Using Antidepressants During Pregnancy: An Update

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Elizabeth Z. King has no conflicts of interest with the subject matter of this article. Dr Stowe has served on speaker's bureaus for GlaxoSmithKline, Pfizer, and Wyeth; he has served on the advisory boards for Bristol-Myers Squibb and GlaxoSmithKline. He has received research grant support from GlaxoSmithKline, Pfizer, Wyeth, and the National Institutes of Health. Dr Newport has served on speaker's bureaus for AstraZeneca, Eli Lilly, GlaxoSmithKline, and Pfizer; and has received research grant support from Eli Lilly, GlaxoSmithKline, Wyeth, the National Alliance for Research on Schizophrenia and Depression, and the National Institutes of Health.

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nancy and associated with their own unique barriers to treatment.
- The relative risk of fetal exposure to maternal depression versus that of antidepressant medication remains poorly defined because of our reliance on a patchwork conglomeration of case series, pregnancy registries, and observational studies with inconsistent levels of control for potentially confounding exposures.

Nevertheless, careful synthesis of the extant data can inform the development of evidence-based guidelines for the use of antidepressants during pregnancy.

Should prenatal antidepressant therapy even be considered?

One clinical option is to avoid antidepressant therapy during pregnancy altogether. Treatment discontinuation, however, is not done without consequences. Indeed, the conventional package label warning that "use in pregnancy is not recommended unless the potential benefits justify the potential risks to the fetus" is impossible to follow unless the risks of both antidepressant therapy and treatment discontinuation are understood.

The risks of treatment discontinuation are determined by (1) the likelihood of relapse in the absence of antidepressant therapy; (2) the availability and

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EDUCATIONAL OBJECTIVES

After reading this article, you will be familiar with:

- The impact of maternal depression on the fetus.
- The risks of antidepressant therapy during pregnancy.
- Treatment planning for depressed women of reproductive capacity

Who will benefit from reading this article?

Psychiatrists, primary care physicians, neurologists, obstetricians, nurse practitioners, nurse midwives, psychiatric nurses, and other mental health care professionals. Continuing medical education credit is available for most specialties. To determine whether this article meets the CE requirements for your specialty, please contact your state licensing board.

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Despite, or perhaps because of, heightened attention to the use of antidepressants during pregnancy over the past decade, the management of prenatal maternal depression has become increasingly controversial. The myriad complexities of prenatal psychiatric care include the following:

- Diagnosis is complicated by constantly evolving symptoms of pregnancy that in many respects resemble those of depression (eg, changes in appetite, energy, sleep).
- Clinical decision making must consider the well-being of the mother, fetus, and even older children who can be adversely impacted by active maternal psychopathology.
- Alternative therapies are largely untested in pregnancy.

Indeed, the conventional package label warning that "use in pregnancy is not recommended unless the potential benefits justify the potential risks to the fetus" is impossible to follow unless the risks of both antidepressant therapy and treatment discontinuation are understood.

The risks of treatment discontinuation are determined by (1) the likelihood of relapse in the absence of antidepressant therapy; (2) the availability and efficacy of nonpharmacologic therapies; and (3) the impact of untreated maternal prenatal depression on the well-being of offspring.

Likelihood of relapse

Although pregnancy has traditionally been viewed as a period of emotional well-being, as many as 70% of women present with depressive symptoms during pregnancy and up to 16% fulfill criteria for major depression.[1-5] Furthermore, 11.5% of those evaluated for postpartum depression report onset during pregnancy.[6] A recent study, demonstrating a hazard ratio of 5.0 (95% confidence interval, 2.8-9.1) for depressive relapse during pregnancy when antidepressant treatment is discontinued, should dispel any notion that pregnancy confers any protection from depression.[7]

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Nonpharmacologic therapies

Psychotherapy represents the principal alternative to antidepressant treatment during pregnancy, although other modalities, including brain stimulation therapies (transcranial magnetic stimulation and electroconvulsive therapy), hormonal therapies, herbal therapies, and light therapy, have been suggested. A recent meta-analysis of the relative efficacy of antidepressants and psychosocial treatments during pregnancy and the postpartum period suggests that antidepressants might be critical to maximizing therapeutic benefit.[8] Specifically, the authors report effect sizes for reducing perinatal depressive symptoms of 3.048 for antidepressant monotherapy and 3.871 for antidepressants coadministered with cognitive behavioral therapy (CBT). More modest effect sizes were observed when psychosocial therapies were used alone: 2.045 for group therapy (CBT, educational and transactional analysis), 1.260 for interpersonal therapy, 0.642 for CBT, 0.526 for psychodynamic therapy, 0.418 for supportive counseling, and 0.100 for psychoeducation. These data, suggesting that antidepressant treatment might be preferable or even necessary for moderate to severe depression, coupled with the potential barriers to psychotherapy (eg, compliance, cost, availability), indicate that antidepressants remain pivotal treatment alternatives for many depressed pregnant women.

CATEGORY C

Impact of maternal depression

If fetal well-being is the preeminent objective, antidepressant therapy might still be unwarranted. Treatment that causes even minimal risk should be avoided if the illness poses little threat to the unborn child. For example, many pregnant women refuse treatment for mild self-limited conditions, eg, tension headaches and upper respiratory tract infections, that do not appear to affect fetal viability, the course of pregnancy, or obstetric outcome. Unfortunately, however, there is growing evidence that maternal depression during pregnancy carries numerous risks to the fetus.

The adverse impact of prenatal depression can be observed in maternal health behaviors during pregnancy, acute neonatal outcome, and longer-term neurodevelopmental effects in the child. Depressed pregnant women are more likely to neglect prenatal care, receive inadequate nutrition, engage in suicidal behavior, and use tobacco, alcohol, and cocaine.[9,10] Maternal depression is associated with up to 3-fold higher rates of preterm delivery,[11,12] 4-fold higher rates of low birth weight,[11] and a doubling of operative delivery and neonatal ICU admission rates.[13]

Emerging evidence indicates that fetal exposure to maternal depression can adversely affect cognitive development[14] and lead to emotional and behavioral problems that remain evident in older children.[15-19] Prenatal depression has also been linked to alterations in stress-respondent CNS activity.[20] Recent investigations by our group have demonstrated alterations in hypothalamic-pituitary-adrenal axis reactivity as evidenced by increased salivary cortisol in the infants of women with prenatal depression (P. A. Brennan, PhD, Z. N. Stowe, MD, unpublished data, April 2006). These clinical studies are complemented by an extensive array of animal research in both rodents and nonhuman primates that indicates that prenatal stress has persistent, adverse effects on the growth, learning, and function of various biobehavioral systems in the offspring.[21]

- Structural malformations associated with exposure during organogenesis.
- Alteration of the normal evolution of pregnancy, affecting fetal growth and/or the timing of parturition.
- Acute neonatal symptoms when exposure occurs proximate to delivery.
- Long-term neurodevelopmental effects of fetal CNS exposure.

Birth defects (major malformations)

Collectively comprising nearly 20,000 first-trimester infant exposures (**Table 1**), the prospective data are etine's pregnancy category.[26] Although the FDA deemed the data sufficiently compelling to alter the pregnancy classification, definitive conclusions are precluded by numerous limitations in this preliminary data set (ie, there is no nonexposed control group, the paroxetine malformation rates reported in this study approximate population norms, and the significant finding in 1 arm of the study is eliminated when those with exposure to other known teratogens are excluded).

Certainly, a conservative approach is warranted when dealing with medication use in pregnancy. Nevertheless, it is reassuring that more extensive data

Table 1

Major malformation rates associated with first-trimester antidepressant exposure: prospective reports

Medication	No. of infants exposed in first trimester	No. of infants with major malformations (%)
Fluoxetine[25,27,28,47,50]	4679	126 (2.69)
Sertraline[25,31,48,50]	3393	66 (1.95)
Citalopram[25,34,50,51]	2688	73 (2.72)
Paroxetine[25,31,48,50,52]	2687	94 (3.50)
Bupropion[25,30,49,53,54]	2550	56 (2.20)
Amitriptyline[25,49,52]	1082	40 (3.70)
Venlafaxine[25,32]	771	14 (1.82)
Trazodone[25,49,52]	404	10 (2.48)
Nortriptyline[25,49,52]	260	3 (1.15)
Escitalopram[25]	235	8 (3.40)
Imipramine[25,49,52]	188	10 (5.32)
Doxepin[25,49,52]	175	12 (6.86)
Fluvoxamine[25,48,52]	147	1 (0.68)
Nefazodone[25]	140	2 (1.43)
Clomipramine[25,52]	107	4 (3.74)
Maprotiline[49,52]	92	4 (4.35)

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RISKS OF ANTIDEPRESSANT THERAPY

Reproductive safety data have accumulated so rapidly over the past decade that antidepressants are now among the best-studied classes of medications in pregnancy; nevertheless, there remain critical gaps in our knowledge regarding their safety in pregnancy. The volume of published reproductive safety data for any given antidepressant is largely dictated by the length of time it has been on the market. Consequently, newer agents remain relatively devoid of prenatal safety data.

One critical limitation permeating the current literature is the consistent failure to validate fetal exposure. For example, previous investigations assume that maternal antidepressant compliance is 100%. No existing studies have confirmed fetal antidepressant exposure using laboratory assay of maternal/umbilical cord antidepressant concentration, documentation of prescription refill compliance, or other potential measures of compliance. Similarly, existing studies have relied on maternal self-report rather than objective laboratory documentation of substance use during pregnancy. As such, the proportion of women using illicit substances is likely underreported because of concerns about stigma and social services referral.

Taking these limitations into account, the theoretical risks of prenatal antidepressant exposure include:

Nortriptyline	260	3 (1.15)
Escitalopram[25]	235	8 (3.40)
Imipramine[25,49,52]	188	10 (5.32)
Doxepin[25,49,52]	175	12 (6.86)
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Nefazodone[25]	140	2 (1.43)
Clomipramine[25,52]	107	4 (3.74)
Maprotiline[49,52]	92	4 (4.35)
Mirtazapine[25]	47	0 (0.00)
Desipramine[49,52]	26	1 (3.85)
Protriptyline[25]	10	0 (0.00)
Trimipramine[25,52]	10	0 (0.00)
Duloxetine	0	0 (0.00)
Total	**19,691**	**524**

Publications reporting major malformation rates without clarifying timing of prenatal antidepressant exposure are not included.[29,55] Likewise, those that failed to report the malformation rates for specific medications are not included.

derived from an amalgam of pregnancy registries, poison control centers, managed health care databases, case series, and controlled observational studies. The overall major malformation rate associated with first trimester antidepressant exposure (2.66%) is actually lower than the 3% to 4% rate commonly reported in the general population.[22-24] Despite this reassuring finding, safety data remain limited for several newer compounds and older, seldom-used agents.

A recent preliminary analysis of a managed care database, demonstrating a statistically higher odds ratio for major malformations (particularly cardiovascular malformations) after first-trimester paroxetine exposure in comparison to exposure to other antidepressants,[25] led the FDA to reclassify parox-

are available for antidepressants as a class than for many other medications commonly prescribed to pregnant women, with an overall malformation rate comparable to or below population-based averages.

Fetal growth/timing of delivery

Data regarding the impact of prenatal antidepressant exposure on the vulnerability to miscarriage, preterm delivery, and low birth weight are decidedly mixed. Some have reported an association with such outcomes[27-30] whereas others have not.[31-34] This scenario is further complicated by yet other studies reporting an association of prenatal maternal stress and/or depression with prematurity and low birth weight.[11,12] Thus, no definitive conclusions can be

(Please see Antidepressants During Pregnancy, *page 92)*

Antidepressants During Pregnancy

Continued from page 91

drawn as to whether antidepressant use during gestation conveys an adverse impact on fetal growth or the timing of parturition.

Neonatal adaptation

A syndrome of neonatal symptoms associated with fetal exposure to antidepressants, specifically serotonergic antidepressants, proximate to delivery has drawn increasing attention and has been extensively reviewed.[35] Controlled prospective studies suggest that there may be an association between antidepressant exposure and poor neonatal adaptation (**Table 2**); however, closer scrutiny of these reports reveals a cadre of methodologic shortcomings. Little effort has been made to mask those evaluating the neonates as to fetal antidepressant exposure; there has been no effort to control for the severity of maternal mental illness; and key confounding exposures such as gestational age at delivery, maternal smoking, and/or maternal use of other medications have either been ignored altogether or controlled for in the crudest fashion (as dichotomous variables derived from unconfirmed maternal self-report).

A putative mechanism for antidepressant-associated neonatal respiratory difficulty has been suggested by a recent retrospective case-control study.[36] The study reported an overrepresentation of selective serotonin reuptake inhibitor (SSRI) exposure after gestational week 20 among neonates with persistent pulmonary hypertension (PPHN) than those without PPHN (adjusted odds ratio, 6.1 [2.2 - 16.8]). However, the fact that only 3.7% of the neonates with PPHN were exposed to an SSRI in late pregnancy, coupled with the recognition that PPHN is itself a relatively rare condition affecting approximately 0.19% of newborns,[37] raises questions as to whether this statistically significant finding is as clinically meaningful as the authors contend.

Another recent case-control study, comparing the exposure of neonates who required observation with healthy neonates,[38] further highlights the importance of controlling for confounding factors. In this study—in which all neonates (N = 46) were exposed to antidepressants and born to mothers fulfilling diagnostic criteria for major depression—the mothers of those who required observation had significantly higher scores on Hamilton Depression (21.7 vs 16.2) and Hamilton Anxiety (21.1 vs 13.6) rating scales, were significantly more likely to have a comorbid anxiety disorder (92.8% vs 53.1%), and were on average exposed to higher doses of clonazepam (0.43 mg/d vs 0.14 mg/d).

Neurodevelopmental outcomes

To date, only 4 studies have systematically assessed child development after prenatal antidepressant exposure. The first 2 reports, from the same group, assessed children aged 15 to 86 months, collectively comparing 126 children exposed prenatally to a tricyclic antidepressant and 90 children exposed to fluoxetine with 120 children of women with no history of depression. Using age-adjusted rating instruments, the investigators found no differences with respect to global cognition, psychomotor development, or language development.[21,39]

The third study, assessing children aged 6 to 40 months, compared 13 children of women who were depressed but did not take antidepressant medication during gestation with 31 children prenatally exposed to an SSRI.[40] This group also found no differences in global cognition; however, lower psychomotor scores were reported for the children exposed to SSRIs.

Unfortunately, the limitations of these 3 studies render their implications speculative at best. First, children were not age-matched in any of these studies. Although the authors reported age-adjusted

Table 2

Prospective cohort studies of neonatal adaptation and serotonergic antidepressant use proximate to delivery

Reference	Late exposure group(s)	Comparator group(s)	Outcome	Odds ratio (95% CI) % difference	Masked assessments*	Statistical controls†		
						Smoking at term	Gestational age	Depression severity
Chambers[28]	Fluoxetine (n = 73)	Early fluoxetine‡ (n = 101)	Poor adaptation§	8.7 [2.9-26.6]	No	Dichotomous	Dichotomous	No

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Chambers[28]	Fluoxetine (n = 73)	Early fluoxetine‡ (n = 101)	Poor adaptation§	8.7 [2.9-26.6]	No	Dichotomous	Dichotomous	No
Costei[56]	Paroxetine (n = 55)	Healthy volunteer and early paroxetine‡ (n = 54)	Respiratory distress	9.6 [1.1-79.3]	No	Dichotomous	Dichotomous	No
Laine[57]	SSRI (n = 20)	Healthy volunteer (n = 20)	Serotonergic symptoms‖	6.9 [1.6-29.2]	Incomplete	No	Dichotomous	No
Kallen[58]	SSRI (n = 563)	All women in birth registry (n > 560,000)	Respiratory distress Jaundice Hypoglycemia Convulsions	2.0 [1.4-2.8] 1.0 [0.6-1.5] 1.4 [0.9-2.0] 3.6 [1.0-9.3]	No	No¶	No	No
Oberlander[42]	SSRI (n = 28) SSRI plus clonazepam (n = 18)	Healthy volunteers (n = 23)	Poor adaptation#	5.6 [1.1-25.3]	Incomplete	No	No	No
Zeskind[59]	SSRI (n = 17)	Healthy volunteers	Tremulousness Behavioral state change REM sleep epochs REM sleep bouts REM sleep startles Motor activity Heart rate variability	29 higher, $p < .04$ 57 lower, $p < .005$ 13 higher, $p < .13$ 49 lower, $p < .001$ 48 higher, $p < .13$ 46 higher, $p < .08$ 17 lower, $p < .07$	Yes	Dichotomous	Continuous	No
Sivojelezova[34]	Citalopram (n = 63)	Healthy volunteers and early SSRI‡ (n = 158)	Any complication	1.5 [1.0-2.4]	No	No¶	No	No

CI, confidence interval; SSRI, selective serotonin reuptake inhibitor; REM, rapid eye movement.

*Reports whether those performing assessments of neonates were masked to fetal antidepressant exposure.

†Statistical controls were implemented either by subject matching or incorporating covariates in multivariate statistical analyses. Reports whether control was implemented and, if so, as a dichotomous covariate or a continuous covariate.

‡Early exposure variably defined as discontinued antidepressant before the end of 2nd trimester, the 6th month of pregnancy, or the 24th week of pregnancy.

§Poor adaptation includes jitteriness, tachypnea, hypoglycemia, hypothermia, poor tone, respiratory distress, weak or absent cry, or desaturation on feeding.

‖Serotonergic symptoms include tremor, restlessness, rigidity, shivering, hyperreflexia, myoclonus, and incoordination.

¶Maternal smoking at the first antenatal visit was controlled.

#Poor adaptation includes respiratory distress, jitteriness, and cardiac arrhythmia.

CATEGORY

index scores, the predictive validity of these indices across child developmental stages has not been established.[41] Consequently, differences in the ages of the children among the study groups might confound the results. Second, the last study mentioned above is further confounded by the fact that 29% of the participants were enrolled after delivery. This inclusion of a retrospective (postnatally enrolled) sampling could result in an overrepresentation of children with developmental delay.

The most recent investigation, by Oberlander and colleagues,[42] evaluated children at fixed time points (aged 2 and 8 months) thereby eliminating the age adjustment confounder. This study reported no difference between 46 infants exposed to SSRIs and 23 children of healthy volunteers with respect to either cognitive or motor development.

Finally, the interpretation of neonatal adaptation and neurodevelopmental outcome studies is potentially dictated, at least in part, by the sensitivity of the outcome measures employed. Recent studies are to be applauded for an increasing reliance on standardized rating instruments of infant well-being and development; however, such instruments were not specifically designed to elucidate the potential effects of fetal exposure to antidepressants or maternal depression. As a result, the sensitivity of the measures used in these studies remains open to debate. A gross measure may lack the sensitivity to identify an adverse effect and might therefore lead to an erroneous conclusion that none has occurred. Conversely, an exquisitely sensitive measure might identify an effect that is statistically significant but of little or no functional consequence and could therefore lead to an erroneous conclusion that harm has occurred.

CLINICAL DECISION MAKING

There are many shortcomings in the evidence regarding depression during pregnancy, its effects, and its treatment. The ethical implications of conducting

frequency and severity of past depressive episodes, and the presence of comorbid psychiatric and/or medical disorders. A comprehensive obstetric history should include the occurrence of prior depressive episodes during pregnancy and the postpartum period, any history of medical complications during previous pregnancies, plans for breast-feeding and, finally, prior treatment history with a detailed assessment of response to psychotherapy and specific antidepressant agents.

Patients with mild, infrequent episodes of depression might prefer to avoid antidepressant therapy in favor of psychotherapy. When antidepressant therapy is warranted, the preferred agent is one with an extensive reproductive safety database that has previously proved effective for the patient. Those currently taking an antidepressant with a particular safety concern or limited safety data might be advised to delay conception to afford an opportunity to switch to an antidepressant with a preferable safety profile.

Switching antidepressants is inadvisable. Switching after conception exposes the fetus to yet another medication and inadvertently increases the likelihood of fetal exposure to maternal depression.

Clinicians must also consider the patient's age with respect to treatment planning. Delaying conception to implement therapeutic trials of alternative therapies could inadvertently increase risk secondary to advanced maternal age. This is avoidable by treating women of reproductive capacity from the very outset as if they are, or might soon become, pregnant. In all cases, the clinician should educate women about healthy behaviors—prenatal vita-

certainty that the second antidepressant will work effectively.

Antidepressant discontinuation before delivery

To avoid the reputed transient effects of serotonergic antidepressants on the neonate, discontinuing antidepressant treatment a few weeks before to delivery has been suggested.[44] Although this approach might improve neonatal adaptation in the hours and days immediately following delivery, it is not without its shortcomings. In particular, it eliminates treatment just when the new mother will be most vulnerable to depressive illness, ie, as she approaches the postpartum period. The well-documented effects of maternal postpartum depression on infant development must, therefore, be weighed against the transient effects of antidepressant exposure at delivery that in all existing studies have been self-limited and have required no clinical intervention.

Postpartum prophylaxis

Some women who are vulnerable to postpartum depression are fortunate enough to experience relative euthymia during gestation. Conventional wisdom has been to initiate prophylactic antidepressant therapy for such women 4 to 6 weeks before anticipated delivery. Increasing concerns regarding neonatal adaptation in newborns exposed to antidepressants suggest that waiting to initiate antidepressant ther-

of little or no functional consequence and could therefore lead to an erroneous conclusion that harm has occurred.

CLINICAL DECISION MAKING

There are many shortcomings in the evidence regarding depression during pregnancy, its effects, and its treatment. The ethical implications of conducting research during pregnancy mandate the use of observational studies rather than randomized, placebo-controlled clinical trials. Conducting observational studies, however, requires considerable forethought so that confounding variables can be appropriately controlled. Too often, outcomes are attributed to antidepressant exposure in the absence of proper controls for illness effects, and vice versa.

Despite these limitations, 2 facts have clearly emerged: (1) discontinuing treatment during pregnancy dramatically increases the likelihood of recurrent depression; and (2) moderate to severe depression during pregnancy carries considerable risk for infant well-being. Consequently, there is no risk-free alternative when advising women with histories of depression regarding treatment during pregnancy. In each clinical encounter, the likelihood and risks of untreated prenatal depression must be weighed against the risks of fetal exposure to antidepressant medication.

Preconception counseling

One common clinical scenario is that of a woman who is currently being administered antidepressant therapy and planning to conceive. Preconception planning affords an opportunity for patient education and planning of clinical decision making before fetal exposure has occurred. During this visit, the clinician should assess the current mood state, the with respect to treatment planning. Delaying conception to implement therapeutic trials of alternative therapies could inadvertently increase risk secondary to advanced maternal age. This is avoidable by treating women of reproductive capacity from the very outset as if they are, or might soon become, pregnant. In all cases, the clinician should educate women about healthy behaviors—prenatal vitamins; reduction in maternal obesity; avoidance of tobacco, alcohol, and caffeine; and proper hydration and exercise.

Unplanned conception

Half of all pregnancies in the United States are unplanned.[43] Typically, patients are 6 or more weeks into an unplanned pregnancy before realizing that they are pregnant. In this scenario, it is often wise to advise a patient to continue her present treatment. Because prenatal exposure to an antidepressant has already occurred, the goal at this juncture is to protect the fetus from other potentially harmful exposures.

Abruptly stopping treatment is unwise, since it carries an extremely high risk for relapse with its attendant potential for harm. Gradually tapering medication entails an additional 3 to 4 weeks of fetal antidepressant exposure (including time for residual medication to clear), by which time organogenesis would be nearing completion. As a result, the fetus is afforded little protection from the effects of antidepressant exposure and is left vulnerable to maternal depression.

Finally, switching antidepressants to an agent with more extensive reproductive safety data is also inadvisable at this juncture. Switching after conception exposes the fetus to yet another medication and inadvertently increases the likelihood of fetal exposure to maternal depression, since there is no

Some women who are vulnerable to postpartum depression are fortunate enough to experience relative euthymia during gestation. Conventional wisdom has been to initiate prophylactic antidepressant therapy for such women 4 to 6 weeks before anticipated delivery. Increasing concerns regarding neonatal adaptation in newborns exposed to antidepressants suggest that waiting to initiate antidepressant therapy immediately after delivery might be preferable. Two small placebo-controlled studies in women with a history of postpartum depression have produced discordant results using this approach to postpartum prophylaxis.[45,46]

SUMMARY

There is a propensity in the medical literature and the news media to emphasize adverse outcomes, whereas negative study results seldom garner much attention. This is true for both medication and illness exposures. The quest to conduct the perfect study is akin to the search for the Holy Grail. Consequently, clinicians must practice within their comfort zone and have ready access to incomplete yet reliable information.

Thoughtful consideration of "potential pregnancy" in the treatment planning for women of reproductive capacity serves to reduce the consternation precipitated by a positive pregnancy test. By inquiring routinely about birth control at all visits when treating women during the reproductive years, clinicians can provide a conduit for discussion and treatment planning that aims to reduce risk for mother and child.

Drugs Mentioned in This Article

Amitriptyline (Elavil, Endep)
Bupropion (Wellbutrin)
Citalopram (Celexa)
Clomipramine (Anafranil)

(Please see Antidepressants During Pregnancy, *page 94)*

CATEGORY 1

Antidepressants During Pregnancy

Continued from page 93

Clonazepam (Klonopin)
Desipramine (Norpramin, Pertofrane)
Doxepin (Adapin, Sinequan)
Duloxetine (Cymbalta)
Escitalopram (Lexapro)
Fluoxetine(Prozac)
Fluvoxamine (Luvox)
Imipramine (Trofanil)
Maprotiline (Ludiomil)
Mirtazapine (Remeron)
Nefazodone (Serzone)
Nortriptyline (Aventyl, Pamelor)
Paroxetine (Paxil)
Protriptyline (Triptil, Vivactil)
Sertraline (Zoloft)
Trazodone (Desyrel)
Trimipramine (Rhotrimine, Surmontil)
Venlafaxine (Effexor)

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Are Veterans Receiving Adequate Mental Health Care?

by Stephen Barlas

Questions concerning the adequacy of mental health care for returning Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) veterans continue to capture congressional attention. The latest reminder was a Government Accounting Office (GAO) report issued in May stating that of the 5% of returning veterans between 2001 and 2004 who tested as being at risk for posttraumatic stress disorder (PTSD), only 2% were referred by Department of Defense (DOD) health care providers for further mental health or combat/operational stress reaction evaluations.

"DOD cannot provide reasonable assurance that OEF/OIF service members who need referrals for further mental health or combat/operational stress reaction evaluations receive them."

"DOD cannot provide reasonable assurance that OEF/OIF service members who need referrals for further mental health or combat/operational stress reaction evaluations receive them," the report said.

Any mental health care would normally be provided by the DOD for up to 180 days after discharge and then report to Secretary of Defense Donald Rumsfeld in May 2007. The task force's first meeting was in July. "High on the list will be steps for improving the awareness of the potential mental health conditions among service personnel and ways to improve the access and efficacy of our existing programs," Winkenwerder said.

VA expands mental health efforts

The VA is also expanding its efforts. When he appeared before the Senate Veterans Affairs Committee last February, R. James Nicholson, secretary of the VA, said, "The department will continue to place particular emphasis on providing care to those suffering, as a result of their service in Operation Enduring Freedom and Operation Iraqi Freedom, from a spectrum of combat stress reactions, ranging from readjustment issues to . . . PTSD."

Ira Katz, MD, PhD, deputy chief patient care services officer for mental health at the VA, said in an interview that the VA is working hard to expand mental health services for both veterup 3 new centers of excellence for mental health that were mandated by Congress. Legislation for these centers was established by Congress in 2005 and sponsored by Sen Kay Bailey Hutchison (R-Tex). Nicholson designated the 3 centers on December 5, 2005, to the VA hospitals in Waco, Texas; San Diego; and Canandaigua, NY.

VA officials in the 3 cities are currently searching for directors for those centers. They could be psychiatrists, psychologists, doctoral social workers, or doctoral nurses. "We are very pleased the centers will give us opportunity to focus on PTSD and other mental health conditions, including the stress and resiliency veterans experience throughout their life span, from the point they leave the military and as they age," Katz stated.

Meanwhile, Congress is likely to increase VA mental health funding for those centers and for support of initiatives such as better mental health care at primary care clinics. The appropriations bill for the VA, passed by the House a few days after the GAO report on PTSD came out, contains $2.8 billion for specialty mental health care for fiscal year 2007, which starts on October 1, 2006. That would be an increase over the $2.2 billion budgeted for fiscal year 2006, according to Tim Peterson, a staffer on the House Appropriations Subcommittee on Military Quality of Life and Veteran's Affairs. Treatment for PTSD and funding for the 3 centers of excellence is

or postpartum depression: a pilot randomized clinical trial. *Am J Psychiatry.* 2004;161:1290-1292.
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"DOD cannot provide reasonable assurance that OEF/OIF service members who need referrals for further mental health or combat/operational stress reaction evaluations receive them," the report said.

Any mental health care would normally be provided by the DOD for up to 180 days after discharge and then by the Department of Veterans Affairs (VA) after that. Senator Barbara Boxer (D-Calif) called the GAO finding "inexcusable" in a letter to Lt Gen Kevin Kiley, MD, Surgeon General, US Army, who is the highest ranking military officer appointed to the new DOD Mental Health Task Force. Congress ordered the Pentagon to establish that task force by April 7, 2006, but that deadline was missed.

VA and DOD care for returning veterans at risk for PTSD and other mental disorders is very much a hot-button issue these days. That explains why William Winkenwerder, Jr, assistant secretary of defense for health affairs, was quick to dispute the GAO study in an interview with the American Forces Press Service. He stated: "The level of our effort and our outreach is unprecedented. We have broken new ground."

Whatever new efforts the DOD has made—and critics like Boxer dispute the extent of any improvements—will probably be expanded on after the Mental Health Task Force submits a Operation Iraqi Freedom, from a spectrum of combat stress reactions, ranging from readjustment issues to . . . PTSD."

Ira Katz, MD, PhD, deputy chief patient care services officer for mental health at the VA, said in an interview that the VA is working hard to expand mental health services for both veterans with PTSD and those with other psychiatric diagnoses. Reflective of that effort is a request for proposals recently issued by the VA. The 21 Veterans Integrated Service Networks (VISNs), which are regional arms of the VA, were asked to submit proposals for better integrating mental health care into primary care settings. Laurie Tranter, a VA spokeswoman, said there is no dedicated funding stream attached to this initiative. The first set of winning proposals will be funded in fiscal year 2006 and will have their funding continued in fiscal year 2007, when additional VISNs may be added to this new program.

Katz explained that of the 555,500 veterans who have returned home since the Iraq and Afghanistan war fronts opened, 168,500 as of February 2006 have elected to seek care from VA health centers for a psychiatric diagnosis (the second most common diagnosis after musculoskeletal conditions) and 15% of the latter group sought treatment for PTSD.

In addition, the VA is slowly setting for fiscal year 2007, which starts on October 1, 2006. That would be an increase over the $2.2 billion budgeted for fiscal year 2006, according to Tim Peterson, a staffer on the House Appropriations Subcommittee on Military Quality of Life and Veteran's Affairs. Treatment for PTSD and funding for the 3 centers of excellence is included within the $2.8 billion. The Senate has not acted yet.

Dan Gage, spokesman for Rep James Walsh (R-NY), chairman of the House appropriations subcommittee in charge of VA and DOD mental health funding, said it is not surprising that the VA is taking its time setting up those 3 centers. "It is a new step for the VA and we don't want to rush to do it just to say we did it," explained Gage. ❐