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## Seizing the opportunity to rethink renal research

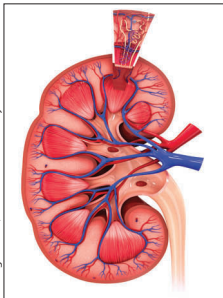


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The global burden of kidney disease is increasing. Worldwide, chronic kidney disease affects around 8–16% of the population, and the number of deaths from this disease almost doubled in the past decade. Incidence of acute kidney injury is also increasing, although causes vary widely between low-income and high-income countries.

Renal replacement therapy saves lives, but as discussed by Alberto Ortiz and colleagues, and by Raymond Vanholder and coworkers, in this week's special issue devoted to renal medicine, it goes only a small way to meeting the challenge of kidney disease. Dialysis is expensive—in economic, human, and environmental terms—and replaces only one function of a healthy kidney. Renal transplantation is more cost effective and associated with improved survival, but organ shortages and the need for lifelong immunosuppressive therapy present substantial challenges. Research into low-cost alternatives to renal replacement therapy, improved detection of disease, and affordable prevention strategies is urgently needed.

Most high-quality research in renal medicine today focuses on high-impact, cutting-edge science, to improve care provision for the few. In today's *Lancet*, the new CARPEDIEM machine designed by Claudio Ronco and colleagues aims to provide haemofiltration to neonates, and Somjot Brar and coworkers describe a regimen to prevent contrast-induced acute kidney injury during cardiac catheterisation. Lamentably few research submissions for this issue focused on improving renal care in low-income and middle-income countries.

Kidney disease gets little attention from policy makers. Few trials have been done on mortality factors in renal replacement therapy, optimisation of care before kidneys fail, or treatments to improve cardiovascular risk in these patients. In a Comment last year we called for a global target of 0 by 25: zero deaths of patients with untreated acute kidney failure in low-income countries by 2025. To meet this objective the nephrology community must refocus research on the areas that need it most.

■ *The Lancet*

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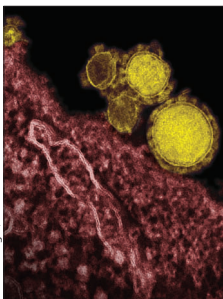
See [Series](#) pages 1831 and 1844

For more on [chronic kidney disease](#) see <http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2813%2960647-9/fulltext>

For more on [acute kidney injury](#) see <http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2813%2960647-9/fulltext>

For **0 by 25** see [Comment](#) *Lancet* 2013; **382**: 2041–42

## MERS-CoV: address the knowledge gaps to move forward



Callisa Images/Corbis

The first and second cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection in the USA were reported by the Indiana State Department of Health and the Florida Department of Health on May 1 and May 11, respectively, to the Centers for Disease Control and Prevention. These two cases, like all previous cases reported worldwide, have a Middle Eastern connection.

Person-to-person transmission of MERS-CoV has not been sustained, but the number of cases reported to WHO has been increasing. However, according to the WHO Statement on the Fifth Meeting of the International Health Regulations Emergency Committee released on May 14, the conditions have not yet been met for a MERS-CoV public health emergency of international concern. More than 600 laboratory-confirmed cases have been reported to WHO so far. Alarming, Simon Cauchemez and colleagues reported that at least 62% of asymptomatic cases had not been detected up to Aug 8, 2013.

Although severe acute respiratory syndrome (SARS) coronavirus and MERS-CoV have different infection sources, some of the lessons learnt from SARS since 2003

are relevant for the prevention of MERS-CoV transmission. All confirmed and probable cases of MERS-CoV infection should be notified to WHO. Health-care personnel should be taught or given refreshers on infection control practices to safeguard against nosocomial transmission. In a Comment, Alimuddin Zumla and David Hui stress the importance of basic measures for infection control for curbing the increase in nosocomial infections.

Since the first case of MERS-CoV was reported in Saudi Arabia in September, 2012, much remains to be learnt about the virus. In 2013, Abdullah Assiri and colleagues pointed out major gaps in knowledge about the epidemiology, community prevalence, and clinical range of MERS-CoV. Questions that still need to be addressed include what are the optimum measures for infection control, what is the potential for person-to-person transmission, and what is the complete range of expression of disease? International collaboration is imperative to address the gaps in knowledge and apply the lessons learnt from past outbreaks to existing and emerging infectious diseases. ■ *The Lancet*

See [World Report](#) page 1793

For the [WHO statement](#) see <http://www.who.int/mediacentre/news/statements/2014/mers-20140514/en/>

For [Simon Cauchemez and colleagues' paper](#) see [Articles](#) *Lancet Infect Dis* 2014; **14**: 50–56

For the [Comment](#) see *Lancet* 2014; published online May 20. [http://dx.doi.org/10.1016/S0140-6736\(14\)60852-7](http://dx.doi.org/10.1016/S0140-6736(14)60852-7)

For [Abdullah Assiri and colleagues' paper](#) see [Articles](#) *Lancet Infect Dis* 2013; **13**: 752–61