Sexual health

Does vasectomy affect sexual function?

Vasectomy does not appear to be associated with reduced sexual activity, a large study from the United States has found.

The study authors used the National Survey of Family Growth (NSFG) dataset comprising 7,643 women and 4,928 men. The NSFG is a probability sample of the US population aged 15-45. One member per household was randomly selected from men over 25 who had been sexually active, and likewise women between the ages of 25 and 45.

Men were asked: 'Have you ever had a vasectomy or any other operation that makes it impossible for you to father a child?' Women were asked the same question about their partner.

Outcome measures included: the number of times the individual had had sexual intercourse in the previous four weeks: never, less than once a week, or one or more times a week. Further analysis was carried out using logistic regression to adjust for demographic, socioeconomic, health and reproductive factors known to influence the decision to have a vasectomy and sexual function.

There were 5,838 men aged 25-45 who met the study inclusion criteria, of whom 353 had undergone a vasectomy.

The average sexual frequency was 5.9 times a month for men who had had a vasectomy and 4.9 times in non-vasectomised men (P = 0.0004). Only 6% of vasectomised men reported not having sex in the previous month, compared with 15% of non-vasectomised men (P = 0.0062). Two-thirds (66%) of vasectomised men had sexual intercourse one or more times a week compared with just over half (55%) of non-vasectomised men (P = 0.0186).

After adjusting for age, marital status, education, self-reported health, BMI, number of children and income level, vasectomised men had 81% higher odds of having sexual intercourse one or more times a week compared with non-vasectomised men (95% CI: 6-210%; P = 0.030).

For women whose partners had had a vasectomy, average sexual frequency was 6.3 times a month, compared with 6.0 for women whose partners were not vasectomised (P = 0.1341). After adjusting for other factors, women with vasectomised partners had 46% higher odds (95% CI: 5-103%) of having sexual intercourse one or more times a week compared with those with non-vasectomised partners (P = 0.024).

The study suggests not only that vasectomy is not associated with reduced sexual function, but that the converse may be true in some cases. The authors speculate that the apparent higher frequency of sexual intercourse in the vasectomised group might possibly be explained by: decreased anxiety about unplanned pregnancy, a desire to compensate for perceived demasculinisation or that those men who opted for vasectomy were a more sexually active subset before the procedure and continued to be afterwards.

This study might help to encourage more men to consider vasectomy as a long-lasting method of contraception.

DR RICHARD MA

Guo DP, Lamberts RW, Eisenberg ML. Relationship between vasectomy and sexual frequency. *J Sex Med* 2015;12: 1905-10

Mental health

Bipolar disorder is not always recognised in younger people

As many as one in ten patients aged 16-40 prescribed antidepressants for depression or anxiety have unrecognised bipolar disorder, a UK study has found.

A total of 21 general practices in West Yorkshire participated in the study. Patients aged 16-40 who had been prescribed antidepressant drugs were identified by a search of the primary care database. Of the 2,341 eligible patients who were invited to participate 236 agreed to do so.

Participants were asked to complete the Mood Disorder Questionnaire (MDQ). They attended a semi-structured diagnostic interview based on DSM IV criteria and those with possible bipolar disorder were subsequently discussed at a consensus meeting.

A total of 17 participants were found to have unrecognised bipolar II disorder; prevalence 7.3% (95% CI: 4.4-11.1%). Adjustment for differences between the sample and a national database increased the prevalence to 10%. Of the 17 patients with unrecognised bipolar disorder, 11 had been diagnosed with depression, one with anxiety disorder and five with mixed anxiety and depression.

Unrecognised bipolar disorder was associated with younger age and more severe lifetime depression. The positive predictive value of the MDQ was low. The MDQ takes about 5 minutes to complete. Using the recommended cut-off score of ≥ 7, the present study found a PPV of only 14% which is too low for this to be used as a screening tool. NICE is unequivocal in recommending that we should not»

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 test[2] 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 practice[3] 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 anti-depressants: an observational study. *Br J Gen Pract* 2016;DOI:10.3399/bjgp16X683437

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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 is 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

Antibioic	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%