

Maternal Mental Health: Where Should Our Research and Policy Priorities Be?

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In the midst of the COVID-19 pandemic, mental health care has become an increasingly important topic in light of the cumulative stressors of social isolation, economic insecurity, anxiety and fears of infection, financial hardship, and the potential loss of friends or family. Evidence suggests that mental health disorders, including major depression disorder (MDD) and anxiety disorders, are increasing at an alarming rate in the setting of the COVID-19 pandemic, and access to mental health care remains limited. During this critical time, maternal mental health deserves special attention by researchers and policy makers for several reasons, but particularly because of growing evidence that maternal mental health has long-reaching effects on the physical, intellectual, and emotional development of a woman's children [1]. Maternal mental health is therefore a true public health issue that ultimately affects every one of us.

Beyond this compelling reason to focus on maternal mental health, a number of other unique aspects to the mental health of women complicate treatment. For example, women are more likely to be the victims of physical and sexual abuse, and the ebb and flow of reproductive hormones can trigger mood and anxiety symptoms in biologically and socioeconomically vulnerable women. Furthermore, treating mental health disorders during the reproductive years requires a specialized knowledge of what medications can be used during pregnancy and lactation and a desperate need for research into best management practices for treatment during this critical time period. The COVID-19 pandemic, by increasing the mental health needs of both women and men, has only served to emphasize the knowledge gaps and need for policy change that will ultimately improve mental health outcomes for not only women, but men as well.

On December 2, 2019, the Committee on Population of the National Academies of Sciences, Engineering,

and Medicine held a stakeholder meeting on maternal mental health and women's mental health across the life course. The meeting was meant to build and expand upon a previous workshop—Women's Mental Health across the Life Course through a Sex and Gender Lens held in March 2018 [11]—with a new focus on maternal mental health. During the meeting, experts and stakeholders discussed maternal mental health and specifically focused on the perinatal period. The discussion addressed topics such as risk factors, barriers to mental health care, areas in need of research, and potential policy interventions. The authors of this commentary will present some of these ideas with the added perspective of a reproductive psychiatrist—a psychiatrist who specializes in the mental health care of women during the reproductive years. This commentary will also highlight opportunities brought on by the COVID-19 pandemic that have a bearing on these discussions.

Research Priorities to Inform Policy

Each of the following areas includes potential research opportunities in maternal mental health that can inform future policy directions to improve mental health outcomes for women and ultimately their families.

Research is needed to identify best practices for integrating mental health care into primary care settings. Access to mental health care continues to be an issue for men and women alike. Stigma remains a barrier to seeking mental health care as does lack of insurance coverage and financial and time constraints—particularly for mothers with young children. Despite the increased prevalence of mental health disorders, less than 30 percent of women who screen positive for depression or anxiety seek or receive treatment [2].

One potential solution to closing this care gap is to integrate mental health services into primary care set-

tings such as family practice, obstetrics and gynecology, and even the pediatric setting. Integration of mental health services into primary care will increase access by reducing stigma via making assessment and treatment of mental health a part of routine medical care and reducing the effort needed to seek treatment. A number of different models can be used, but research into how to best integrate mental health care into primary settings is lacking. Models range from an on-site social worker who can provide referrals to psychiatric care as needed to an on-site psychiatrist who can provide direct care and who can consult with the primary care providers for straightforward cases.

Another way to integrate mental health care into primary care settings is to either educate or provide consulting support to primary care providers. The reality is that there are not enough mental health care providers to meet the current and growing need for mental health services; therefore, training frontline providers in the basics of psychiatric care is critical [3]. However, research is also lacking on how to best accomplish this goal. The COVID-19 pandemic has identified that web-based and long-distance options might be preferable to the expense of integrating mental health services in person. Telehealth and teleconsulting options can provide real-time guidance to frontline physicians. A successful example of this option is the Massachusetts Child Psychiatry Access Program for Moms (MCPAP for Moms), which provides real-time consulting options for obstetricians and gynecologists seeking advice about psychiatric care for their patients. Ongoing research on these and other options is needed.

Develop the evidence base around flexible payment mechanisms to increase access to mental health care. Research is needed to determine what payment mechanisms and models increase access to cost-effective mental health care, particularly during the perinatal time period. This research can then be used to support evidence-based policies that increase access and promote mental health care.

Promising payment mechanisms for research include:

1. reimbursing front line medical providers including family practice, obstetricians and gynecologists, and pediatricians for providing mental health care;

2. reimbursement for coordinated care between mental health care providers and medical providers;

3. reimbursement for provider-to-provider consults;
4. financial incentives for screening, particularly during pregnancy and postpartum;
5. ongoing reimbursement for telehealth and eHealth services; and
6. linking optimal mental health practices to higher reimbursement rates.

Mental health care during the COVID-19 pandemic has dramatically expanded via legislation that increases providers' abilities to offer telehealth services, allowing patients to be at home for appointments and to receive some care across state lines. Continued reimbursement for telehealth will not only increase mental health care during the COVID-19 pandemic but will also increase care for pregnant women and women with young children by making access to this care much easier. Research on telehealth conducted during the COVID-19 pandemic can, in the future, inform plans for increasing access for pregnant and postpartum women.

Research Priorities to Inform Care

The following research areas represent significant gaps in knowledge for best practices for treating maternal mental health at critical time points during the reproductive years.

Research is needed to identify best practices for psychiatric care in pregnancy and postpartum.

Perinatal depression is incredibly common, with approximately one in seven women meeting criteria for MDD during or immediately following pregnancy, and research has demonstrated that women are more likely to develop MDD in the year following childbirth than at any other time point in their lives [4]. Anxiety and other psychiatric disorders are also more common in the perinatal period [5]. Furthermore, mental health conditions are the second leading cause of maternal mortality in the year following childbirth [6,7]. Despite these grim statistics, little research focuses on best management practices for psychiatric care during pregnancy and the postpartum time period, and the continuation or initiation of psychiatric medications during pregnancy remains controversial.

On top of the lack of research, the literature on the safety of psychiatric medication use during pregnancy is complex, conflicting, and difficult to interpret, while the risks of untreated psychiatric illness during pregnancy are frequently underestimated. Women, there-

fore, often receive conflicting information on whether or not to continue psychiatric medications during pregnancy or how best to prevent onset of psychiatric illness during the postpartum time period. In fact, a recent commentary in the official journal of the American Academy of Pediatrics, called for “new approaches, resources and collaborations” to study the safety of psychiatric medications in pregnancy and infant outcomes [7].

Overall, women are often undertreated during pregnancy either by not being identified, by not initiating mental health care, or by a reluctance to start or increase psychiatric medications while pregnant [2]. For example, metabolism and blood volume change significantly over the course of pregnancy, and many drugs are metabolized differently during this time. Other areas of medicine, such as neurology and cardiology, more actively manage medications during pregnancy—yet data is lacking on how to best manage psychiatric medications during pregnancy and lactation. Most women are seen by the health system more frequently during the perinatal period; therefore, research into best practices for screening for psychiatric illness and practices that promote initiation of care should also be undertaken. Intervention during pregnancy is an optimal time to identify women at risk, begin treatment, and educate mothers on coping skills, therapeutic skills, and facts about mental health for the long-term health of both the woman and her family.

Finally, socioeconomic factors and a lack of social support also increase the risk of postpartum depression [8]. Research on interventions that provide more social and economic supports during the postpartum time period is therefore also critical. Research focused on this critical area will not only improve mental health outcomes for women but will also provide much needed data to make informed decisions about care during pregnancy.

Research is needed to identify best practices for psychiatric care in perimenopausal and menopausal women. The perimenopausal/menopausal time period also deserves additional focused research. Menopause, by definition, occurs after an older woman has stopped menstruating for one full year. The years leading up to menopause are marked by hormonal fluctuations that can trigger mood and anxiety disorders as well as other physical symptoms of perimenopause, including hot flashes, changes in sleep and libido, and vaginal dryness. In addition, there are

a host of environmental factors that occur during this period that can increase the risk of the development of a psychiatric disorder, including stress from caring for both children and aging parents and career-related stress. Other stressors during this time period include increased social isolation as children grow up and leave the house, the development of health issues, and changes in physical appearance.

Research on the causes and biomarkers of psychiatric disorders during this time period are needed as well as psychotherapies geared toward this period of transition. The social environment plays a role in women's interpretations of the meaning of perimenopause, including availability of social supports, demands or lack of demands of family life, and cultural attitudes regarding menopause [9]. Are there social conditions that can be changed to improve mental health outcomes during this time period? A better understanding of the effects of perimenopause on psychiatric disorders such as bipolar disorder, MDD, and anxiety disorders is also needed. Finally, identification of who would benefit from hormonal interventions and when to intervene needs to be studied for perimenopausal physical symptoms (e.g., hot flashes) and psychiatric symptoms and disorders. A rational approach to treating both the symptoms of perimenopause and the psychiatric disorders that can arise during this time-period is needed.

Research Priorities to Inform Interventions for Environmental Factors in Psychiatric Illness

The following research areas represent significant gaps in knowledge for best practices for preventing psychiatric illness in individuals, particularly women, who are at elevated risk because of adverse environmental conditions.

Research is needed in early interventions to prevent long-term effects of adverse childhood experiences (ACEs). ACEs including physical, emotional, and sexual trauma are associated with adverse mental health outcomes and increase the risk for later physical and psychiatric illness. Women and several minority groups are more likely to experience four or more ACEs, thus putting them at increased risk of medical and psychiatric illnesses during their lifetime [10]. Interventions to prevent ACEs and to help individuals recover from ACEs early in life have a good chance of reducing the burden of later physical and mental illness.

The CDC has made recommendations for policies that may reduce the number of and the long-lasting effects of ACEs. These recommendations include encouraging employers to offer family-friendly policies such as paid family leave and flexible work schedules and increasing access to programs that enhance parents' and youths' coping skills to manage stress, resolve conflicts, and reduce violence [10]. Research into whether or not such policies reduce the negative impact of ACEs is needed to support their long-term implementation.

Research is needed in how to positively impact the social determinants of health. Policies that address the social determinants of health, such as those that increase social support, decrease violence, and improve and expand education will most likely affect maternal mental health outcomes in a positive way, but research is lacking.

Examples of policies that should be studied for impacts on maternal mental health include:

1. policies that promote caregiver support, child-care, and transportation;
2. policies that provide protections for women in the workplace from harassment and discrimination;
3. policies that increase access to community services, including community mental health services;
4. policies that reduce violence and provide more support for victims of violence;
5. policies that increase mental health access and education in school systems; and
6. policies that provide improved socioeconomic opportunities, now even more pertinent because of the economic effects of the COVID-19 pandemic.

Conclusions

Maternal mental health is a critical area of growth that needs attention for both research and policy development. Improving maternal mental health outcomes will ultimately improve the mental health of and medical health outcomes for all because maternal mental health is closely tied to medical, educational, and emotional outcomes for children. Furthermore, focusing on improving mental health outcomes for women will ultimately improve our mental health system. Significant gaps remain in knowledge about psychiatric care during pregnancy, lactation, and perimenopause that

need to be addressed as psychiatrists are already treating women during these critical time periods, and the lack of knowledge contributes to ongoing suffering and suboptimal care. There is also a need for research that will inform evidence-based policy recommendations including on how to best integrate mental health care into frontline medical settings and how to increase access to mental health care through different models of payment. The creative use of alternative models and resources, including the expansion of telehealth services, has the potential to increase mental health access for all women, as well as men.

In the setting of the COVID-19 pandemic, there is a growing need to expand mental health services for the general public and for women specifically. This expansion will ultimately improve our mental health system as a whole, as well as the mental health outcomes tied to the COVID-19 pandemic. Research into how to best educate or offer mental health guidance to frontline providers for treatment of psychiatric illness, design creative models of reimbursement to expand options for care, provide regular mental health interventions during the perinatal time period, prevent and mitigate the effects of ACEs, and address social determinants of health will not only improve our public health outcomes for all, but also improve mental health outcomes from the ongoing COVID-19 pandemic. Research that results in evidence-based policies that aim to improve social-structural and economic conditions for women will not only protect women's mental health, but will also improve our society's mental, physical, and economic outcomes from the COVID-19 pandemic. Focusing on improving maternal mental health will provide our society with the much-needed tools and improvements in our health systems so that all may benefit.

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