



Kidneys and women's health: World Kidney Day 2018

World Kidney Day is on 8 March, 2018. The theme for this year is "Kidneys & Women's Health: Include, Value, Empower".

Chronic kidney disease affects about 10% of the world's adult population and is one of the top 20 causes of death worldwide; however its effects are not experienced in the same way by men and women. Some kidney diseases, such as lupus nephritis or kidney infection, are more likely to affect women. Women also have different complications on dialysis than men, and are more likely to be donors than recipients of kidney transplants.

With World Kidney Day and International Women's Day both falling on March 8 in 2018, it offers the opportunity to highlight the importance of women's kidney health. Cochrane Kidney and Transplant, one of 53 Cochrane review groups that produce and disseminate systematic reviews of research on healthcare interventions, is helping provide reliable evidence to improve health outcomes for women and girls (see review list below).



Lupus nephritis, which typically affects young women, is a kidney disease caused by an autoimmune disorder in which the body's immune system attacks its own cells and organs. Cochrane Kidney and Transplant's review 'Immunosuppressive treatment for proliferative lupus nephritis' was first published in 2004 and is currently being updated for the second time. The review provides

valuable evidence supporting use of the newer drug mycophenolate mofetil (MMF) over the previously used cyclophosphamide, demonstrating better disease remission with fewer side effects.

"The results of our latest update provide even stronger evidence for the use of the newer drug regimen, particularly in the short term," current update author David Tunnicliffe said. "This is good news for women, as MMF is easier to take as an oral medication compared to the intravenously-administered cyclophosphamide, and has fewer negative effects in terms of hair loss and fertility.

"Our review also highlights the need for further studies on the longer-term effects of MMF, the potential value of combination therapy and the use of new cutting-edge biologic therapies."

Kidney infections are also more common in women and girls. Pyelonephritis is a potentially severe infection that in its acute form can lead to permanent kidney damage. A positive outcome is much more likely if both diagnosis and treatment are undertaken as quickly and effectively as possible. Cochrane Kidney and Transplant has two reviews on acute pyelonephritis in children.



'Procalcitonin, C-reactive protein, and erythrocyte

sedimentation rate for the diagnosis of acute pyelonephritis in children' examines the usefulness of three widely available blood tests to diagnose acute pyelonephritis. The first version of the review, published in 2015, found that none of the tests was accurate enough to allow clinicians to confidently diagnose the condition and called for further research. The authors are currently updating the review to evaluate the results of newer studies.

Another Cochrane Kidney and Transplant review looks at treatment options for acute pyelonephritis. First published in 2003, the latest update of 'Antibiotics for acute pyelonephritis in children' in 2014 found that, for children older than one month, oral antibiotics alone are as effective as a short course (three to four days) of IV antibiotics followed by oral therapy. When IV antibiotics are given, a short course (two to four days) of IV therapy followed by oral therapy is as effective as a longer course (seven to 10 days) of IV therapy. If IV therapy with aminoglycosides is chosen, single daily dosing is safe and effective.

"These findings are important because oral therapy is much easier to administer, less stressful for the child and does not require admission to hospital," review author Elisabeth Hodson said. "Our review also identified the need for further studies to determine the optimal duration of antibiotic therapy for acute pyelonephritis."



One of the most common kidney-related conditions, and one that overwhelmingly affects women and girls, is urinary tract infection. UTI is one of the most common problems for which young women seek medical attention and is one of the most common bacterial infections in infants and children. Cochrane Kidney and Transplant has a large selection of reviews on the treatment and

prevention of UTIs, which have contributed to the development of more effective, evidence-based healthcare interventions for women and girls of all ages. Unsurprisingly, the UTI reviews have proved very popular with readers of the Cochrane Library, with the group's most accessed review being 'Cranberries for preventing urinary tract infections'.

"We are very proud of the contribution our author teams from around the world have made towards improving the health of women and girls with kidney-related conditions," Cochrane Kidney and Transplant Co-ordinating Editor Jonathan Craig said. "We look forward to continuing to support authors in providing the very best evidence to inform decision-making for patients, carers and healthcare providers."

For more information, please visit:

Cochrane Kidney and Transplant - <u>http://kidneyandtransplant.cochrane.org/</u> The Cochrane Library - <u>http://www.cochranelibrary.com/</u> World Kidney Day - <u>http://www.worldkidneyday.org/</u>

Cochrane Kidney and Transplant reviews

Lupus nephritis

• Immunosuppressive treatment for proliferative lupus nephritis

Pyelonephritis

- Antibiotics for acute pyelonephritis in children
- <u>Procalcitonin, C-reactive protein, and erythrocyte sedimentation rate for the diagnosis of acute pyelonephritis in children</u>

Urinary Tract Infection

- Antibiotic duration for treating uncomplicated, symptomatic lower urinary tract infections in elderly women
- <u>Antibiotics for preventing recurrent urinary tract infection in non-pregnant</u>
 <u>women</u>
- Antibiotics for treating lower urinary tract infection in children
- Antimicrobial agents for treating uncomplicated urinary tract infection in women
- Chinese herbal medicine for treating recurrent urinary tract infections in women
- Cranberries for preventing urinary tract infections
- <u>Cranberries for treating urinary tract infections</u>
- <u>Dimercaptosuccinic acid scan or ultrasound in screening for vesicoureteral reflux</u> <u>among children with urinary tract infections</u>
- Duration of antibacterial treatment for uncomplicated urinary tract infection in women
- Interventions for covert bacteriuria in children
- Long-term antibiotics for preventing recurrent urinary tract infection in children
- Methenamine hippurate for preventing urinary tract infections
- <u>Modes of administration of antibiotics for symptomatic severe urinary tract</u> <u>infections</u>
- Oestrogens for preventing recurrent urinary tract infection in postmenopausal women
- <u>Probiotics for preventing urinary tract infection in people with neuropathic</u> <u>bladder</u>
- <u>Probiotics for preventing urinary tract infections in adults and children</u>
- Quinolones for uncomplicated acute cystitis in women
- <u>Short versus standard duration oral antibiotic therapy for acute urinary tract</u> <u>infection in children</u>
- <u>Urinary alkalisation for symptomatic uncomplicated urinary tract infection in</u>
 <u>women</u>