

Contents lists available at ScienceDirect

The Lancet Regional Health - Europe



journal homepage: www.elsevier.com/lanepe

# Letter Malformations and pregnancy with schizophrenia

## Alain Braillon<sup>1,\*</sup>, Susan Bewley<sup>2</sup>

<sup>1</sup> previously senior consultant. Amiens, France

<sup>2</sup> Emeritus Professor of Obstetrics and Women's Health. Department of Women & Children's Health, King's College London, London, UK

### ARTICLE INFO

Article History: Received 18 September 2021 Accepted 5 October 2021

The study highlighting the high prevalence of complications associated with pregnancy, delivery and neonatal outcomes (gestational diabetes, gestational hypertension, genito-urinary infection, intrauterine growth retardation and preterm labour) in women with schizophrenia deserved comment [1].

The claim that "no significant differences were found for congenital malformations (p=0.18) failed to raise adequate concern about a 23% increase in risk or absolute risk increase of 0.5%, (2.7% during pregnancy with schizophrenia vs 2.2% in controls) [1]. The role of antipsychotic medications should have been investigated as, for example, olanzapine causes major congenital malformations [2]. Sadly, antipsychotic prescriptions are not available in the French national hospital database. Further, this risk is likely to be underestimated as serious malformations can explain, at least in part, the 2.17 increase in the adjusted odds ratio for stillbirth and medical abortion [1]. Indeed, there is a two-fold higher risk of stillbirth in women exposed to antipsychotic medications compared with women exposed only prior to pregnancy [3]. Last, further investigations are needed to characterize child neurodevelopmental as effects of antipsychotic medications on the developing fetal brain are likely.

Fabre and colleagues rightly called for health policy interventions before and during pregnancy with social determinant approaches as well as for maintaining antipsychotic treatment at the lowest dose possible [1]. However, as the evidence base for psychotropic use in pregnancy is exclusively observational, it is not acceptable that the safety issue remains by-passed once more. Post-market surveillance studies must be systematic and mandatory [4,5]. In the era of 'big data', data linkage between prescriptions with obstetric and child outcomes should be routine for drugs during pregnancy.

#### Contributors

AB wrote the original draft, SB reviewed & edited. Both validated the final piece.

#### Funding

None.

#### **Declaration of Interests**

AB and SB are among industry independent experts on Jeanne Lenzer's list (https://jeannelenzer.com/list-independent-experts). SB chairs Healthwatch, a charity promoting science and integrity in healthcare (https://www.healthwatch-uk.org/).

#### References

- Fabre C, Pauly V, Baumstarck K, et al. Pregnancy, delivery and neonatal complications in women with schizophrenia: a national population-based cohort study. Lancet Reg Health Eur. 2021 Online 6 September. doi: 10.1016/j.lanepe.2021.100209.
- [2] Ellfolk M, Leinonen MK, Gissler M, Kiuru-Kuhlefelt S, Saastamoinen L, Malm H. Secondgeneration antipsychotic use during pregnancy and risk of congenital malformations. Eur J Clin Pharmacol 2021 Online Jun 8. doi: 10.1007/s00228-021-03169-y.
- [3] Sørensen MJ, Kjaersgaard MI, Pedersen HS, Vestergaard M, Christensen J, Olsen J, Parner E, Pedersen LH, Bech BH. Risk of fetal death after treatment with antipsychotic medications during pregnancy. PLoS One 2015;10:e0132280. doi: 10.1371/ journal.pone.0132280.
- [4] Jonge L, Zetstra-van der Woude PA, Bos HJ, de Jong-van den Berg LT, Bakker MK. Identifying associations between maternal medication use and birth defects using a case-population approach: an exploratory study on signal detection. Drug Saf 2013;3611:1069–78. doi: 10.1007/s40264-013-0082-2.
- [5] Wang Z, Ho PWH, Choy MTH, Wong ICK, Brauer R, Man KKC. Advances in epidemiological methods and utilisation of large databases: A methodological review of observational studies on central nervous system drug use in pregnancy and central nervous system outcomes in children. Drug Saf 2019;42:499–513. doi: 10.1007/s40264-018-0755-y.

https://doi.org/10.1016/j.lanepe.2021.100251

2666-7762/© 2021 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/)

DOI of original article: http://dx.doi.org/10.1016/j.lanepe.2021.100257, http://dx.doi.org/10.1016/j.lanepe.2021.100209.

<sup>\*</sup> Corresponding author.

E-mail address: braillon.alain@gmail.com (A. Braillon).