Antenatal prescribing patterns in a specialist perinatal mental health service: A retrospective case-record analysis

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Introduction

The perinatal period is a time of increased risk for maternal mental health. Moreover, both maternal mental disorder and its pharmacological treatment pose a risk for the fetus, with potentially significant long-term effects on cognition and behaviour (Hay *et al.* 2001; Hay *et al.* 2003; Ansorge *et al.* 2008).

Balancing the risks and benefits of medication for mothers and babies is of critical importance, in particular the potential neurodevelopmental effects of antenatal exposure to psychotropics. The scale of antenatal prescribing in the USA is concerning, with an estimated 1 in 3 pregnant women taking psychotropic medication (ACOG 2008). Similar data for the UK is lacking, but a recent study suggests that rates are lower here (Taylor *et al.*, personal communication).

Perinatal mental health services have been established in the UK to provide specialist psychiatric care during pregnancy. Identifying current patterns of perinatal prescribing is an important part of informing future practice, as a prelude to minimising risks and maximising benefits for mothers and babies. We aimed to identify key characteristics of antenatal psychotropic prescribing in a specialist perinatal mental health service in Glasgow.

Method

The Perinatal Mental Health Service (PMHS) in Glasgow provides specialist psychiatric care for women in the West of Scotland during pregnancy and up to 1 year postnatally. It receives referrals for more than 250 women annually for a variety of reasons, from preconception advice through to inpatient care for puerperal psychosis. Patients attending the service are from a range of socioeconomic backgrounds, including several areas that are among the most deprived in the UK.

Data for all patients seen by the PMHS are routinely summarised. We reviewed all summaries available over a 2 year period, and entered data anonymously into Microsoft Excel™ for analysis. Patterns of antenatal psychotropic prescribing were identified, including type and timing of drug, and duration of exposure. Psychotropics were defined as antidepressants, antipsychotics or mood stabilizers described in the British National Formulary (BNF) Sections 4.3, 4.2 and 4.2.3 (excluding Benzodiazepines, but including Lamotrigine [Section 4.8.1]) (BNF 60, September 2010).

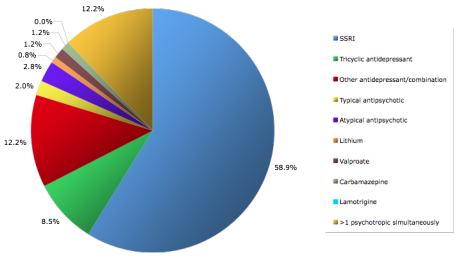
Results

Summary sheets were available for 627 women. Analysis revealed that 39.2% of patients were prescribed a psychotropic during pregnancy, with 35.8% of these also taking other (non-psychotropic) medication. Data were categorised into type of drug, timing of drug and duration of exposure to drug.

Type of drug (Figure 1)

The majority of women prescribed a psychotropic antenatally were taking Selective Serotonin Reuptake Inhibitor (SSRI) monotherapy (Figure 1). 12.2% were prescribed more than 1 psychotropic simultaneously.

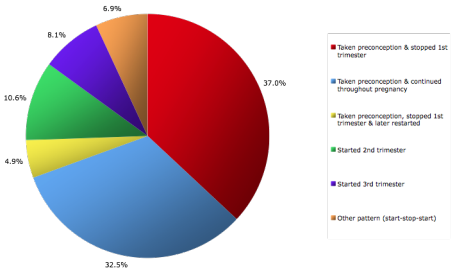
Figure 1 Type of drug



Timing of drug (Figure 2)

32.5% of those taking psychotropics before conception continued medication throughout pregnancy, while 41.9% discontinued in the 1st trimester (although a minority subsequently restarted). 18.7% started medication in the 2nd or 3rd trimester, with the rest following other stop-start patterns of prescribing.

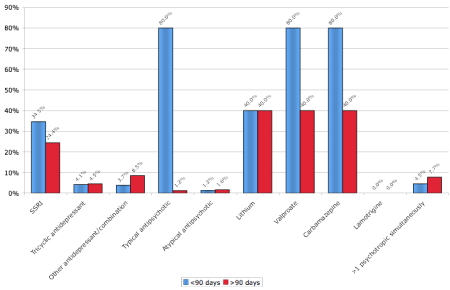
Figure 2 Timing of drug



Duration of exposure (Figure 3)

50.8% were exposed for less than 90 days, and 49.2% for more than 90 days.

Figure 3 Duration of exposure to drug



Discussion

Significant numbers of patients seen in a perinatal mental health service are prescribed psychoactive medication antenatally. However, whereas over 70% of women in a general maternity population who were prescribed a psychotropic before conception continued taking it throughout pregnancy, this was true of only 32.5% in this sample (Taylor *et al.*, personal communication). It is plausible that specialist input leads to reduced antenatal psychotropic prescribing, and therefore GPs, obstetricians and midwives should be encouraged to consider referring all pregnant women on psychotropics for psychiatric review, at the very least by a general adult psychiatrist. This is all the more important as it is duration of exposure rather than timing that appears to pose most risk to the fetus (Oberlander *et al.* 2008).

The majority of fetuses were exposed to SSRI monotherapy, but a significant proportion were also exposed to other psychotropics. Although current data are largely reassuring about the short-term safety of antenatal psychotropics in general and SSRIs in particular (with a few notable exceptions), our knowledge of their long-term consequences is minimal. This is especially concerning in light of recent work on neurobehavioural outcomes in rodents exposed to serotonergic agents during early neurodevelopment (Ansorge *et al.* 2004; Ansorge *et al.* 2008). As always, more research is required, but the possibility that specialist psychiatric input reduces antenatal psychotropic prescribing merits specific attention.

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