

Depression in Pregnancy: Treat or Do Not Treat?

Amani Mohsen*

Independent Researcher, Beirut, Lebanon

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*Corresponding author: Amani Mohsen, Independent Researcher, Beirut, Lebanon

Mini Review

Globally, mental health disorders are increasingly prevalent worldwide with depression particularly contributed to the largest percentage of global disability (7.5% of all years lived with disability in 2015). It is more common in females than males affecting 4 -7% of women in reproductive age group [1]. Women with mild depression are treated with cognitive based therapy and antidepressants are used depending on the severity of the symptoms [2]. Utilizing antidepressants preconception and during pregnancy was assessed in wide range of studies to evaluate the risk of associated congenital anomalies. Ornoy et al reviewed the association between tricyclic antidepressants (TCA) and congenital anomalies. Early studies showed slight increase in the associated risk however the following large studies showed no association [2]. An updated analysis of the Quebec cohort of 18487 depressed pregnant women revealed increased risk of major congenital anomalies with citalopram (adjusted OR, (aOR) 1.36, 95% CI 1.08 to 1.73; 88 exposed cases) mainly anomalies related musculoskeletal system and craniosynostosis. In general, TCA was associated with eye, ear, face and neck defects (aOR 2.45, 95% CI 1.05 to 5.72), and digestive defects (aOR 2.55, 95% CI 1.40 to 4.66) [3]. New generation antidepressants such as selective serotonin reuptake inhibitors (SSRI) and selective norepinephrine reuptake inhibitors (SNRI) were also evaluated. A systematic review of 23 studies evaluated the associated risk of congenital anomalies with Paroxetine (SSRI) in first trimester versus no exposure. Paroxetine was associated with 23% increased risk of any major congenital anomaly in meta-analysis of 15 studies. Cardiac anomalies were significantly increased mainly bulbus cordis anomalies and anomalies of cardiac septal closure (pooled OR 1.42, 95% CI 1.07, 1.89; n = 8 studies), atrial septal defects (pooled OR 2.38, 95% CI 1.14, 4.97; n =4 studies) and right ventricular outflow tract defect (pooled OR 2.29, 95% CI 1.06, 4.93; n =4 studies) [4]. In a systematic review of 12 cohort studies, first trimester exposure to Sertraline (SSRI) was significantly associated with cardiac anomalies (OR =1.36; 95% CI =1.06-1.7) specifically atrial and ventricular septal defects [5]. A third systematic review of eight studies showed no increased risk of congenital anomalies with first trimester exposure to either

Venlafaxine or Duloxetine knowing that included sample size was small in this review [6]. A population-based case-control study involving 3.3 million births from 12 European registries showed that first trimester uses of selective serotonin reuptake inhibitor (SSRI) is associated with congenital heart diseases mainly Tetralogy of Fallot (OR 3.36, 95 % CI 1.67-6.75), and Ebstein's anomaly (OR 8.23, 95 % CI 2.91-23.28) [7]. Another analysis of three population-based registries of 519, 117 deliveries showed that preconception or early exposure to SSRI is associated with congenital heart diseases however stopping these medications prior to pregnancy reduces the risk of subsequent anomalies [8]. SSRI type was not identified in both population-based analyses.

Discontinuation of antidepressants prior to pregnancy is associated with 5 times risk of relapse of depression during pregnancy in comparison with those who maintained their medication [9]. A systematic review of 30 studies showed an association between preterm delivery and untreated depression during pregnancy (OR =2.43; 95% CI, 1.47 to 4.01; P =.001) [10]. Other systematic review of the association between untreated depression and neonatal outcomes revealed that untreated depression is associated with increased early neonatal distress, less orientation and motor activity, disrupted sleep and adverse long term neurobehavioral outcomes [11]. A systematic review by Jarde et al, included 23 observational studies and showed that depression is significantly associated with preterm labor and low birth weight [12]. Furthermore, severity of antenatal depression will affect maternal quality of life and exacerbate negative consequences. Depression in pregnancy warrants re-assessment of the depressed woman and treat each woman individually and balance the risks of antidepressants versus the risk of depression which would be severe and associated with complete disability and suicidal ideation. Public interventions and social connectedness are highly needed to fight depression and prevent its serious consequences.

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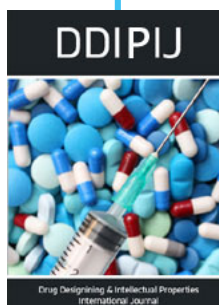
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