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### **Decision Making for Postpartum Depression Treatment**

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Depression and its many sequelae affect multiple domains of perinatal health. Successful treatment increases the likelihood of optimal function in these critical areas. Examples are physiological regulation, cognition, psychosocial relationships, compliance with self-care, minimal use of recreational drugs and alcohol, decreased cigarette use, healthful nutritional choices for infants and family, ability to understand and integrate health information, and accessing well baby care and pediatric appointments. Postpartum wellness improves the probability of postpartum feelings of wellbeing, functionality, capacity to enjoy the family and infant, normal infant growth, neurodevelopment and health, and the ongoing maturation of mother–infant interactions.

A major function of physicians and other healthcare professionals is framing treatment choices for patients with postpartum depression and guiding them through the decision making process. Deber and colleagues<sup>1</sup> developed an approach that focused on the importance of identifying treatment options for a particular disease, considering alternate choices that include no treatment and reviewing potential outcomes with an empathic approach. Another review combined the perspectives of perinatal psychiatrists, decision-making theorists, obstetricians, and forensic psychiatrists to describe the risk–benefit considerations regarding psychiatric treatments during pregnancy.<sup>2</sup> We have elaborated the ideas and concepts from this pioneering research to develop an approach to treatment decision making for post-partum depression. Our focus is the clinician's artful application of information about treatments to the individual patient.

# CONTEXT OF THE DECISION MAKING TASK FOR PERINATAL DEPRESSION

With frequent health professional contacts, the period of childbearing is an opportune time to affect perinatal mental health. The clinician's task is to change the trajectory of the woman's health status in the direction of improved outcomes, such as decreased maternal and fetal/infant diseases and complications, and better health, functioning and overall well-

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being. In this paper, we explore the healthcare professional's role in intervening to treat postpartum-onset depression.

Each woman arrives at childbearing with myriad life experiences that continue to affect the course of pregnancy, childbirth, and childrearing. Improving perinatal mental health compels an interdisciplinary understanding and approach that integrates the complex biological, social, psychological, and environmental forces that shape pregnancy and childbirth.<sup>3</sup> These interactions comprise a set of longitudinal assets and risks that a woman brings to childbearing. Examples of biological factors are genetic and gene–environment interactions; environmental factors are exposure to toxins, crowding, air pollution, and inadequate food availability. Social-environmental factors include socioeconomic status, stress, social support, safety, and neighborhood resources.

This set of distal dynamic factors defines the individual woman's susceptibility to risk factors that are specifically related to childbearing. A woman's long-term risks and her health status directly proximal to conception interact with the additional demands of pregnancy and lactation to influence perinatal health outcomes. These same forces shape her experience, attitudes, and conceptualization of mental health, which form the decision frame<sup>4</sup> from which she will make choices.

#### **RESPONSIBILITIES OF THE CLINICIAN**

#### **Context of Decision Making**

The healthcare professional can structure the decision making process around a comprehensive diagnostic formulation. The distal factors described above can be understood through exploration of the natural history of the depressive syndrome across the woman's life. Her family experiences, major life events, and social support system affect the severity, chronicity, and treatment responses of psychiatric episodes. These factors also affect her ability to access treatment, her selection of interventions, and her compliance. Her previous choices about illness management provide examples of her decision making. For example, a woman who has been hospitalized for suicide attempts each time she discontinued effective pharmacotherapy to attempt conception is likely to make different choices for pregnancy management than a woman with only one brief postpartum episode of depression that remitted after five months without intervention.

Medical and psychiatric comorbidity are important contextual factors. Chronic diseases, such as diabetes or hypertension, may exacerbate during depressive episodes. Management of these health problems often is compromised by the negative cognitive and motivational effects of depression. The burden of the whole set of health problems affects pregnancy outcomes.

As important as the exploration of risks is the exploration of assets that may influence the treatment planning process. For example, a woman who discontinues pharmacotherapy to attempt conception could have a supportive partner, a long-term relationship with a psychiatrist who provides combined psychotherapy and medication, excellent healthcare coverage, significant financial resources, and family who will care for her other children.

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Her decision-making context is radically different from an indigent single woman with an abusive partner and poor social support.

Family history also provides information about genetic risk and models of managing illness. A woman's experiences with a family member with mental illness can be highly influential in forming her views. For example, a patient who had an abusive father with unstable bipolar disorder reported that his term for mental health professionals was "quacks who try to control your mind." She was fearful about developing manic episodes in addition to her recurrent depressions. On examination, she denied any symptoms of mania, and when specific symptom inquiries were made, she attributed them to external events. When asked about a period of euphoric mood, she responded: "After my babies were born, I was just really happy! Every woman is. I am not like my father; I would never hurt my children." For several months postpartum, this patient slept only a few hours each night. Her comment was, "No one sleeps when they have a new baby." During the first postpartum month, she stripped the wallpaper in her entire home and replaced it. Her second post-birth experience included two speeding tickets and an automobile accident. For this woman, denial of symptoms created an affirmation that she did not have the disorder that her father had. Her beliefs affected her treatment choices. She made choices from a decision frame that was a composite of her life experience.

Another critical task for the clinician is to use psychotherapeutic skills to support the patient's decision making process, particularly if she reaches an impasse in her ability to move forward in the consideration of various treatment options. The mental health professional's ability to help her recognize and identify the cognitive and emotional factors responsible for interfering with effective decision making is crucial. For example, a woman had received psychotherapy for depression for several years and was in remission. She conceived a planned pregnancy but became depressed after birth. Her therapist referred her for a medication consultation. The patient rescheduled the appointment several times. During the interview, she became anxious when she discussed the option of antidepressant medication. She was able to identify that her anxiety was related to the death of her sister's first child 10 years before to sudden infant death syndrome. She decided to decline antidepressants and said, "I understand all that you have told me about antidepressants in breast milk and the baby's blood. But I would never be able to forgive myself if I took medication while breastfeeding and this baby died like my sister's. No matter what the science says, I would never be able to convince myself that I did everything possible to stop it from happening to my baby."

#### **Knowledge of Treatment Options**

Knowledge of available treatment information is critical to the decision-making process. Web-based resources are available to the healthcare professional for accessing current data about medications during childbearing. One such resource is a a free database on reproductive and developmental toxicology, provided online by the National Institutes of Health at http://www.toxnet.nlm.nih.gov. Treatment options for postpartum depression are reviewed elsewhere in this issue (Abreu et al., see page xxx).

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With the increased public interest in complementary and alternative therapies as well as novel therapies, the clinician is faced with another issue. Because of the desire to avoid medication during childbearing, patients often express interest in non-standard therapies. How much evidence of efficacy must be present to offset concerns about medication therapy? Is the patient (and perhaps physician) trading efficacy of the treatment for the perception of increased safety? If the patient refuses all standard therapies, how should the health professional respond? We briefly review therapies that have been of particular interest to our patients and research team.

Internal circadian rhythms drive behaviors in people, animals, and plants. Light and other external time markers shift the rhythms to advance or delay the phase of the internal clock.<sup>5</sup> Seasonal affective disorder and other forms of non-seasonal depression may be associated with phase delays. Properly timed light therapy at the end of the night will suppress melatonin secretion and correct the phase delay to reduce depressive symptoms. Light therapy is efficacious for seasonal affective disorder as well as nonseasonal depression.<sup>6</sup> Light therapy has been studied for antepartum depression in open-label and small randomized clinical trials.<sup>7,8</sup> Corral et al.<sup>9</sup> described antidepressant effects of bright light therapy in two women with postpartum depression.

Timed sleep deprivation is a strategy to improve the mood of depressed patients.<sup>10</sup> Because postpartum women face inevitable sleep deprivation, advice on timing of their evening sleep may be helpful. Parry et al.<sup>11</sup> assigned 12 severely depressed women to sleep deprivation in the early night (sleep permitted from 3 to 7 a.m.) or late night (sleep permitted from 9 p.m. to 1 a.m.). Response was defined as a 50% reduction in baseline depression score or a Hamilton Rating Scale score of less than or equal to 8. They found that 82% of mothers responded to late night deprivation compared to 33% with early night sleep deprivation.

Omega-3 fatty acids are essential nutrients that must be consumed in the diet. Sources include plant and marine derived foods, such as flaxseed, hemp, canola, walnuts and fish. These fatty acids are major precursors of secondary messengers and reduce inflammatory cytokines, leukotrienes, and prostaglandins. They also modulate cell receptor, transporter and enzymatic activity. Altered neuronal membrane fluidity, preterm delivery,<sup>12</sup> pre-eclampsia,<sup>13</sup> and postpartum depression<sup>14</sup> are associated with diets deficient in Omega-3 fatty acids. A recent open trial of eicosapentaenoic acid and docosahexaenoic acid administered to 15 depressed pregnant women showed mood improvement by 41% on the Edinburgh Postnatal Depression Scale.<sup>15</sup> In contrast, Marangell et al.<sup>16</sup> failed to detect any effect to prevent postpartum depression in seven women who consumed fish oil at a dose of 3 grams daily at 36 weeks gestation through 12 weeks postpartum.

The herb hypericum (St. John's Wort) is a popular treatment in Europe for mild to moderate depression. It is more effective than placebo for the treatment of mild to moderate depression.<sup>17</sup> Several meta-analyses revealed that hypericum was more effective than placebo and similarly effective to standard antidepressants for mild to moderate depression. However, in another study, 340 patients with moderately severe depression received hypericum, sertraline, or placebo.<sup>18</sup> Neither treatment was statistically superior to placebo. Separately, the two active constituents of hypericum (hyperforin and hypericin) were

evaluated in breastmilk, and only hyperforin was detectable in breastmilk.<sup>19</sup> The infant had undetectable plasma levels, and no adverse effects were observed.

#### **Clinical Evaluation**

The context of life course factors flows naturally to the evaluation of the woman's psychiatric evaluation. Her diagnosis must be reviewed carefully, since treatment recommendations are based upon the diagnostic formulation. The immediate and long-term goals of treatment include acute symptom management, recurrence prevention, and continuation and maintenance interventions. Clarification of these goals establishes the rationale for selecting particular interventions at particular times during childbearing.

For example, a pregnant woman with a history of successful treatment with an antidepressant 4 years earlier presented for consultation. She was concerned about her risk for recurrence of depression after the birth of her second child. For women with one or more previous episodes of postpartum depression, the recurrence risk is 25%.<sup>20</sup> Postpartum preventive treatment is appropriate for high-risk groups, such as women with previous episodes,<sup>20</sup> major life stressors,<sup>21</sup> socioeconomic adversity,<sup>22</sup> or a severely ill infant.<sup>23</sup> The patient's choice was to initiate interpersonal psychotherapy preventively during the latter part of pregnancy and into the postpartum period. She wanted to maximize her probability of wellness without drug treatment during pregnancy and breastfeeding as well as engage a healthcare professional to monitor her mood. If the depression recurred, she planned to start the same antidepressant for acute treatment and continue it long-term, since the capacity to enjoy her family was critical to her.

Because the postpartum period is one of high risk for emergence of mania, exploration for past and current symptoms of mania (or mixed states) such as racing thoughts, pressured speech, elevated or irritable mood, decreased need for sleep, increased productivity, and agitation is critical. Delusional beliefs, perceptual changes such as auditory or visual hallucinations, and disorganized thinking or behavior affect not only diagnosis but also the capacity to provide informed consent for treatment. In short, bipolar disorder is accompanied by a unique set of treatment considerations that differ from those for postpartum depression.<sup>24</sup>

History taking must be accompanied by an assessment of general health since psychiatric symptoms can mask underlying medical conditions. Postnatal thyroid disorder presents with a mix of psychiatric and somatic complaints. Postpartum thyroid disease occurs at a rate of 7%, which is double the rate of 3% to 4% in the general population.<sup>25</sup> Pop et al.<sup>26</sup> reported that 38% of patients with post-partum thyroid dysfunction endorsed depressive symptoms that resolved with thyroid replacement. The increased nutritional requirements for pregnancy and lactation increase risk for iron deficiency and other anemias, which contribute to fatigue and irritability.

#### **Discussion of Risks and Benefits**

**Untreated Maternal Illness**—Untreated depression results in illness persistence and often in increased symptom severity. The disability which arises from persistent maternal

mental disease poses a major public health burden in terms of lost productivity and increased health costs according to the World Health Organization's Global Burden of Disease study.<sup>27</sup> On a personal level, the depressed woman may suffer from impaired work performance, income loss, diminished feelings of well-being, tensions in interpersonal relationships, and loss of social support. She may experience difficulty with concentration or making decisions, have impaired judgment and reasoning, or neglect the basic or emotional needs of her child. Rarely, she may threaten the safety or wellbeing of herself and others as a result of her mental illness. Impaired mother-infant interactions affect 10% to 25% of women with postpartum psychiatric symptoms.<sup>28</sup> They are accompanied by maternal rejection of the baby, insecure attachment, and cognitive or behavioral problems in children.

The perceived benefit of not treating postpartum depression based on the hope that a spontaneous remission will occur may be based on several factors. These include:

- Maternal or spousal fears of exposing the nursing infant to short or long-term adverse effects of the ingested drug transmitted through breastmilk;
- The stigma of receiving a diagnosis and treatment for a psychiatric condition;
- The perceived failure of not being able to overcome the depression without treatment;
- In accurate normalization of the mood disorder as similar to the common experience of all postpartum women, or the baby blues; and
- Past experience of multiple brief episodes that remit spontaneously (which raises suspicion of an underlying bipolar illness).

**Risk–Benefit Considerations of Treatments**—The healthcare professional has the responsibility to consider treatment choices that he or she believes will provide greater benefit than risk for the woman, her infant, and family. In addition to data supporting efficacy, the availability of treatments and monitoring procedures (especially for antidepressant treated breastfeeding mother infant pairs) should be considered. Not all evidence-based therapies for postpartum depression are routinely accessible. Qualified clinicians trained in interpersonal psychotherapy or cognitive-behavior therapy are not available in many settings. Although antidepressant medication can be prescribed by any physician, local practitioners may be reluctant to provide it during pregnancy or breastfeeding, or may disagree with the mental health clinician's recommendations to use medication.

Psychotherapy and antidepressant pharmacotherapy are the mainstays of treatment for major depression.<sup>29</sup> Psychotherapy provides the advantage of no additional exposure to medication. Although many clinicians assume that women prefer psychotherapy during pregnancy or breastfeeding, our clinical observation has been that women often prefer the treatment that has been effective in the past. This treatment is associated with increased confidence that it will be effective, associated burdens that are known (side effects, time commitments, resources needed to comply). While the data typically presented by clinicians is generally grouped data; ie, the percentage of women in a group who have had a response,

it is the woman's individual history and experience that is (not surprisingly) more relevant to her decision making.

The risks associated with maternal pharmacotherapy in the postpartum may arise from drug side effects, drug interactions with other prescribed medications or over the counter agents, and risk to the infant of transmission through breastmilk. Clinical trials and effectiveness studies suggest a 30% to 40% nonresponse rate with the first course of antidepressant treatment; among non-responders, 50% fail a second trial.<sup>30</sup> More than 20% of those in outpatient primary care settings who seek treatment for depression have bipolar illness.<sup>31</sup> Therefore, it is critical to monitor closely for signs and symptoms of clinical worsening, side effects or medication intolerance, mania or hypomania, and treatment adherence. Consideration of augmentation or alternative interventions after a satisfactory initial drug trial (6 to 8 weeks duration at the tolerated upper dose limit) may be necessary.

Women may elect to feed their infants formula by personal preference or to avoid antidepressant exposure through breastfeeding. The American Academy of Pediatrics promotes continuation of breastfeeding through for the first year of life.<sup>32</sup> Infants fed breastmilk experience fewer episodes and milder severity of diarrhea, respiratory infections and ear infections. The advantages to mothers include lower rates of postpartum bleeding, faster return to pre-pregnancy weight, with a possible decreased risk for premenopausal breast cancer and osteoporosis.<sup>33</sup> About 70% of mothers begin nursing but only 33% are still breastfeeding at 6 months.<sup>34</sup> Although many women and clinicians focus on psychotropic use during breastfeeding, it is important to recognize that women take drugs for a number of reasons after birth. About 90% of postpartum women endorse medication intake in the first postpartum week, mainly for pain management after birth; 25% at 4 months postpartum; and 5% are treated with long-term medication management for chronic disorders.<sup>35</sup>

Maternal antidepressant treatment results in the presence of the drug and metabolites in breastmilk. Usually, the amounts that can be measured in infants' sera are below the limit of quantifiability or less than 10% of the maternal level.<sup>36</sup> In a comprehensive pooled analysis, Weissman et al.<sup>36</sup> concluded that routine serum level monitoring of breastfed infants was not recommended. However, the vast majority of data on infants of antidepressant-treated lactating mothers are for healthy, full-term infants. These findings cannot be generalized to premature or ill infants, who may be treated with other medications that may affect the metabolism of even small amounts of antidepressant. Serum level monitoring is appropriate in such circumstances, but analyses of the micro-quantities of serum that can be drawn from such infants are a challenge for many commercial laboratories. Serum level monitoring provides a toxicity monitoring mechanism that can be included in treatment planning if it is available in the clinician's setting.

Maternal dose or plasma levels, breast milk levels, and infant age are not reliable predictors of infant plasma drug levels.<sup>36</sup> In a pooled analysis, Weissman et al.<sup>36</sup> found that 22% of infants exposed to fluoxetine through breastmilk had serum drug levels of 10% or more of maternal levels. Seventeen percent of citalopram-exposed infants had elevated serum levels by this definition. Nortriptyline, paroxetine, and sertraline produced nonquantifiable infant

levels. These are useful data, but what if the woman only responds to a new antidepressant for which few data have been published. The quality and quantity of information affect the attractiveness of therapies during the postpartum period. For example, a woman with a past response to sertraline is probably more likely to feel comfortable with taking it during lactation than a woman who has been treated with a newer agent.

Because they are potent agents that act on the central nervous system, theoretical short and long-term risks to the infant's neurodevelopment exist. Infant behavioral monitoring before and after initiating treatment with the mother is clinically useful to monitor the effects of antidepressants during nursing.<sup>37</sup> Infants may exhibit short-term sequelae such as lethargy, poor weight gain, hypotonia and inconsolability.<sup>36</sup> Neonates may be at greater risk than older infants. Reports of adverse infant effects occurred mainly at up to age 8 weeks.<sup>36</sup>

Long-term neurobehavioral effects are uncertain since measures of infant serum drug levels do not provide a reliable indication of the effects on the developing brain or central and peripheral neurotransmitter activity. Chambers et al.<sup>38</sup> described growth impairment in 6-month old fluoxetine-exposed, nursing infants. However, their mothers had taken the same antidepressant during pregnancy, so these infants experienced far greater drug exposure than from breast-feeding alone.

Lactating mothers who elect pharmacotherapy for depression should be prescribed the lowest effective dose. The choice of antidepressant is based on a combination of factors: past efficacy for the individual patient, best tolerability, simplicity of dosing schedule, the largest body of data, shorter half-life and minimal or no metabolites. Optimal monotherapy is preferable to polytherapy. Interventions that combine an anti-depressant with psychotherapy are more favorable symptom management than two low-dose antidepressants or sedative hypnotic agents.

**Psychoeducation for the Patient**—The patient's perception of risk must be reasonably accurate to enable high quality decision making. The data that informs the process must be valid. Koren et al.<sup>39</sup> and Viguera et al.<sup>40</sup> have studied psychoeducational interventions during risk benefit decision making for psychotropic drug management in pregnancy, and have found that many women have misperceptions about the magnitude of reproductive risks. These researchers demonstrated changes in women's choices of management strategy after provision of information and support. The patient's competence, or decision-making capacity, to agree to or refuse interventions should also be evaluated during the psychoeducation process. For example, in the case of the woman whose sister lost an infant to sudden infant death syndrome (described above), the mother was able to tell the physician about antidepressants during breastfeeding in her own words, which was evidence that she clearly understood the information. She presented an understandable motivation for declining drug therapy, and applied her life experience and personal values to the deliberations to arrive at a comfortable decision.

#### **RESPONSIBILITIES OF THE PATIENT**

#### **Risk Perception**

Risk is the probability of an outcome in the presence of an exposure. Conceptualizing it is a complex challenge. To evaluate risk, the occurrence rate of an exposure-related adverse event is compared with the baseline rate in the general population. Risk data may be gathered prospectively in cohort studies or retrospectively in case control studies. Weak or moderate associations are observed commonly between suspected toxins and adverse effects or between therapeutic exposures and protective effects. The presence of weak associations in repeated studies provides validation of clinical significance. One example related to perinatal health is data from replicated studies that indicate that peri-conceptional folate supplementation decreases the risk for neural tube defects in a general population of women.<sup>41</sup>

The dimensions of risk are:

- Identification, which seems to be redundant as it is implied that the risk is identified once you begin talking about the dimensions of it;
- Permanence is it temporary, sustained, or remediable?;
- Timing (early versus delayed);
- The outcome probability (absolute versus relative, brief versus cumulative); and
- The patient's perceived importance of the outcomes (subjective sense of "badness").<sup>42</sup>

The risks and benefits associated with various forms of treatment must be weighed by the patient. For example, a risk such as a brief temporary exposure to anesthesia during electroconvulsive therapy compared to relief of severe depression may be an appealing option for the mother who is concerned about chronic drug therapy during childbearing. She may have depression that responds only to high-dose combination therapy. The alternative could be a sustained risk with exposure to several antidepressants, a considerable side effect burden and breastmilk transmission to her premature infant born at 33 weeks gestation.

The actual risk and an acceptable level of risk must be differentiated.<sup>43</sup> In interpreting risk data, three important factors are the size of the confidence interval (CI), size of the risk estimate (relative risk or odds ratio), and the biologic plausibility. A 95% CI provides reassurance of the stability of the risk estimate.<sup>44</sup> For example, lithium confers an increased risk for Ebstein's anomaly (a congenital downward displacement of the tricuspid valve) with pregnancy-related exposure that is 20 to 40 times greater than the baseline rate (1 of 20,000, or 0.005%). However, the absolute risk remains very small (1 of 2,000 to 1 of 1,000).<sup>45</sup> Though both statements are accurate, the impact of the statement to the patient that, "Your baby has a risk of a heart defect that is 20 to 40 times greater than a baby whose mother did not take lithium" is much different than the statement that, "Your baby has less than a one per thousand chance of having a heart defect."

The appreciation or estimation of risk is affected not only by the complexity of risk concepts, but also by the biases or misconceptions held by the patient, family or physician.<sup>46</sup> Biases and misperceived risk are encountered frequently in medical practice. For example, one patient may estimate her risk based on the risk of another related event already familiar to the patient ("I'm prone to medication side effects therefore I'll get terrible side effects if I take this for depression"). Another patient may overestimate a statistically small risk with an established notoriety and underestimate large risks. Alternatively, she may mis-calibrate her risk for a certain outcome or the extent or accuracy of her knowledge.<sup>42</sup> For example, one patient may place a strong value on the risk to her nursing infant for adverse effects from drug transmitted in breastmilk and underestimate her relapse risk. Perhaps her clinical history is characterized by five prior depressive episodes with a suicide attempt during periods of antidepressant therapy. The clinician can use psychotherapeutic skills to ensure that the patient has an awareness of potential underestimation. This is distinct from her valuation of the fact once she understands it.

It is also important for the clinician to take care not to inadvertently impose his or her values on the risk-benefit process. The clinician must tolerate the patient's desire to make decisions for herself. Consultation with a colleague is appropriate in cases in which the clinician is uncertain or uncomfortable with the decision making process.

To assist the patient in understanding risk concepts, the discussion must be presented in understandable terms. A 30% risk reduction could be described in more concrete terms, such as a drop in risk from 10% to 7%. The latter phrasing allows the individual to apply her personal values to a tangible risk difference. Often, the physician's attitude and advice will modify the mother's choice.<sup>34</sup> Use of tools such as graphic displays or videos, comparisons with non-medical risks to place the risk within a larger context of the person's life, and qualitative terms may communicate risk concepts more effectively.<sup>42</sup> An interdisciplinary approach that involves other trusted professionals, such as the primary care physician, obstetrician, or pediatrician may be advantageous in the care of mother-infant pairs.

#### Informed Consent

The informed consent process is composed of three elements: disclosure, competence and voluntariness (autonomy).<sup>2</sup> Disclosure of the information necessary and reasonable for arriving at a treatment decision is the clinician/physician's responsibility. Voluntariness is defined as the expression of authentic choice without coercion<sup>47</sup> and recognizes the autonomous nature of individuals with illness. The competence or decision-making capacity of the individual patient is presumed intact unless her clinical presentation suggests otherwise. Her participation in the informed consent process provides an indication of the patient's competence. A patient's competence to agree to treatment is affirmed when she demonstrates an understanding of the information regarding the nature of her illness and treatment options, appreciation of the effects of treatment, reasoning for her choices, and ability to communicate her choices.<sup>48,49</sup> Concise documentation of the information provided by the clinician and the thought process or deliberations which the patient undertook to come to her treatment decision should be recorded in her chart. This will serve to document that the informed consent process was completed and comprehensive.

#### AREAS FOR FURTHER RESEARCH

A skillful approach to the process of decision-making is an aspect of clinical treatment in all areas of medicine. Such processes are subject to research. For example, the complexity of treatment choices for patients with bipolar disorder or schizophrenia is more complicated than that for unipolar depression. What are the most fruitful ways to structure specific elements of the process to the specific disorder? Are there aspects of the illness that compromise decision-making that require the development of tools for assessment of competency?

We must learn more about the treatment preferences of women who have depression after delivery. A qualitative study of treatment preferences and responses, perceptions of risks and benefits, and satisfaction with the risk-benefit discussion would enhance knowledge. We tend to focus on symptom reduction as a successful outcome. Is that true for women, or do they focus on other domains (such as functional ability)? What are the preferences for postpartum women with respect to inclusion of their partner or other trusted individuals in the risk-benefit discussion?

#### SUMMARY

As clinicians, we tend to focus on facts. Which maternal pharmacotherapy is associated with the least amount of drug in the breastfed infants' sera? Are breastmilk levels related to infant serum levels? How frequently should psychotherapy be conducted, and how can the course of treatment be flexible with the patient's needs? What is the efficacy of alternative and novel therapies? How often does postpartum depression recur? These questions are important and lead to the data that we provide to women during the decision making process.

However, these data are derived from grouped patient data sets. The application of information from these data sets to the individual in the office is an art that requires assignment of value by the patient based on her view from her own unique perspective. The mental health professional is the provider of information, structure, support, and guidance through the dynamic process of making treatment choices. Effective decision making for the treatment of postpartum depression ideally occurs in a context that values a woman's life experiences and her psychosocial environment, and must be a collaborative process between each patient and provider to be as successful as possible.

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