



Jane Hocking: an expert of the nether regions



For the ACCEPt study see
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“My whole career has tended to focus on the ‘nether regions!’” Jane Hocking tells *The Lancet Infectious Diseases* from her office at the University of Melbourne. In her role as Head of the Sexual Health Unit at the Melbourne School of Population and Global Health, she has carried out research on various sexually transmitted infections, with a particular emphasis on chlamydia.

Raised in Hamilton, a country town in western Victoria, Australia, Hocking was aware early of disadvantage in her community regarding access to sexual health, including high rates of unplanned pregnancies. Her parents told her that education was the best route to success, and she went on to study medical laboratory science at the Royal Melbourne Institute of Technology. “I was interested in pathology and this degree enabled me to secure a role at the Victoria Cytology Service. There I became aware of human papillomavirus (HPV) and developed an interest in sexual health”, she explains. Not wanting to stare down a microscope forever, Hocking took advice from her then mentor, Heather Mitchell, an epidemiologist who established Australia’s first Pap test registry. “I wanted to be involved in using screening data to make policy decisions, but I needed other training, so I went to Swinburne University to study health statistics, despite my innate fear of computers at the time!”

A job at the Burnet Institute followed, analysing data on a large cohort of injecting drug users, and then a Masters of Public Health at the University of Melbourne, on condom breakage and slippage, saw her return to studying sexual health. Wanting to understand how research is translated into policy, Hocking did a 2-year public health training programme within the Victorian Department of Health during which she realised that she would prefer research to policy work. At the age of 37, she began her PhD on chlamydia at the University of Melbourne under the supervision of another career mentor, Kit Fairley (Director of the Melbourne Sexual Health Centre). “Kit was supportive, encouraging, and helped me develop my research career”, says Hocking.

This work generated Australia’s first and only population estimates of chlamydia prevalence in young people, finding that about one in 20 will have chlamydia at any time. These estimates prompted the Australian Government to recognise chlamydia as a serious public health concern. Hocking and her colleagues went on to show that up to 18% of women will become re-infected within 4 months. “This is important because repeat chlamydia infection can dramatically increase the risk of developing pelvic inflammatory disease, which can lead to infertility”, explains Hocking.

This work led to the Australian Chlamydia Control Effectiveness Pilot (ACCEPt) trial, a landmark study published in *The Lancet*. It investigated annual opportunistic testing for young people, showing the difficulty of reducing the prevalence of chlamydia through general practice. Despite increasing screening rates by 2.5-times, the intervention did not impact population chlamydia prevalence nor the incidence of pelvic inflammatory disease diagnosed in general practice. “This trial has made me rethink how we approach chlamydia control” explains Hocking. Victoria has only a handful of sexual health clinics and most chlamydia is diagnosed in general practice. “Following on from ACCEPt, my team is now investigating strategies to improve chlamydia case management in general practice,” says Hocking. “How can we better connect young people with general practitioners and nurses, is there a role for online chlamydia testing and prescribing services linked with general practice? Could we use mailed test kits for chlamydia re-testing?”

Hocking is currently working with her postdoctoral student Fabian Kong on establishing the pharmacokinetic profiles of antibiotics for treating sexually transmitted infection in the throat, rectum, and genitals. “With increasing antimicrobial resistance, we need to optimise available antibiotics for sexually transmitted infection treatment, potentially using alternative regimens at different infection sites”, says Hocking.

Hocking has recently joined the International Advisory Board of *The Lancet Infectious Diseases*, has been working with the Centre for Excellence in Rural Sexual Health (Australia) to investigate strategies to improve sexual health care access for young adults in rural areas, and is working with academic general practitioners to establish a large repository of general practice consultation data for research and policy development. Outside of work, she follows Australian Rules football and is a lifelong Hawthorn Hawks fan. She is a lover of fine dining and admits she values a good bath. “I do some of my best thinking while relaxing in the bath!” she laughs.

“I am incredibly proud to be able to work with Jane in the nether regions!” says Nicola Low of the Institute of Social and Preventive Medicine at the University of Bern, Switzerland. “She is both a thinker and a doer, with a keen eye for key research questions and a talent for putting ideas into action”, Low says. “The recipe for Jane’s inspiration must lie in the combination of daily swimming, designer shoes, and pinot noir.”

Tony Kirby