LUPINE PUBLISHERS
Open Access

Drug Designing & Intellectual Properties International Journal

DOI: 10.32474/DDIPIJ.2018.02.000128

ISSN: 2637-4706

Mini Review

Depression in Pregnancy: Treat or Do Not Treat?

Amani Mohsen*

Independent Researcher, Beirut, Lebanon

Received: July 19, 2018; **Published:** July 25, 2018

***Corresponding author:** Amani Mohsen, Independent Researcher, Beirut, Lebanon, Email: dr-amanimohsen@hotmail.com

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 track 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.

References

1. (2017) World Health Organization. Depression and other common mental disorders: Global health estimates.

2. Ornoy A, Weinstein-Fudim L, Ergaz Z (2017) Antidepressants, Antipsychotics, and Mood Stabilizers in Pregnancy: What Do We Know and How Should We Treat Pregnant Women with Depression. Birth defects research 109(12): 933-956.

3. Bérard A, Zhao J-P, Sheehy O (2017) Antidepressant use during pregnancy and the risk of major congenital malformations in a cohort of depressed pregnant women: an updated analysis of the Quebec Pregnancy Cohort. BMJ open 7(1): e013372.

4. Bérard A, Iessa N, Chaabane S, Muanda FT, Boukhris T, et al. (2016) The risk of major cardiac malformations associated with paroxetine use during the first trimester of pregnancy: a systematic review and meta-analysis. British journal of clinical pharmacology 81(4): 589-604.

5. Shen ZQ, Gao SY, Li SX, Zhang TN, Liu CX, et al. (2017) Sertraline use in the first trimester and risk of congenital anomalies: a systemic review and meta-analysis of cohort studies. British journal of clinical pharmacology 83(4): 909-922.

6. Lassen D, Ennis ZN, Damkier P (2016) First-Trimester Pregnancy Exposure to Venlafaxine or Duloxetine and Risk of Major Congenital Malformations: A Systematic Review. Basic & clinical pharmacology & toxicology 118(1): 32-36.

7. Wemakor A, Casson K, Garne E, Bakker M, Tucker D, et al. (2015) editors. Selective serotonin reuptake inhibitor antidepressant use in first trimester pregnancy and risk of congenital anomalies: A European register-based study. Eur J Epidemiol 30(11): 1187-7798.

8. Jordan S, Morris JK, Davies GI, Tucker D, Thayer DS, et al. (2016) Selective Serotonin Reuptake Inhibitor (SSRI) antidepressants in pregnancy and congenital anomalies: analysis of linked databases in Wales, Norway and Funen, Denmark. PloS one 11(12): e0165122.

9. Cohen LS, Altshuler LL, Harlow BL, Nonacs R, Newport DJ, et al. (2006) Relapse of major depression during pregnancy in women who maintain or discontinue antidepressant treatment. Jama 295(5): 499-507.

10. Grigoriadis S, VonderPorten EH, Mamisashvili L, Tomlinson G, Dennis C-L, et al. (2013) The impact of maternal depression during pregnancy on perinatal outcomes: a systematic review and meta-analysis. J Clin Psychiatry 74(4): e321-341.

11. Suri R, Lin AS, Cohen LS, Altshuler LL (2014) Acute and long-term behavioral outcome of infants and children exposed in utero to either maternal depression or antidepressants: a review of the literature. The Journal of clinical psychiatry 75(10): e1142-1152.

12. Jarde A, Morais M, Kingston D, Giallo R, MacQueen GM, et al. (2016) Neonatal outcomes in women with untreated antenatal depression compared with women without depression: a systematic review and meta-analysis. JAMA psychiatry 73(8): 826-837.

Submission Link: Submit Article

DOI: 10.32474/DDIPIJ.2018.02.000128