This month in Eyes on Evidence

**Surgery versus medical therapy in ulcerative colitis**
A retrospective cohort study using US data found that elective colectomy was associated with better survival than long-term medical therapy in people with advanced ulcerative colitis, in particular in people aged 50 years or older.

**Self-monitoring for people on vitamin K antagonist anticoagulant therapy**
A meta-analysis found that for people receiving long-term vitamin K antagonist therapy, self-monitoring of anticoagulation status with point-of-care devices was at least as safe as monitoring by healthcare professionals.

**Shared decision-making: antibiotic use for acute respiratory infections**
A Cochrane review found moderate quality evidence that interventions to facilitate shared decision-making reduced antibiotic prescribing for acute respiratory infections in primary care in the short term.

**Previous pregnancies in young women having an abortion**
A retrospective cohort study of data from England and Wales found that nearly 1 in 4 women aged less than 20 years who underwent an abortion had already had at least 1 previous birth or abortion. Post-abortion contraceptive counselling should take a ‘woman-centred’ approach that focuses on women’s contraceptive preferences.

**Mental health of carers after bereavement**
A case–control study in Northern Ireland found that people who had cared for someone with a long-term condition who died subsequently had poor mental health after bereavement, but mental health was
Evidence summaries from NICE’s Medicines and Prescribing Programme
NICE has recently published summaries on:

- Chronic wounds: advanced wound dressings and antimicrobial dressings
- Moderate to severe acute post-operative pain: sufentanil sublingual tablet system
- Attention deficit hyperactivity disorder in children and young people: guanfacine prolonged-release
- Adverse events associated with off-label medicine use in adults
- Myocardial infarction: risks and benefits of extended dual antiplatelet therapy

Surgery versus medical therapy in ulcerative colitis

Overview:

- In a US cohort of people with advanced ulcerative colitis, elective surgery was associated with lower mortality than long-term medical therapy.
- There was a significant benefit of surgery specifically in people aged 50 years or over, which was a major contributor to the overall effect.
- The data provide reassurance that surgery may be associated with positive outcomes compared with continued medical therapy and should be discussed with people who have ulcerative colitis that is difficult to control.

Background: Ulcerative colitis is a type of chronic inflammatory bowel disease where the colon and rectum become inflamed (NHS Choices 2014).

People whose disease does not respond to initial medical therapy, such as an aminosaliclylate, have the option to escalate to different drugs, such as corticosteroids or immunosuppressants. However, long-term use of these drugs in people with ulcerative colitis is associated with opportunistic infections (Toruner et al. 2008) and cancer (Bongartz et al. 2006).

Alternatively, people with unresponsive disease may choose to undergo elective surgery to remove the affected portion of large bowel (colectomy). Elective colectomy may reduce the risk of mortality compared with no colectomy or emergency colectomy in people with ulcerative colitis (Roberts et al. 2007).

Current advice: The NICE guideline on ulcerative colitis recommends that a topical corticosteroid or oral prednisolone may be considered to induce remission in people who cannot tolerate or who decline aminosaliclylates, or in whom aminosaliclylates are contraindicated. Intravenous corticosteroids should be offered to induce remission in people admitted to hospital with acute severe ulcerative colitis.

NICE technology appraisal guidance recommends the anti-TNF drugs infliximab, adalimumab and...


**golimumab**, within their marketing authorisations, as options for treating moderately to severely active ulcerative colitis in adults whose disease has responded inadequately to conventional therapy or have medical contraindications for, such therapies.

**Vedolizumab** is recommended, within its marketing authorisation, as an option for treating moderately to severely active ulcerative colitis in adults only if the manufacturer provides the drug with the discount agreed in the patient access scheme.

The NICE guideline on ulcerative colitis recommends that the likelihood of needing surgery should be assessed in people admitted to hospital with acute severe ulcerative colitis who cannot tolerate or have contraindications to intravenous corticosteroids, and in those who do not improve despite corticosteroid treatment.

The guideline adds that people with ulcerative colitis who are considering elective surgery (and their family members or carers as appropriate) should be given information about all available treatment options, and the opportunity to discuss these options with a specialist (such as a gastroenterologist or a nurse specialist).

The NICE pathway on ulcerative colitis brings together all related NICE guidance and associated products on the condition in a set of interactive topic-based diagrams.

**New evidence:** A retrospective cohort study by Bewtra et al. (2015) assessed surgery compared with long-term medical therapy in people with advanced ulcerative colitis.

A total of 182,235 people in the USA with ulcerative colitis were identified from the databases for Medicaid (a health insurance system for people on low income), Medicare (insurance largely covering people aged 65 and older) or both.

People were eligible for the study if they had advanced ulcerative colitis (n=32,833), defined as any hospitalisation with a primary diagnosis of ulcerative colitis, 2 or more prescriptions for an oral corticosteroid within a 90-day period, or any prescription for immunosuppressant therapy (ciclosporin, tacrolimus, azathioprine, mercaptopurine [none of which are licensed for ulcerative colitis in the UK] or infliximab).

People with advanced ulcerative colitis who had undergone elective colectomy were identified using surgical codes in the databases (n=830), and each matched with up to 10 people who had received medical therapy only (n=7541). Participants were followed for up to 9 years.

The mortality rate was 34 deaths per 1000 person–years for people who had surgery and 54 deaths per 1000 person–years for medical therapy. Surgery was associated with lower mortality than medical therapy (adjusted hazard ratio [HR]=0.67, 95% confidence interval [CI] 0.52 to 0.87). This effect disappeared in sensitivity analyses that excluded people who may have had less severe disease.

A post-hoc analysis by age group showed lower mortality with surgery in people aged 50 years or older (adjusted HR=0.60, 95% CI 0.45 to 0.79). No mortality benefit with surgery was seen in people aged under 50 years (adjusted HR=1.35, 95% CI 0.69 to 2.66).

Limitations of this analysis include that participants were beneficiaries of the US Medicare or Medicaid insurance systems, or both, so the findings may not be generalisable to other populations. In addition, the source populations were followed up during different time frames (Medicaid: 2000–2005; Medicare: 2006–2011; both: 2000–2011), and the retrospective nature of the study means that the findings may have been affected by residual confounding.

Commentary by Professor Alan J Lobo, Consultant Physician and Gastroenterologist, Royal Hallamshire Hospital, Sheffield and Professor of Gastroenterology, University of Sheffield:
"The headline conclusion of this large and rigorously undertaken study is important. It supports the view that elective surgery has an important role as an option for people with ulcerative colitis that is difficult to control. However, it is a retrospective analysis of databases used by US insurers.

"The survival benefit from surgery was driven by the benefit in people aged over 50 years. The authors explored potential explanations for the effect in this group – such as steroid or immunosuppressant use, narcotic analgesic use and infections – with no clear association found.

"The authors undertook sensitivity analyses that removed people with less severe disease, including those who received less immunosuppressant treatment. Once these less severely affected people were excluded, the effect of surgery became non-significant, suggesting that surgery was most effective in these people. The reasons for a survival benefit with surgery in people with less severe disease are not fully clear. The effect could perhaps be due to exposure to complex immunosuppressant medication and steroids in their matched, medically treated, controls.

"A careful attempt was made to match the treatment groups for comorbidity, but it is possible that patients in whom surgery carried a greater risk would be more likely to receive medical therapy. This in turn might be associated with higher mortality – confounding not captured by the comorbidity score. Because of the administrative nature of the databases examined, cause of death could not be assessed, which may have given more insight into the findings.

"These findings reinforce the NICE recommendation that surgery should be discussed with people in whom medical treatment has been ineffective in providing prolonged remission or associated with troublesome side effects. The NICE guideline also recommends that people with ulcerative colitis who are considering elective surgery should be given information about all available treatment options and the opportunity to discuss these options. Although the survival advantage is reassuring, other risks of surgery will be important to people considering surgery.

"The NICE technology appraisal of infliximab, adalimumab and golimumab for treating moderately to severely active ulcerative colitis considered that surgery might not be an option for all patients and was therefore not a suitable comparator for anti-TNF drugs, particularly in evaluating cost effectiveness. The findings of this study may help to inform future discussion.

"Although difficult to design, a prospective randomised trial of surgery versus continued medical treatment would clarify the effect on of each strategy on quality of life, cost and safety."

Study sponsorship: National Institutes of Health, and Agency for Healthcare Research and Quality.

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Self-monitoring for people on vitamin K antagonist anticoagulant therapy

Overview:

- Compared with standard monitoring, self-monitoring of anticoagulation status did not
affect the risk of bleeding or death in people receiving long-term vitamin K antagonist therapy, and was associated with a lower risk of thromboembolic events.

- In this meta-analysis, the effects of self-monitoring were largely driven by the beneficial effects of self-management (where people adjust their medication dose themselves after testing).
- Care must be taken in generalising these results to the UK, where standard care is generally very good and may be cheaper than the cost of self-monitoring.

**Background:** Many people with atrial fibrillation, heart valve disease or other conditions associated with a high risk of blood clots (thrombosis) are prescribed long-term anticoagulation treatment with vitamin K antagonists, such as warfarin.

People receiving long-term vitamin K antagonists need regular tests (using the international normalised ratio [INR]) to measure the clotting tendency of their blood (NHS Choices 2014). Their medication dose is then adjusted accordingly to ensure blood clots are prevented without increasing the risk of bleeding. This repeated monitoring may be carried out in specialist anticoagulation clinics, or by primary or secondary care staff.

An alternative is for people to carry out these tests at home with point-of-care coagulometers (self-monitoring; NICE 2014). People may then alter their medication dose themselves (self-management) or contact a healthcare professional for advice on any change to dosage (self-testing). The use of these coagulometers may improve health outcomes by enabling anticoagulation dose to be adjusted more accurately (Heneghan et al. 2006).

**Current advice:** NICE has diagnostics guidance on atrial fibrillation and heart valve disease: self-monitoring coagulation status using point-of-care coagulometers.

The CoaguChek XS system and the INRatio2 PT/INR monitor are recommended for self-monitoring of coagulation status in adults and children on long-term vitamin K antagonist therapy who have atrial fibrillation or heart valve disease if:

- the person prefers this form of testing and
- the person, or their carer, is both physically and cognitively able to self-monitor effectively.

Patients and carers should be trained in the effective use of the CoaguChek XS system or the INRatio2 PT/INR monitor, and clinicians involved in their care should regularly review their ability to self-monitor.

The NICE pathways on atrial fibrillation and structural heart defects bring together all related NICE guidance and associated products on these conditions in sets of interactive topic-based diagrams.

**New evidence:** A meta-analysis by Sharma et al. (2015) assessed the effectiveness of self-monitoring of anticoagulation status in people receiving long-term vitamin K antagonist therapy.

The authors searched for randomised controlled trials that compared self-testing or self-management of anticoagulation control using point-of-care coagulometers (self-monitoring) with monitoring by healthcare professionals (standard care). The review included studies of both adults and children with heart valve disease, atrial fibrillation or other clinical conditions who required long-term vitamin K antagonist therapy.
A total of 26 trials from Europe and North America were identified. Of these trials, 22 were included in the analysis (n=8394).

In a pooled analysis of all 22 trials, self-monitoring was associated with a significant reduction in the risk of thromboembolic events compared with standard care (relative risk [RR]=0.58, 95% confidence interval [CI] 0.40 to 0.84, p=0.004). When the two different types of self-monitoring were considered separately, self-management was associated with a significantly lower risk of thromboembolic events than standard care (RR=0.51, 95% CI 0.37 to 0.69, p<0.0001; 15 trials, n=4640). No significant risk reduction was seen among trials of self-testing (RR=0.99, 95% CI 0.75 to 1.31, p=0.56; 7 trials, n=3754).

The risk of any bleeding event with self-monitoring did not differ significantly from that with standard care (RR=0.95, 95% CI 0.74 to 1.21, p=0.66; 22 trials, n=8394). However, self-testing was associated with a slightly higher risk of bleeding than standard care (RR=1.15, 95% CI 1.03 to 1.28, p=0.02; 7 trials, n=3754).

There was no significant difference in all-cause mortality between self-monitoring and standard care (RR=0.83, 95% CI 0.63 to 1.10, p=0.20; 13 trials, n=6537). Self-management appeared to be associated with a reduction in mortality that was close to statistical significance (RR=0.68, 95% CI 0.46 to 1.01, p=0.06; 10 trials, n=3293). Self-testing had no effect on mortality (RR=0.97 95% CI 0.78 to 1.19, p=0.74; 3 trials, n=3244).

The authors concluded that self-monitoring of anticoagulation status was at least as safe and effective as monitoring by healthcare professionals for people receiving long-term vitamin K antagonist therapy. Limitations of this analysis include the variation among trials; for example, in clinical indications for anticoagulation and training in self-monitoring provided to participants. In addition, most of the included trials were considered to be at high or unclear risk of bias.

Commentary by Professor DA Fitzmaurice, Professor of Primary Care, Primary Care Clinical Sciences, Institute of Applied Healthcare Research, University of Birmingham:

“These data are not particularly novel, do not really add much to current evidence and unfortunately repeat the faults of previous reviews in this area. The studies that drive the seeming improvement in outcomes with self-monitoring are those with high patient selection bias in areas where routine care was relatively poor.

“Conversely, where routine care is good, for example the UK, no improvement in clinical outcomes is seen. Indeed, the one UK-based trial found no improvement in outcome among people using self-management, and self-management was five times as expensive as routine clinic-based care (Jowett et al. 2006). Many of the studies included in the evidence review for the NICE diagnostics guidance did not include UK costs.

“There are additional patient benefits self-monitoring in terms of convenience and not having to attend anticoagulation clinics. In my opinion, the ability to test without having to access a clinic is the most positive aspect of self-monitoring.

“It is often noted that self-management seems to confer benefit whereas self-testing, where dose is adjusted by a healthcare professional, is not. This effect is most likely due to patient selection, in that only the most highly motivated and educated patients are deemed to be able to self-manage and adjust their own dose. It may however reflect real improvement driven by increased patient autonomy.

“There is no doubt that self-testing and self-management are good options for some patients. Unfortunately, these approaches may come at a cost to service providers, in this case the NHS. This new meta-analysis makes it difficult to have a sensible debate about the role of self-monitoring by overstating the clinical effectiveness and understating the costs.”
Shared decision-making: antibiotic use for acute respiratory infections

Overview:

- A Cochrane systematic review found moderate quality evidence that interventions to facilitate shared decision-making reduced short-term prescribing of antibiotics for acute respiratory infections from 47% to 29% in primary care.
- There were not enough data to assess whether the interventions produced a sustained reduction in antibiotic prescribing or adverse outcomes.
- The NICE guidelines on antimicrobial stewardship and medicines optimisation recommend that all people have the opportunity to be involved in making decisions about their medicines.

Background: Antibiotics are sometimes prescribed to people who see their GP for acute respiratory infections. However, antibiotics have little benefit in these types of infections, such as in acute bronchitis (Smith et al. 2014) or colds (Kenealy and Arroll 2013). In addition, prescribing antibiotics for acute respiratory infections may contribute to the growth of antimicrobial resistance (Costelloe et al. 2010).

Shared decision-making is the conversation that happens between a patient and their health professional to reach a healthcare choice together (NHS 2012). Shared decision-making is a potential strategy for reducing the overuse of ineffective treatments (Elwyn et al. 2012).

Current advice: The NICE guideline on antimicrobial stewardship recommends that prescribers take time to discuss with the patient and/or their family members or carers (as appropriate):

- the likely nature of the condition
- why prescribing an antimicrobial may not be the best option
- alternative options to prescribing an antimicrobial
- their views on antimicrobials, taking into account their priorities or concerns for their current illness and whether they want or expect an antimicrobial
- the benefits and harms of immediate antimicrobial prescribing
- what they should do if their condition deteriorates (safety netting advice) or they have problems as a result of treatment
- whether they need any written information about their medicines and any possible outcomes.

The NICE guideline on medicines optimisation recommends that all people have the opportunity to be
involved in making decisions about their medicines. Healthcare professionals should find out what level of involvement in decision-making the person would like and avoid making assumptions about this.

The guideline adds that patient decision aids can support health professionals to adopt a shared decision-making approach in a consultation, to ensure that patients, and their family members or carers where appropriate, are able to make well-informed choices that are consistent with the person’s values and preferences. Further recommendations on shared decision-making are outlined in the guideline.

The NICE pathways on antimicrobial stewardship and medicines optimisation bring together all related NICE guidance and associated products on these issues into sets of interactive topic-based diagrams.

**New evidence:** A Cochrane review by Coxeter et al. (2015) looked at whether interventions that aimed to facilitate shared decision-making increased or reduced antibiotic prescribing for acute respiratory infections in primary care.

The review included 9 moderate quality randomised controlled trials (RCTs) in around 492,000 patients and over 1100 primary care doctors in several countries (3 RCTs included people from the UK). Reported study duration ranged from 14 days to just over 3.5 years.

All studies provided education and communication skills training to improve GPs’ understanding in several areas such as risk communication techniques, evidence for the risk–benefit of antibiotics and other treatment options, and how to deal with patients’ concerns and expectations. Several interventions contained materials developed for patients.

The primary outcome was prescription of antibiotics (for example, antibiotics prescribed per consultation, or a change in the population rate of antibiotic prescriptions per unit of time) compared with usual care.

A pooled analysis of moderate quality evidence from 8 RCTs (n=10,172) showed that the interventions reduced short-term prescribing of antibiotics (immediately after or within 6 weeks of the consultation) for acute respiratory infections from 47% to 29% (risk ratio=0.61, 95% confidence interval 0.55 to 0.68, p<0.001).

No significant differences were seen between the intervention and usual care groups in clinical complications, such as reconsultation for the same illness. Only 2 studies (n=1052) could be pooled to assess the effects of the intervention on patient satisfaction with the consultation, and no significant difference was seen between groups. However, the authors graded the data on patient satisfaction as low quality.

The study is limited by the fact that there were not enough data to assess the effects of the intervention on sustained reduction in antibiotic prescribing, adverse outcomes (such as hospital admission, pneumonia or death), or on the involvement of the patient or caregiver in shared decision-making (such as regret or conflict with the decision made).

**Commentary by Professor Alastair Hay, Professor of Primary Care and NIHR Research Professor, Centre for Academic Primary Care, University of Bristol and chair of the guideline development group for the NICE guideline on antimicrobial stewardship:**

“The majority of antibiotics prescribed in England are prescribed in primary care (Public Health England 2014). Ashworth et al. (2015) have recently shown an association between reduced practice-level antibiotic prescribing and reduced patient satisfaction. But GPs should not prescribe more antibiotics to improve patient satisfaction.

“Clinicians and policy makers seeking solutions to the problem of prescribing and patient satisfaction should be encouraged by this Cochrane review by Coxeter et al. (2015). This study synthesises the evidence on shared decision-making for optimising the prescribing of antibiotics for
respiratory tract infections. The review provides robust evidence of reduced prescribing with this approach, without reducing patient satisfaction.

“Sadly, despite the review analysing data from nearly 500,000 patients, only 2 of the reviewed studies reported adverse event data (pneumonia and death) and none reported impacts on antimicrobial resistance. So, there remains an absence of evidence to evaluate the safety of reduced prescribing and the likely benefits in preventing antimicrobial resistance.

“All NICE guidelines state patients should have the opportunity to make informed decisions about their care and treatment, in partnership with their healthcare professionals. The NICE antimicrobial stewardship guideline states that antimicrobial stewardship interventions should include clinical education and that health and social care practitioners across all care settings should communicate consistent messages about antimicrobial use.

“However, the evidence from this review goes beyond the principles of informed decision-making and suggests that NHS antimicrobial stewardship strategies could be significantly enhanced by implementing the interventions used in these studies. These include relatively inexpensive web-based training modules that clinicians complete at their convenience. A health economic evaluation has yet to be published, but the cost-effectiveness profile is likely to be enhanced due to the benefits of shared decision-making extending beyond prescribing for respiratory tract infections.”

Study sponsorship: National Health and Medical Research Council (NHMRC), Australia.

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Previous pregnancies in young women having an abortion

Overview:

- Between 1992 and 2013, the number of women aged under 20 years who had an abortion peaked at 25.4 per 1,000 women in 2007, then declined to 17.1 per 1,000 women in 2013.
- The proportion of abortions in young women under 20 years that were in those who had previously been pregnant increased from 17.2% in 1992 to 22.9% in 2013.
- Post-abortion contraceptive counselling should take a 'woman-centred' approach that focuses on women's contraceptive preferences.
**Background:** Pregnancy and motherhood in women aged less than 20 years can be associated with socioeconomic deprivation, mental health difficulties and lower levels of educational attainment (Department for Children, Schools and Families 2010). The Public Health Outcomes Framework for England 2013 to 2016 includes indicators aimed at reducing conceptions in women aged less than 18.

In the UK, around 20% of births in young women under the age of 18 are to women who are already mothers (Department for Children, Schools and Families 2008). In 2014, almost half (44.6%) of conceptions in England and Wales in women aged under 20 years led to an abortion (Office for National Statistics 2016).

**Current advice:** The NICE guideline on contraceptive services for under 25s recommends that healthcare professionals should check after pregnancy that young women have chosen a method of contraception. If not, they should offer contraceptive advice on a range of effective methods tailored to women’s circumstances and be sensitive to any concerns they may have.

Healthcare professionals should also discuss contraception and explain the full range of contraceptive methods available before – and as soon as possible after – a young woman has had an abortion. Women who have had an abortion should be offered contraception to prevent another unintended pregnancy or referred to contraceptive services for advice and contraception.

The NICE pathway on contraceptive services with a focus on young people aged up to 25 brings together all related NICE guidance and associated products on the condition in a set of interactive topic-based diagrams.

**New evidence:** A retrospective cohort study by McDaid et al. (2015) assessed previous pregnancies in young women in England and Wales who had undergone an abortion.

This study used data from abortion notification forms on women aged less than 20 years who had an abortion between 1992 and 2013. Data on the number of previous pregnancies that resulted in live birth, still birth over 24 weeks, and abortions were obtained from the Department of Health. Data from the Office for National Statistics on women aged 15–19 years were used to calculate abortion rates per 1,000 population.

Between 1992 and 2013, the number of women aged under 20 years who had an abortion ranged from a low of 28,215 in 1995 (19.1 per 1,000 women aged 15–19 years) to a peak of 43,955 in 2007 (25.4 per 1,000 women aged 15–19 years). By 2013, the number of women aged under 20 years who had an abortion had dropped to 29,011 (17.1 per 1,000 women aged 15–19 years).

In 1992, 17.2% of women aged less than 20 years who had an abortion had been pregnant at least once previously (95% confidence interval [CI] 16.8 to 17.6%). In 2013, 22.9% of young women who had an abortion had been pregnant previously (95% CI 22.4 to 23.3%), an increase of 33%. The proportion of abortions in young women who had previously been pregnant stabilised at around 22–23% between 2004 and 2013.

The authors also attempted a raw summary of the proportion of pregnancies reported with a previous abortion and those reported with a previous birth. Summation of 2013 data suggested that 25.6% of abortions followed a repeat pregnancy.

Strengths of this study include that it used national data from abortion notification forms, which doctors who perform abortions are legally required to submit. Limitations include possible inaccuracies in the medical histories captured in these forms and that some women may have had more than 1 abortion in the same calendar year, which will have resulted in that individual being double-counted.
Commentary by Dr Lesley Hoggart, Senior Lecturer in Public Health, The Open University:

“The main purpose of this research was to provide more accurate data on previous pregnancies in young women having an abortion. McDaid et al. (2015) obtained this data through secondary analysis of previously unpublished data from abortion notification forms.

“The authors’ analysis of this data gives a more accurate, and lower, estimate than their raw analysis of annual abortion and birth data from the Department of Health. A total of 22.9% (as opposed to 25.6%) of women aged less than 20 years who presented for an abortion in 2013 had experienced 1 or more previous pregnancies. The research thus implies that almost 1 in 4 women who conceive under the age of 20 years are likely to experience further pregnancies or abortions before they reach 20, many of which will be unintended. This is a reminder that women – in this case young women – may not modify their sexual and reproductive behaviour enough following a pregnancy to rule out the possibility of a subsequent unintended pregnancy and abortion.

“As the McDaid et al. (2015) study makes clear, the real issue going forward is how sexual health services can best help teenagers (indeed all women) prevent unintended and unwanted pregnancies. Recent evidence suggests that women’s contraceptive choices following an abortion are not always met (McCall et al. 2015). In addition, discontinuation rates of contraceptive implants following an abortion may be high (Bury et al. 2014). A ‘woman-centred’ approach that focuses on women’s contraceptive preferences should inform post-abortion contraceptive counselling. This approach aligns with the advice in the NICE guideline on contraceptive services for under 25s.

“Equally important is to implement an individualised ‘woman-centred’ approach within all sexual health services, including signposting women to relevant services following an abortion. Finally, in light of a growing body of work critical of a focus on ‘repeat abortion’, the overall aim of contraceptive services for young women could be rephrased as how best to help all women exercise reproductive control without being judgemental, and stigmatising, about women who do experience more than 1 abortion.”

Study sponsorship: None.

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Mental health of carers after bereavement

Overview:

- A case–control study reported that carers in Northern Ireland were more likely to experience poor mental health than non-carers, irrespective of whether the person they were caring for died or not.
- Among people who had been bereaved, carers aged 65 years or older were at similar risk of mental health problems as non-carers of the same age, whereas working age carers were at higher risk of mental health problems than non-carers.
- Although healthcare professionals should support people through bereavement, there is a
greater need to support people who are caring for someone at home, especially carers of working age.

**Background:** People who provide long-term care to family or members of their household with physical or mental health problems are at risk of poor mental health themselves ([Eyes on Evidence 2015](#)). Carers may also experience a decline in mental health after the death of the person they are caring for ([Brazil et al. 2004](#)). However, whether carers experience poorer mental health after bereavement compared with bereaved people who are not carers is not clear ([Schulz et al. 2001](#)).

**Current advice:** The NICE guideline on older people with social care needs and multiple long-term conditions states that local authorities must offer carers an individual assessment of their needs in line with the Care Act 2014. Authorities should consider helping carers access support services and interventions.

The NICE guideline on depression in adults ([currently being updated](#)) recommends that a person who may have depression should undergo a comprehensive assessment that does not rely simply on a symptom count. In addition to assessing symptoms and associated functional impairment, the person’s living conditions and interpersonal relationships should be considered.

The NICE pathways on social care for older people with multiple long-term conditions and depression bring together all related NICE guidance and associated products on these areas into sets of interactive topic-based diagrams.

**New evidence:** A case–control study by [Moriarty et al. (2015)](#) investigated whether carers who had been bereaved experienced poorer mental health than carers who had not been bereaved and people who were not carers.

Participants were identified from the Northern Ireland Longitudinal Study database, which contains 2001 census data and administrative healthcare data from 445,819 people randomly selected by birth date (approximately 28% of the population of Northern Ireland).

Carers were identified as people who said in 2001 that they looked after someone with long-term physical or mental ill health or disability, and who lived with someone who had self-identified as having long-term physical or mental health problems or disability. Participants were considered bereaved if the national death register for 2001–9 showed that a person they lived with had died during this period.

Participants were designated as having poor mental health if they had been prescribed antidepressants or anti-anxiety drugs between January and February 2010.

The study sample comprised 317,264 people aged 16 and over. These people were split into 4 groups:

- People who had cared for someone they lived with and that person had died (bereaved carers; n=5414)
- People who had cared for someone they lived with but had not been bereaved (non-bereaved carers; n=18,690)
- Non-carers who lived with someone who had died (bereaved non-carers; n=18,407)
- Non-carers who had not experienced bereavement (non-bereaved non-carers; n=274,753).
Among people who had been bereaved, carers were more likely to experience poor mental health than non-carers (odds ratio [OR]=1.82, 95% confidence interval [CI] 1.68 to 1.97, p<0.05). In people who had not experienced a death, carers were also more likely to have poor mental health than non-carers (OR=1.72, 95% CI 1.64 to 1.79, p<0.05). The overlapping confidence intervals for these two comparisons indicated a similar likelihood of poor mental health in carers who had been bereaved and in those who had not been bereaved.

People who were not carers but had been bereaved were more likely to experience poor mental health than non-bereaved non-carers (OR=1.48, 95% CI 1.41 to 1.56, p<0.05).

In adjusted subgroup analyses, carers aged 65 or older were slightly more likely to experience poor mental health than non-bereaved non-carers, with little difference between carers who had been bereaved (OR=1.38, 95% CI 1.21 to 1.56, p<0.05) and those who had not been bereaved (OR=1.11, 95% CI 1.01 to 1.29, p<0.05).

Carers of working age (25–64 years) were likewise more likely than non-bereaved non-carers to experience poor mental health, with the risk marginally higher in carers who had been bereaved (OR=1.41, 95% CI 1.27 to 1.57, p<0.05) than in those who had not been bereaved (OR=1.17, 95% CI 1.11 to 1.24, p<0.05). The risk in bereaved carers was also higher than in bereaved non-carers (OR=1.24 versus non-bereaved non-carers, 95% CI 1.15 to 1.33, p<0.05).

The authors concluded that carers were at risk for mental ill health while providing care and after the death of the care recipient. This study is limited by the large number of assumptions the authors made about their data, such as that prescription of antidepressants or anti-anxiety drugs accurately reflected the level of mental health problems in the study population.

Commentary by Dr Stephen Barclay, General Practitioner and Honorary Consultant in Palliative Care, Cambridge:

“Bereavement care in the UK is largely the responsibility of GPs and their practice teams, and voluntary sector organisations such as Cruse Bereavement Care. Only the minority of family and carers of patients who receive specialist end of life care are eligible for bereavement support. The ‘average’ GP will have around 20 patients die each year, leading to between 60 and 100 people experiencing a significant bereavement. GPs are often unsure how best to respond to bereavement and fear ‘medicalising’ what for many is a traumatic but normal life experience.

“This important study provides evidence about which groups of people suffer most after the death of someone close to them, thus potentially guiding the targeting of bereavement care. Although poor mental health after bereavement was found to particularly affect carers of working age, the most striking finding was that poor mental health was more strongly linked with being a carer than with experiencing bereavement. Being a carer for someone you live with appears to have a significant effect on your mental health, whether or not that person dies.

“The message for clinicians is clear: although there is a need to support people through a bereavement, there is perhaps a greater need to support people who are caring for someone at home, especially carers of working age.

“The measure used in the study as a proxy for poor mental health (taking anti-anxiety drugs or antidepressants) is a potential weakness, as the authors acknowledge. In clinical practice, this measure could be turned into a strength: all people identified as having poor mental health will have consulted a GP to obtain those prescriptions. These consultations could provide an opportunity for wider provision of support than medication alone.”

Study sponsorship: Economic and Social Research Council.
Evidence summaries from NICE’s Medicines and Prescribing Programme

Evidence summaries: medicines and prescribing briefings review the evidence for the clinical effectiveness of treatment options within a therapeutic class or indication, and provide advice on the relative position of different options. These briefings will assist localities in their planning on medicines optimisation priorities, as well as providing individual prescribers with information to help informed decision making.

NICE has recently published the following Evidence summary: medicines and prescribing briefing:

- **Chronic wounds: advanced wound dressings and antimicrobial dressings**

  This evidence summary discusses the best available evidence for advanced wound dressings and antimicrobial dressings for managing common chronic wounds (diabetic foot ulcers, pressure ulcers, venous leg ulcers and infected wounds).

Evidence summaries: new medicines form part of NICE’s service to provide high quality medicines and prescribing information to the NHS and patients in England. The summaries are aimed at commissioners, budget holders and groups such as Area Prescribing Committees to help them make informed decisions and aid local planning on the introduction of key new medicines. Evidence summaries: new medicines do not constitute formal NICE guidance but are designed to support the managed introduction of selected new medicines or new indications for existing medicines not covered by NICE’s Technology Appraisal programme.

NICE has recently published the following Evidence summaries: new medicines:

- **Moderate to severe acute post-operative pain: sufentanil sublingual tablet system**

  Sufentanil (Zalviso) is indicated for the management of moderate-to-severe acute post-operative pain in adults, in a hospital setting only. Two randomised controlled trials compared the sufentanil sublingual tablet system with placebo. A third, open-label randomised controlled trial compared the sufentanil sublingual tablet system with intravenous morphine patient-controlled analgesia.

- **Attention deficit hyperactivity disorder in children and young people: guanfacine prolonged-release**

  Guanfacine prolonged-release (Intuniv) is a non-stimulant treatment for children and young people with attention deficit hyperactivity disorder. Three short-term, randomised controlled trials compared the effects of guanfacine prolonged-release versus placebo on symptoms of attention deficit hyperactivity disorder.

Medicines evidence commentaries form part of NICE’s Medicines Awareness Service and help contextualise important new evidence, highlighting areas that could signal a change in clinical practice. They do not constitute formal NICE guidance. These commentaries are published in NICE’s Medicines Awareness Weekly service and are available online in NICE Evidence search.
NICE has recently published the following Medicines evidence commentaries:

- **Adverse events associated with off-label medicine use in adults**
  
  A large Canadian prospective cohort study considered the association between off-label drug use and adverse events in adults with a new prescription for a medicine.

- **Myocardial infarction: risks and benefits of extended dual antiplatelet therapy**
  
  A meta-analysis of 6 randomised controlled trials examined the merits of extending dual antiplatelet therapy beyond 12 months in people with stable ischaemic heart disease who have had a myocardial infarction.

Subscribe to the Medicines Awareness Service on the NICE website.