

review of the safety of SSRIs. No members of the expert working group have financial interests in any of the companies that hold marketing authorisations for SSRIs. The MHRA funded the study and professional staff at the MHRA, including JM and LW, have been acting as secretariat to or observers on the expert working group's review. Neither JM nor LW have any personal financial interests in any drug product. DG, JC, and DA are members of the MHRA's expert working group on the safety of SSRIs, and DA is a member of the Committee on Safety of Medicines. They act as independent advisers, receiving travel expenses and a small fee for meeting attendance and reading materials in preparation for the meeting. DA has spoken on the methodology of adverse drug reactions in HIV at a scientific meeting attended by several pharmaceutical companies and sponsored by GlaxoSmithKline (GSK). A honorarium was paid to her department. SE has no personal interests to declare. His department receives funding from many pharmaceutical companies, including GSK, but mainly for methodological research. SE has no direct involvement in any of this. The General Practice Research Database Division receives funding for services, including the conduct of commissioned research, from a wide range of public sector bodies and the pharmaceutical industry. CM and SR have no competing interests to declare.

Ethical approval: General Practice Research Database Scientific and Ethical Advisory Group.

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## Subfecundity and neonatal mortality: longitudinal study within the Danish national birth cohort

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Treatment for infertility correlates with adverse outcomes in pregnancy, especially in singleton deliveries.<sup>1</sup> A long time to pregnancy (subfecundity) also correlates with adverse outcomes,<sup>2-4</sup> but few studies evaluating treatment take subfecundity into consideration. We explored the association between time to pregnancy and neonatal death in the Danish national birth cohort.

### Participants, methods, and results

We identified 27 624 firstborn singleton babies, born alive from the 24th week of gestation between March 1998 and December 2001, whose mothers were enrolled in the Danish national birth cohort.<sup>4,5</sup> Mothers had been interviewed during pregnancy (50% by the 16th completed week and 95% by the 25th) and asked about pregnancy planning and other factors.

Women who reported having planned or partly planned their pregnancy were asked how long it had taken them to conceive. If the answer was six months or longer, they were further asked whether they had received infertility treatment. We excluded 402 women

reporting infertility treatment after less than one year of trying and 11 women with missing data on smoking. We analysed 27 329 births (with 66 deaths within 28 days of life (0.24%)). Age at death was recorded in the Danish birth registry.

We grouped women into five categories: up to two months of waiting time (reference); 3-12 months; > 12 months, no infertility treatment; > 12 months, treatment reported; and non-planners (including part planners). We examined the association between these categories and neonatal death through logistic regression, adjusting for mother's age, body mass index, smoking, and social class, the latter derived from the mother's job title.<sup>4</sup>

The risk of neonatal death increased with increasing time to pregnancy (table). Death between the 29th and the 365th day of life was not related to time to pregnancy (data not shown).

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Neonatal deaths (per 1000 births) as a function of time to pregnancy and treatment and crude and adjusted logistic regressions

Time to pregnancy or treatment	Deaths/births (per 1000)	Crude odds ratio (95% CI)	Adjusted odds ratio* (95% CI)
<3 months	13/8361 (1.55)	1.00	1.00
3-12 months	22/7944 (2.77)	1.78 (0.90 to 3.54)	1.76 (0.89 to 3.50)
>12 months	18/4142 (4.35)	2.80 (1.37 to 5.73)	2.82 (1.35 to 5.90)
No treatment reported	11/2104 (5.23)	3.38 (1.51 to 7.54)	3.32 (1.47 to 7.53)
Treatment reported	7/2038 (3.03)	2.21 (0.88 to 5.55)	2.32 (0.86 to 5.80)
Unplanned or partly planned	13/6882 (1.89)	1.22 (0.56 to 2.62)	1.14 (0.52 to 2.49)

\*Adjusted for mother's age at delivery (<26 years, 26-30, 31-35, ≥36), smoking from conception to time of interview (no/yes), pre-pregnancy body mass index (<20, 20-24.9, 25-29.9, ≥30, missing), and social class (low, middle, high, missing). All covariates except age were self reported. When social class or body mass index were missing (4.8%), we included a separate category in the variable.

## Comment

Mothers waiting for longer than one year to conceive their first child gave birth to babies with a higher risk of neonatal death compared with children conceived sooner. We restricted the analysis to primiparae (73.5% of whom reported no previous pregnancies) because death of a previous baby may influence both the decision to conceive again and its outcome.

Infertility treatment was self reported and was only asked of women taking longer than six months to conceive, but there was little difference in risk between treated and untreated, although the causes of death may differ between the two groups.

Only about 35% of eligible women participated in the cohort,<sup>5</sup> and this could cause bias if participants with a long time to pregnancy were at a different level of risk compared to the non-participants. Furthermore, we could not distinguish the length of infertility beyond one year, which limits our ability to identify a dose-response, if it exists.

We collected information on time to pregnancy and confounders before delivery, reducing the potential for other types of bias. The mother's job title may be a poor proxy for social class, but the adjustment appeared to have little effect on our estimates.

A long time to pregnancy per se is not commonly considered a marker of increased risk, and untreated women with a history of infertility may seek (or receive) inadequate prenatal care.

Even though neonatal death was a rare event in this population, it is a serious outcome and any potential risk marker should be considered. Our finding needs, however, to be corroborated elsewhere before it can be stated that a long time to pregnancy increases the risk of neonatal death.

If infertility itself is associated with adverse outcomes, an appropriate comparison group should be used when assessing effect of infertility treatment on pregnancy outcomes, lest adverse effects of treatment be overestimated.

### What is already known on this topic

Infertility treatment is correlated to adverse pregnancy outcomes, and evidence indicates that subfertility per se is also associated with adverse pregnancy outcomes

### What this study adds

Subfertility may be associated with an increased risk of neonatal death and should be included as a risk indicator in neonatal care

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## Predicting the risk of repetition after self harm: cohort study

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About one in six people repeat self harm within a year of an episode.<sup>1</sup> Identifying people who are at risk of repetition is a key objective of assessment.<sup>2</sup> We investigated the predictive value of risk assessments after an episode of self harm and compared assessments made by emergency department staff with those made by psychiatric staff.

### Participants, methods, and results

Four hospitals provide emergency care in the cities of Manchester and Salford. As part of the Manchester and Salford self harm project (MASSH) we collected data on all people aged at least 16 who presented with self harm in 1997-2001.<sup>3</sup> Doctors in the emergency department and, for those patients who received a psychiatric assess-

ment, mental health staff completed comprehensive assessment forms (which included demographic items as well as details of the self harm episode, past history, and current mental state). The assessor was also asked for a global clinical assessment of the risk of repetition of self harm (low, moderate, or high). We used the MASSH database to determine whether people repeated self harm within 12 months of their first presentation. We calculated sensitivity, specificity, and positive predictive value for emergency department and specialist mental health risk assessments.

Overall, 7612 individuals presented with self harm (10 173 episodes). Emergency department staff were

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