

Table 3. Studies Describing Maternal Outcomes of Clozapine Treatment During Pregnancy

First author and year of publication	Number of mothers (number of pregnancies/infants)	Maternal outcomes
Nguyen 2020 ²⁹	N = 8 (9)	No psychotic relapse during the course of the 9 pregnancies Constipation: n = 5 (55.5%), including 1 fecal impaction during labor Symptomatic orthostatic hypotension, at 34 weeks' gestation, with conservative management until delivery: n = 1 Persistent tachycardia (4 days postpartum): n = 1 (patient had been on a stable dose of 400 mg of CLZ for 1.5 years prior to conception) Preeclampsia: n = 0 (0%) GDM: n = 6 (66.7%) (all with pre-pregnancy BMIs in the overweight or obese range) Medication controlled: n = 2 (22.2%) Diet controlled: n = 4 (44.4%)
Narayanaswamy 2018 ³²	N = 1 (1)	GDM at the 36th week (normal pre-pregnancy BMI)
Uygur 2019 ³³	N = 1 (2)	Pregnancy 1: # Pregnancy 2: GDM in the 18th week (unknown pre-pregnancy BMI, but no family history of diabetes), with successful dietary control No psychotic exacerbation
Imaz 2018 ³⁰	N = 3 (4)	M1: No complications M2: GDM from week 14 Brief psychiatric hospitalization 5 days after delivery due to a relapse of manic psychotic symptoms, with rapid response to an increase in CLZ to 200 mg/d M3-1: Psychiatric hospitalization in week 26 until the end of pregnancy M3-2: Psychiatric hospitalization at 6 weeks of pregnancy after alterations in the mother's behavior, without evidence of a relapse in schizoaffective disorder
Hatters Friedman 2016 ¹⁸	N = 1 (1)	GDM in the single pregnancy exposed to CLZ (unknown pre-pregnancy BMI)
Köse Çinar 2016 ³⁵	N = 1 (1)	Clinical admission with paranoid and persecution delusions at week 33 No metabolic diseases during pregnancy with normal pre-pregnancy BMI
Guyon 2015 ³⁷	N = 1 (1)	GDM at the 26th week, with successful dietary management (unknown pre-pregnancy BMI)
Shao 2015 ²⁴	N = 33 (33)	Psychotic relapse in 3 CLZ-using mothers GDM in 2 CLZ-using mothers Pregnancy-induced hypertension in 2 CLZ-using mothers
Bodén 2012 ²⁰	Group 1: N = 169 CLZ- and/or olanzapine-exposed mothers (169) Group 2: N = 388 OAP-exposed mothers (388)	Risk of GDM compared to nonexposed women: Group 1: OR 2.44 (95% CI, 1.14–4.24) Group 2: OR 2.53 (95% CI, 1.48–4.34) Risk of GDM compared to nonexposed women after adjustment for early pregnancy BMI: Group 1: OR 1.46 (95% CI, 0.84–2.53) Group 2: OR 1.71 (95% CI, 0.82–3.56) Increased early pregnancy BMI seemed to be the major cause of GDM
Coston 2012 ³⁸	N = 2 (2)	M1: GDM (unknown pre-pregnancy BMI) M2: GDM (unknown pre-pregnancy BMI)
Moreno-Bruna 2012 ³⁹	N = 1 (1)	No known GDM, but a weight gain of 16 kg
Duran 2008 ⁴¹	N = 2 (3)	M1-1: No psychotic exacerbation Normal fasting blood glucose levels Normal lipid profile Normal hemoglobin A _{1c} levels No history of GDM in the medical records (normal pre-pregnancy BMI) M1-2: No history of GDM in the medical records (no pre-pregnancy BMI information) M2: No history of GDM in the medical records (normal pre-pregnancy BMI)
Mendhekar 2007 ⁴³	N = 1 (1)	Good nutritional care No exacerbation throughout the pregnancy Normal routine laboratory investigations (including blood glucose, hemoglobin, and white blood cell count)
Doherty 2006 ⁴⁵	N = 1 (1)	BMI 34 mg/kg ² at delivery Normal blood sugar at regular antenatal visits
Sethi 2006 ⁴⁴	N = 1 (1)	No GDM (unknown pre-pregnancy BMI)
Gupta 2004 ⁴⁷	N = 1 (2)	Pregnancy induced hypertension in both pregnancies
Karakula 2004 ⁴⁸	N = 1 (1)	GDM (unknown pre-pregnancy BMI)
Mendhekar 2003 ⁴⁹	N = 1 (1)	Normal routine laboratory investigations, including glucose monitoring No GDM (unknown pre-pregnancy BMI)
Nguyen 2003 ⁵⁰	N = 1 (2)	Pregnancy 1: GDM (unknown pre-pregnancy BMI) Pregnancy 2: no GDM (normal pre-pregnancy BMI) No psychiatric exacerbations during in both pregnancies
Stoner 1997 ⁵⁴	N = 2 (2)	M1 and M2: Psychiatric symptoms intensified during pregnancy M1 and M2: Uncooperative during labor
Waldman 1993 ⁵⁸	N = 1 (1)	GDM in the second trimester (unknown pre-pregnancy BMI) Otherwise uneventful No exacerbation of psychiatric illness throughout gestation, labor, and delivery

#No information.

Abbreviations: BMI=body mass index, CLZ=clozapine, NorCLZ=norclozapine, GDM=gestational diabetes mellitus, M1=mother 1 (and so on), M2-1=mother 2, pregnancy 1 (and so on), OAP=other antipsychotics, OR=odds ratio.