

NRAMP Newsletter

Issue 3, September 2016

The National Register of Antipsychotic Medication in Pregnancy (NRAMP)

www.maprc.org.au/nramp

NRAMP Newsletter for Clinicians, Issue 3, 2016

We extend a very warm welcome to new and current readers of our NRAMP Newsletter for Clinicians. As always, please accept our sincere thanks for your continued support and enthusiasm.

NRAMP continues

We are delighted to report that even though our second recruitment target of 300 was achieved in June of this year, NRAMP will continue to collect data, with a new target being set at 500 participants. This has many benefits, including the opportunity to continue receiving ongoing referrals and queries, the expansion of our ever-growing clinical network and the continued collection of vital data to inform future practice.

Recruitment drive

With our new target to aim for, we are ready to surge ahead with recruitment. Your ongoing input is vital to the expansion of data collection and the development of best practice, antipsychotic medication safety guidelines. May we encourage you to continue your support in this way. We would also like to express our gratitude to all clinicians who ring or email with study-related queries. This tells us that study awareness continues to grow, with professional opinion being sought from the NRAMP Team on a regular basis. Your queries and referrals are always very welcome. Do continue to contact us for information and guidance on your patient-tailored, antipsychotic medication management concerns.

NRAMP Recruitment	
Screened	663
Consented	304
Current Target	500

NRAMP Referrals

The Clinicians' Portal of the NRAMP Website (address noted above), provides our downloadable Patient Referral Form. Please be assured that referring your patients to NRAMP need not be an onerous task. On the contrary, it is has been designed to suit time-poor clinicians, and can be readily achieved during face-to-face patient consultations. We provide a *Quick Reference Guide* here, for your convenience. In short, we respectfully request that you mention NRAMP to your patients, obtain their consent to refer them and then send their details (name, and contact numbers) via email, fax or phone, to the NRAMP Team (details on page 2). This worthwhile activity allows clinicians the opportunity to strengthen and support the body of knowledge around perinatal mental health care by encouraging a more collaborative, patient-centred approach which also involves and acknowledges the choices of women. The ongoing cycle of **patient - treatment - research - treatment adjustment - improved patient outcomes** has the potential to strengthen and support current health services.

NRAMP Quick Reference Guide for patient referral		
Step 1	INFORM	Your patients about NRAMP
Step 2	OBTAIN	Your patients' verbal consent for referral
Step 3	REFER	Your patients' details by phone, email or fax

NRAMP Website

The NRAMP Website, specifically the Clinicians' Portal, is designed to keep you up to date with all things NRAMP. Although the database is currently not available on this site, we do provide our collected publications, current and archived issues of the Clinicians' Newsletter, referral information and newsworthy items. Access may be obtained by emailing the NRAMP Co-ordinator (details on page 2), and providing your name, contact details, role, place of work and Provider Number or Registration Number. You will then receive an email when your access to the site becomes active.

NRAMP Snapshot

One of the many areas of interest, and to provide clinicians with an update of our findings, is tracking the prevalence, incidence and outcomes for mothers and infants where mothers have developed gestational diabetes mellitus (GDM), either de novo or with subsequent pregnancies. The combination of pregnancy, GDM and antipsychotics can be difficult to manage, putting mothers and infants at high risk for adverse events. Studies report an increased risk of developing GDM where women have taken atypical antipsychotics during pregnancy (a, b, c). Antipsychotics are also known to be weight-promoting, while being overweight or obese pre-pregnancy and having a family history of diabetes are also strong predictors of GDM.

Maternal risk factors

Pre-pregnancy BMI >25 (being overweight or obese); excessive weight gain during pregnancy; family history of diabetes mellitus (DM); previous GDM or co-morbid DM; history of polycystic ovary syndrome (PCOS); medications (particularly antipsychotics); poor lifestyle choices (poor diet, lack of or minimal exercise); possible caesarean section (with accompanying risks, particularly when obese pre-pregnancy)

Maternal Outcomes

Looking at the first 300 women consented to NRAMP, 62 (21%) developed GDM, the majority for the first time. This includes 19 (31%) women who were also obese (BMI >30) pre-pregnancy, 35 (56%) who had a family history of DM and four women for whom DM was an ongoing issue at 12 months postpartum. Maternal atypical antipsychotics tracked in this group included quetiapine, olanzapine, risperidone, aripiprazole and clozapine, all taken throughout pregnancy. In comparison, the Australian Bureau of Statistics (ABS, 2012) report GDM in 5-10% of the general Australian pregnant population (d).

Infant risk factors

Macrosomia (excessive birth weight); prematurity; respiratory distress syndrome; hypoglycaemia; obesity in later life; Type 2 DM also in later life.

Infant Outcomes

To date we have recorded 43/62 (69%) live births to mothers who were taking atypical antipsychotics and developed GDM during pregnancy; there were no recorded miscarriages, terminations or stillbirths in this group. The majority of births were vaginal, with 8 (19%) by emergency caesarean section (for fetal distress, maternal anxiety).

Respiratory distress: Eighteen infants (18/43, 42%) had varying degrees of respiratory distress at birth, to mothers with GDM who took quetiapine (7), olanzapine (3), risperidone (3), aripiprazole (1) and clozapine (4). ABS comparison is 20%.

NICU and/or SCN admission: Twenty five infants (25/43, 58%) were admitted to NICU, SCN or both. Mothers with GDM took quetiapine (9), olanzapine (4), risperidone (3), aripiprazole (3) and clozapine (6). ABS comparison is 15.4%.

Large for gestational age (LGA): Eight infants (8/43, 19%) weighed > 3500gm at birth. Mothers with GDM took quetiapine (4), olanzapine (2) and aripiprazole (2).

Conclusion

These outcomes from our cohort clearly indicate that women with mental illness who take atypical antipsychotic medication during pregnancy have an increased risk of developing GDM, when compared to the Australian pregnant population. The mix of these three factors alone are predictors of adverse outcomes for mothers and infants, the latter being at further risk of developing Type 2 DM and obesity in later life. At the very least, there must be pre-conception and lifestyle planning, education and management for these women, with ongoing perinatal risk assessment and support for mothers, infants, families and communities, both now and in the future.

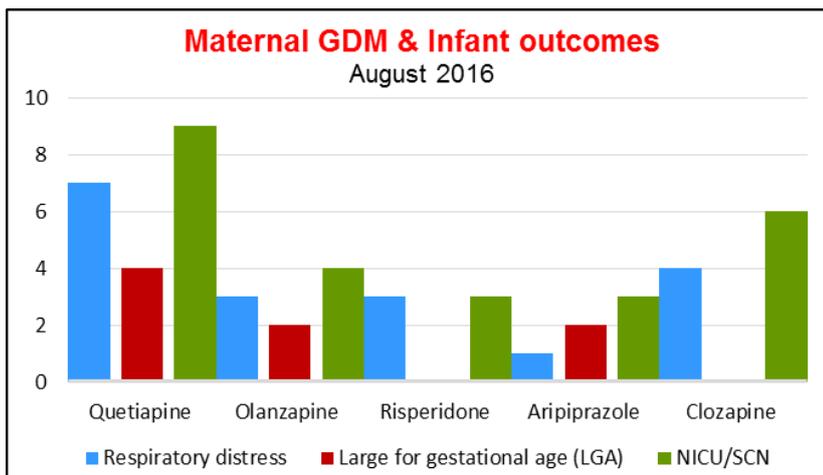
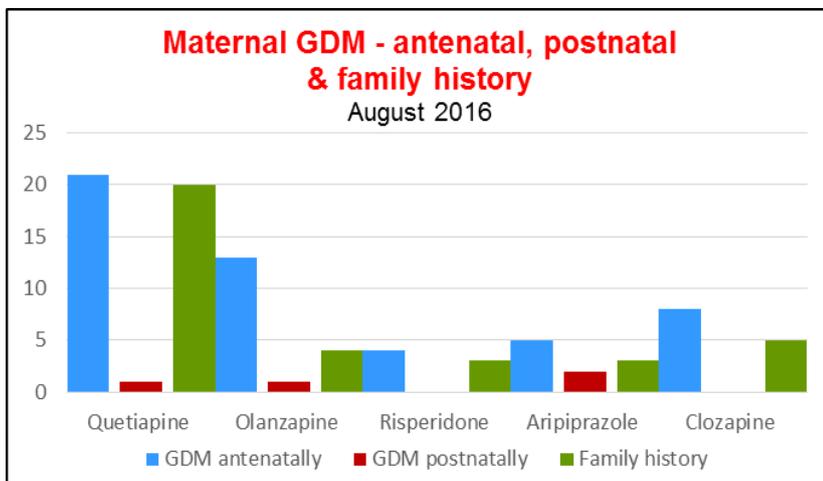
References

(a) Gentile, S. (2014); (b) Boden, R et al. (2012); (c) Galbally, M et al. (2014); (d) Australian Bureau of Statistics (ABS) (2012)

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