

use questionnaires to identify bipolar disorder.¹ I agree but suggest that, as with the PHQ-9, the MDQ may have some value as a rule-out test² i.e. if you suspect bipolar disorder but the MDQ score is less than 7, you are probably wrong (negative predictive value = 97%).

Both this and a previous study of unrecognised bipolar disorder in UK general practice³ are limited by low participation rates (10.1% and 18.5% respectively). The true prevalence is likely to be somewhere between 1% (assuming all of those with unrecognised bipolar disorder volunteered to participate) and 10% (assuming the same prevalence rate among non-participants). The previous study estimated a prevalence of between 3.3% and 21.6%.³

Antidepressants are thought to be less effective in bipolar depression and may destabilise mood. For patients with moderate to severe bipolar depression NICE recommends either a combination of fluoxetine and olanzapine, or quetiapine on its own.¹ The BAP guideline also cautions against antidepressant monotherapy. In particular, tricyclics and venlafaxine are associated with a greater risk of causing a switch to mania and should not be used.⁴

It is important to try to identify depressed patients with unrecognised bipolar disorder both because of the risks associated with antidepressant monotherapy and because these patients may have a higher risk of suicide. NICE recommends that we should ask depressed patients whether they have had previous periods of overactivity or disinhibited behaviour.¹ We should consider the possibility of bipolar disorder in depressed patients with any of the following: early onset; frequent relapses; treatment resistance; family history of bipolar disorder.

DR PHILLIP BLAND

Hughes T, Cardno A, West R et al. Unrecognised bipolar disorder among UK primary care patients prescribed antidepressants: an observational study. *Br J Gen Pract* 2016;DOI:10.3399/bjgp16X683437

REFERENCES

- 1 National Institute for Health and Care Excellence. CG185. Bipolar disorder (update): the management of bipolar disorder in adults, children and adolescents in primary and secondary care. NICE. London. 2014
- 2 Phelps JR, Ghaemi SN. Improving the diagnosis of bipolar disorder: predictive value of screening tests. *J Affect Disord* 2006;92(2-3):141-48
- 3 Smith DJ, Griffiths E, Kelly M et al. Unrecognised bipolar disorder in primary care patients with depression. *Br J Psychiatry* 2011;199:49-56
- 4 Goodwin GM. Evidence-based guideline for treating bipolar disorder: revised second edition – recommendations from the British Association for Psychopharmacology. *J Psychopharmacol* 2009;23:346-88

Paediatrics

High levels of resistance to antibiotics prescribed for UTIs in children

A meta-analysis has revealed significant levels of resistance to commonly prescribed antibiotics for urinary tract infections (UTI) in children. Resistance rates were highest for ampicillin and lowest for nitrofurantoin.

The researchers set out to determine the prevalence of antibiotic resistant *E. coli* UTIs in children in a primary care setting and to quantify the relationship between prior exposure to antibiotics and subsequent bacterial resistance.

The authors searched the Embase, Medline, Cochrane and ISI Web of Knowledge databases for relevant articles published between 1955 and October 2015. Of 4,246 articles identified, 58 papers were deemed suitable for analysis. Of these, 53 addressed prevalence of resistance, three the association between resistance and previous antibiotic exposure, and two addressed both.

Countries were categorised as either developed or developing depending on their OECD status.

The prevalence of antibiotic-resistant *E. coli* isolates in OECD countries is shown in table 1, below. The pooled data from non-OECD countries was much higher for all antibiotics tested.

The five studies that investigated the relationship between prior antibiotic exposure and resistance identified a greater prevalence of antibiotic resistance with more recent exposure. Bacterial isolates from the urinary tract in children who had previously received antibiotics were more likely to be resistant, and the increased risk could persist for up to six months. Odds ratio (OR) 13.23 (95% CI: 7.84-22.31) for exposure 0-6 months previously.

The authors concluded that antibiotic use in children is an important contributor to bacterial resistance, and that this can persist for up to six months after exposure.

When the prevalence of resistance to an antibiotic is 20% or greater it is recommended that it should no longer be considered a first-line therapy.

Around 80% of antibiotics are prescribed in primary care settings. These findings emphasise the importance of keeping up to date with local microbiological resistance data and checking a child's antibiotic exposure over the past six months.

DR CHRIS BARCLAY

Bryce A, Hay AD, Lane IF et al. Global prevalence of antibiotic resistance in paediatric urinary tract infections caused by *Escherichia coli* and association with routine use of antibiotics in primary care: systematic review and meta-analysis. *BMJ* 2016; 352:i939

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Table 1

The prevalence of antibiotic-resistant *E. coli* isolates in OECD countries

Antibiotic	Prevalence	95% Confidence interval
Ampicillin	53.4%	46.0-60.8%
Co-trimoxazole	30.2%	20.5-39.3%
Trimethoprim	23.6%	13.9-32.3%
Co-amoxiclav	8.2%	7.9-9.6%
Ceftazidime	2.4%	0.9-3.3%
Ciprofloxacin	2.1%	0.8-4.4%
Nitrofurantoin	1.3%	0.8-1.7%