copies of this and the additional Issue Summaries listed below can be accessed by contacting: National Maternal and Child Health Clearinghouse at 703/356-1964.

- 1** The Social Context of Women's Health
- 2** Women's Reproductive Health and Their Overall Well-being
- 3** Women's Experience of Chronic Disease
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Depression in Women

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