Maternal Depression: Implications for Parents and Children and Opportunities for Policy Change

Introduction

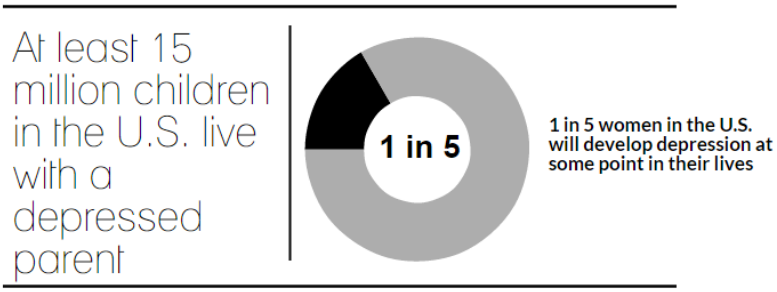
The health and well-being of children, especially infants and very young children, is one of the most sensitive measures of the health of society as a whole. Over the last two decades, states and the federal government have channeled a number of resources to promote children's health. However, one of the most important determinants of children's health is the well-being of their primary caregivers, most often their mothers.[1] Mothers can face numerous challenges during pregnancy, birth, and the postpartum period that can have long lasting effects on their children. One of the most prevalent and far reaching of these challenges is maternal depression.

In addition to the negative impact on the mother's own mental, physical, and emotional health, maternal depression can also have prolonged, harmful effects on the health of her children.[2] Mothers and children who experience poverty, are low income, or are from racial and ethnic minority backgrounds are disproportionately affected.[3] This paper examines the effects of maternal depression on maternal health, parenting, and child development as well as the policy options that could reduce the burden of disease for affected families and system-level health care costs.

Scope and Disproportionate Impact of Maternal Depression

Maternal depression encompasses the range of depressive disorders that can affect mothers from the prenatal period to up to one year postpartum, including prenatal and postpartum depression, and postpartum psychosis.[4] These disorders also frequently coincide with additional conditions and risk factors including other mental health disorders, substance abuse, chronic medical conditions, domestic violence, and poverty, which can exacerbate depressive symptoms.[5]

Scope of Maternal Depression[6]



46 to 65 percent of ever-depressed women have their first experience with depression during their first postpartum year.

50 to 62 percent of women with a history of postpartum depression and 33 percent of women with a history of perinatal depression (22 weeks completed gestation to seven days postpartum) will experience depression during or after a subsequent pregnancy.

Prevalence of Depression among Mothers with Infants by Socio-economic (SES) Status and Severity[7]

Depression Severity	SES	
	Federal Poverty Level or Below	Overall
Some form of Depression	55%	41%
Severe Depression	11%	7%

Women experiencing socio-economic disadvantage have higher rates of depression during pregnancy and postpartum.[8] In particular, women from racial and ethnic minority backgrounds living in urban areas and experiencing poverty are at least twice as likely as their peers in the middle class to experience both major and minor maternal depression.[9] Among mothers with infants, 55 percent of those living in poverty have some form of depression and 11 percent have severe depression compared to 41 percent and 7 percent respectively for mothers with infants overall.[10] Rates of depression are also much higher for pregnant and parenting adolescent girls.[11]

Consequences of Untreated Depression

Although maternal depression is a serious mental health disorder, it is also one of the most treatable.[12] Research shows that adequate treatment (minimum care necessary to remove all symptoms of depression, restore functioning, and reduce the likelihood of relapse)[13] of maternal depression to remission leads to improvement in maternal mental, behavioral, and physical health as well as outcomes for children.[14] In spite of this evidence, mothers are rarely screened for depression during the perinatal period, and very few women ever receive treatment.[15] Mothers who are low income, who are uninsured, or who are members of a racial or ethnic

minority group are at the greatest risk of receiving no treatment or inadequate treatment.[16] Receiving inadequate treatment, ceasing treatment prior to remission (period of time in which mother no longer meets diagnostic criteria for depression and has no more than minimal symptoms),[17] or receiving no treatment can have serious consequences for mothers and their children.

Maternal Health and Parenting Behaviors

In addition to the damaging effects on the mother's mental health, undiagnosed and untreated maternal depression can affect a mother's physical health and parenting behaviors. Maternal depression can impede a mother's ability to manage her own health, especially if she suffers from additional chronic medical conditions.[18] Depression also can impact a mother's ability to maintain employment, which is crucial for low-income mothers and single mothers who are the sole providers for their children.[19] Furthermore, undiagnosed and untreated depression is associated with increased risk-taking behavior and increased rates of suicide.[20]

Many mothers, especially those who are experiencing poverty or other hardships may not recognize their depression as a treatable medical condition.[21] Others may be aware of their depression, but not seek treatment because of social stigma, low social support, distrust of the health care system in general or mental health providers specifically, time constraints, lack of child care, financial barriers, language and cultural barriers or fear that their children will be taken away if they ask for help.[22] It is also important to note that some mothers may not realize the impact that their depression has on their children.[23]

Impact of Maternal Depression on Parenting Behaviors

- Limits bonding and attachment with the child.
- Detracts from nurturing and supportive parenting.
- Reduces warmth, engagement with children, and responsiveness to their cues.
- Increases difficulty maintaining consistent routines and disciplinary practices.
- Diminishes positive reinforcement for children.
- Reduces likelihood of engaging in child health and safety practices, including:
    - Following "Back to Sleep" campaign guidelines for the prevention of Sudden Infant Death Syndrome (SIDS).
    - Bringing children in for well-child visits and vaccinations.
    - Using car seats properly.
    - Covering electrical outlets in the home.
- Can lead to child abuse and neglect.

References: Santoro and Peabody 2010; Glied and Ollerich 2014; Knitzer et al. 2008; Minkovitz, Cynthia S., Donna Strobino, Dan Scharfstein, William Hou, Tess Miller, Kamila B. Mistry, and Karen Swartz. "Maternal Depressive Symptoms and Children's Receipt of Health Care in the First 3 Years of Life." *Pediatrics* 115, no. 2 (2005): 306-314. Accessed July 6, 2015. DOI:10.1542/peds.2004-0341; McDaniel and Lowenstein 2013; Howell et al. 2013.

Birth Outcomes and Early Childhood Development

Because of its effects on caregiving and the mother-child relationship, the mental health of the mother is closely tied to that of her children.[24] The risks of long-term damage are greatest for children during infancy and early childhood.[25] Low-income mothers' higher risk of maternal depression and lower rates of treatment put their infants and young children at even greater risk compared to those of mothers with higher incomes.[26]

Women who experience prenatal depression produce more cortisol (stress chemicals) than mothers who do not experience depressive symptoms during pregnancy.[27] This increases intrauterine growth restriction by 49 percent, low birth weight (LBW) births by 49 percent, and preterm deliveries by 39 percent for infants of depressed mothers compared to those of their non-depressed peers.[28] LBW and preterm delivery are two of the leading causes of infant mortality (death prior to first birthday) in the United States and are also related to developmental delays and health problems later in life.[29] After birth, more severe depressive symptoms in mothers are also related to poor weight gain, increased physical health concerns, increased nighttime awakenings, and altered immune functioning in infants from five months to nine months.[30]

Young children of depressed mothers can experience delays in cognitive and emotional development, reduced language abilities, and increased likelihood of behavioral problems and attention disorders.[31] If maternal depression fosters a negative mother-child relationship, this can persist even after the mother's depression improves and may affect the child's relationship with other adult authority figures, like child care providers and teachers.[32] These issues are particularly worrisome because they profoundly impact school readiness, which establishes a foundation for academic and even workplace success in the future.[33]

The Need for a Two-Generation Approach

The consequences of untreated depression demonstrate the inextricable connection between the health of the mother and that of her child. The importance of this connection is the foundation for what are known as "two-generation approaches to health."[34] Two-generation approaches seek to address the needs of children and their parents simultaneously based on the core belief that "…when opportunities for children and parents are approached in tandem, the benefits may be greater than the sum of the separate parts."[35] Therefore, in order for treatment programs for maternal depression to have the greatest impact, providers must consider the needs of depressed mothers as individuals and as parents along with the needs of her infants and young children.[36]

Unfortunately, maternal depression treatment is rarely conceived of within the two-generation framework.[37] Some key barriers prevent the full realization of two-generation approaches to treating maternal depression. These include differences in coverage eligibility or health insurance plans for children and their mothers, physician practice and specialization, and lack of coordination between care for children and adults and between mental and physical health care.[38] For example, many pediatricians who see mothers frequently at their children's appointments may not feel comfortable or may not feel it is their responsibility to screen a mother for depression.[39] It is also the case that pediatricians may not be reimbursed for screening mothers during a child's appointment.[40]

The 2010 Affordable Care Act (ACA) has begun to address some of these barriers by making health coverage available to more low-income mothers and by allowing more low-income mothers of Medicaid eligible children to also be covered under Medicaid.[41] The ACA also requires that all marketplace plans cover mental health and substance use services at least to the same level as other medical services.[42] Finally, the ACA supports patient-centered medical homes and other innovative care delivery systems as well as the Maternal, Infant, and Early Childhood Home Visiting Program, which provides support services to low-income, first-time mothers and babies including parenting education.[43] However, these important provisions are only the first step toward the greater health system transformation necessary to fully implement two-generation approaches to maternal depression.[44]

Several states have moved forward with two-generation programs to screen and treat mothers with depression while also addressing the needs of their children.[45] In 2000, North Carolina implemented a project to screen young children for depression to promote early identification and referral for treatment and additional services.[46] The state incorporated maternal screening into the program shortly afterward.[47] Parents in North Carolina can now be seen by a primary care provider, licensed clinical social worker, or psychologist for up to six visits under their child's Medicaid coverage.[48] The project has also made strides to co-locate mental health providers in the primary care setting, which greatly improves access and coordination for affected families.[49] The Great Start Program in Minnesota also worked to co-locate mental health services within the primary care setting by incorporating them into pediatric clinics.[50] The program screens mothers for depression throughout the perinatal period and provides patient education materials on maternal depression to new mothers before they are discharged from the hospital.[51]

There are also opportunities to leverage other social services that already use two generation approaches to screen for and treat maternal depression. Ohio and Louisiana, for example, have targeted vulnerable mothers and infants dealing with depression through home visiting programs.[52] Although further study is needed, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) also presents an excellent opportunity to provide maternal depression screening and referral to additional services given that 96 percent of infants living in poverty with depressed mothers participate in the program.[53]

Importance of Health Coverage

The Affordable Care Act and the Coverage Gap

Although the ACA has greatly increased health care coverage options for many Americans through the individual and employer mandates and state Medicaid expansions, approximately 5 million people fall into a coverage gap.[54] Twenty-four percent of adults in the coverage gap are parents who could have gained coverage but had no subsidized option in 2014 because their states chose not to expand Medicaid.[55] Women make up the majority of poor uninsured adults in each of the states that have not expanded the program.[56]As a result, millions of low-income women do not have consistent access to health coverage.[57]

A growing body of research shows that when women have health coverage before becoming pregnant and in between pregnancies, they enter pregnancy healthier and their babies are more

likely to be healthy at birth.[58] However, many low-income women who need care only become eligible for Medicaid once they are already pregnant because of the substantially higher income eligibility levels for pregnant women.[59] The median Medicaid income eligibility level for pregnancy related coverage is 203 percent of Federal Poverty Level (FPL) compared to only 47 percent of FPL for the many non-pregnant women who fall into the coverage gap.[60]

Pregnancy related Medicaid coverage ends 60 days postpartum.[61] This disrupts coverage at a critical time for mothers experiencing depressive symptoms or other health problems that require more time for diagnosis, treatment, and follow-up.[62] Depression is extremely difficult to diagnose during the first few weeks of the postpartum period because clinicians have to be able to distinguish maternal depression, which can occur up to a year postpartum, from a more common condition called the "baby blues," which is less serious and usually does not require treatment.[63] Even in the event that a mother is diagnosed with depression during pregnancy or immediately postpartum, she will not have Medicaid coverage for the ongoing mental health services needed for treatment to remission after the 60-day period.[64]

How Medicaid Can Help Fill the Gap

Nearly half of uninsured mothers with young children did not receive treatment for major depression compared to only one-third of those with health insurance.[65] Several studies suggest that financial concerns and lack of health coverage are among the most important barriers affecting access to treatment for maternal depression.[66] Mothers with either public or private insurance coverage are more likely to receive some treatment or adequate treatment for their depression than those who are uninsured.[67] Treatment rates for maternal depression for mothers with Medicaid coverage are similar to those with private or other insurance.[68] The Oregon Health Insurance Experiment also showed that Medicaid coverage decreased observed rates of depression by 30 percent, increased the probability of diagnosis, and reduced financial strain for those seeking care.[69]

In addition to reducing the prevalence of maternal depression by making treatment more accessible, the expansion of Medicaid coverage also presents an opportunity to prevent depression.[70] Medicaid expansion would make it possible for more low-income women receive care and support prior to conception, which would help them to have better mental and physical health during pregnancy.[71] Expanding the Medicaid program to cover more low-income women would also help to reduce the maternal depression risks associated with unplanned pregnancy by increasing access to interconception care, including family planning services that could promote more appropriate spacing between births.[72]

Although a more thorough study of potential cost-savings is still needed, there is growing evidence that reducing the incidence, prevalence, and severity of maternal depression by expanding Medicaid could also lower costs for states and health plans.[73] Reducing the number of poor birth outcomes related to maternal depression would reduce the number of complicated deliveries and neonatal intensive care unit (NICU) admissions related to preterm delivery and LBW.[74] Reducing the prevalence and severity of maternal depression and its impacts on child health and development could also help reduce inpatient mental health care admissions, psychiatric hospitalizations, and lifetime health costs for children.[75] These savings could have a major impact on state Medicaid finances, as Medicaid programs already pay for more than 44

percent of complicated deliveries and 53 percent of hospital stays for infants born preterm or with LBW nationwide.[76]

Some states are also using Medicaid funds to increase depression screening and promote awareness. Illinois, for example, made maternal depression screening with an approved screening tool a separately reimbursable service for women enrolled in its Medicaid program.[77] Infants and young children of mothers with depression are also automatically eligible for Early Intervention, a system of services that helps babies and toddlers with developmental challenges.[78] However, screening for maternal depression can only be helpful to mothers and children if the necessary treatment and follow-up are made available and affordable with comprehensive coverage.[79]

Conclusion

Children's health is inextricably connected to the health of their mothers.[80] Maternal depression is one of the many serious health challenges women can face during pregnancy and postpartum that illustrates this strong connection. This condition not only affects the mother's health and well-being, but also that of her children in utero, at birth and beyond.[81] Maternal depression is also a condition that disproportionately affects mothers and children who are living in poverty, are low income, and have racial and ethnic minority backgrounds.[82] Even though depression is a highly treatable mental health disorder, many mothers do not receive care because they lack the health coverage that would make such care affordable.[83]

The state option to expand Medicaid eligibility for adults offers a valuable opportunity to extend coverage to more low-income mothers to increase access to maternal depression treatment as well as preventive care. However, reducing the burden of maternal depression and the health disparities among affected mothers and children will ultimately require a broader shift in our health care system than coverage expansion alone. In addition to expanding Medicaid, it is imperative that policymakers incentivize providers and payers to use two-generation approaches for maternal depression treatment to meet the needs of mothers and children together. It is also very important that providers are trained to give culturally and linguistically appropriate care and to address other patient barriers, such as mistrust, fear, and lack of knowledge. Although it is not the whole solution, expanding Medicaid represents a crucial first step toward improving the health and well-being of mothers and children currently living with maternal depression and limiting its reach into future generations. Once screening and treatment for maternal depression are made more available by expanding Medicaid, states can begin to think creatively about addressing additional complexities.

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