

**Discussion** Births to women with records of fertility problems have significantly increased between 1991 and 2013. Changes in maternal age explain much of the population-level trends, but less of the observed increase among first-time mothers. Declining births after OI prescribed in primary care may reflect changing management of patients.

Medical advice must continue to highlight the effect of age on fertility, and the implications for secondary infertility. GPs and service commissioners should be aware that time trends indicate continuing growth in demand for fertility treatment in England.

## Health services research

OP14

### A SYSTEMATIC REVIEW OF COST-EFFECTIVENESS EVALUATIONS OF PSYCHOLOGICAL THERAPIES FOR SCHIZOPHRENIA AND BIPOLAR DISORDER

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**Background** Schizophrenia and bipolar disorder (BD) are among the top twenty causes of disability. Costs of treatment and to society are substantial. NICE guidelines recommend psychological/psychosocial interventions are considered in response to acute episodes/recovery promotion. This review aims to assess cost-effectiveness of psychological interventions, determine robustness of the current evidence base, and identify evidence gaps. The key research question is: which psychological interventions are cost-effective, compared to usual care/alternative interventions, in schizophrenia or BD?

**Methods** Electronic searches of PsycINFO, MEDLINE and Embase identified economic evaluations relating incremental cost to outcomes in an Incremental Cost-Effectiveness Ratio (ICER) published in English since 2000. Studies had to include: probability of cost-effectiveness at explicitly-defined thresholds; adults with schizophrenia/BD; any psychological intervention (e.g. psychological therapy, Improving Access to Psychological Therapies, integrated/collaborative care). Comparators could be routine practice, no intervention, or alternative psychological therapies. Searches were performed in August 2015 (updated January 2017). There were two screening stages with explicit inclusion criteria applied by 2 reviewers at each stage. Pre-specified data extraction/critical appraisal were performed. Results were summarised qualitatively. The review is registered on the PROSPERO database of systematic reviews.

**Results** Of 3785 studies identified, 11 were included. All were integrated clinical and economic randomised controlled trials. All used cost-effectiveness and/or cost-utility analysis. The commonest intervention was CBT (6/11 studies). Measures of health benefit included QALYs (5/11), QLS 1/11), PANSS (2/11), MANSA (1/11), GAF (3/11), days with normal functioning (1/11), a working memory subscale (1/11), full vocational recovery (1/11), days with a bipolar episode (1/11). Follow-up ranged from 6 months to 5 years. 6/11 studies used provider perspectives for the primary analysis; the remainder considered societal perspectives. Interventions were cost-effective in most identified studies (9/11): ICERs ranged from dominant

(intervention is cost-saving AND more effective) to £18 844 per QALY; the probability of cost-effectiveness ranged from 50% to 99.5% at chosen thresholds. The two studies deemed not cost-effective involved art/body psychotherapy and noted significant uncertainty in the data as a limitation. All studies had limitations, including missing data, sample sizes and challenges controlling for other medications/treatments received outside the trial intervention.

**Conclusion** Although recommended in clinical guidelines, there was limited evidence about the cost-effectiveness of psychological therapy for schizophrenia/BD. Most included studies concluded psychological interventions for schizophrenia/BD are cost-effective. However policy implications are unclear due to methodological limitations and heterogeneity in populations and settings between studies. The review had some limitations including potential for English-language bias and limited time-horizon.

OP15

### LONG TERM OUTCOMES AND MORTALITY AMONG PATIENTS ENROLLED IN A STRUCTURED PRIMARY CARE-LED DIABETES PROGRAMME

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**Background** Limited data exists, internationally and in Ireland, on long-term outcomes among people with diabetes who are managed in primary care. The Midlands Diabetes Structured Care Programme encompasses evidence-based strategies to structure diabetes management within general practice: patient registration and recall, regular diabetes review visits, active role of the practice nurse in ongoing management, multidisciplinary specialist access, professional education, and remuneration. Our aim was to examine clinical outcome targets, complications and mortality among patients with diabetes enrolled in the programme since its establishment in 1998.

**Methods** Data were collected in 1999, 2003, 2008 and 2015, on outcomes (clinical parameters, complications and mortality) among patients with diabetes ( $\geq 18$  years) registered with participating practices. Data were extracted from patient notes by clinical nurse specialists using a paper-based data collection form. Cause and date of death were obtained from national death records. Using Stata, chi-square tests were used to test differences in clinical outcomes over time. Cox proportional hazards regression was used to examine the association of baseline factors and mortality.

**Results** Patients from 1999 (n=376), were followed up in 2003 (n=229), 2008 (n=96) and 2016 (n=376). The proportion of patients with a recommended blood pressure target (<130/80 mmHg) increased from 9% in 1999 to 26% in 2016 (p<0.001), as did the proportion with a total cholesterol of <4.5 mmol/L (22% vs. 71%, p<0.001), and triglycerides <2.0 mmol/L (47% vs. 81%, p<0.001). The percentage achieving optimal glycaemic control (HbA1c $\leq 7.0\%$ ) declined (52% vs. 34%). Between 1999–2016, 22% (n=81) of patients had ever experienced a macrovascular complication; primarily CVA (n=21, 6%), MI (n=16, 4%). In 1999, 18% (n=33) had retinopathy, increasing to 57% (n=59) by 2016. In total, 184 (49%) had died. Between 1999–2013 mortality was higher than background rates in the general population (SMR=2.2, 95% CI 1.9, 2.6). Only 25% (n=46) had cause of