



Sexual health in Indigenous communities

Extreme rates of gonorrhoea in remote areas must be reduced

In this issue of the Journal, there are two important articles highlighting the disadvantages experienced by Indigenous Australians, and offering important practical suggestions for improving health care.^{1,2}

The article by Graham and colleagues analyses the notification rates for chlamydia and gonorrhoea in Australia by Indigenous status.¹ Their findings are stunning. Compared with non-Indigenous Australians, Indigenous Australians have rates of gonorrhoea that are 174-fold higher overall and 466-fold higher in women.¹ Because gonorrhoea is commonly symptomatic, rates can provide a reasonable measure of incidence, so these enormous numbers cannot be explained away.³ They are real.

In contrast, chlamydia notifications were only about 10–20 times as high in Indigenous communities.¹ However, chlamydia notification rates do not equate to true incidence because infections are largely asymptomatic, so notification rates are largely dependent on testing rates.⁴ When testing rates were taken into account in an enhanced surveillance program and the analysis adjusted for age and area of residence, Indigenous Australians were only 1.6 times as likely to have chlamydia.⁵ Given the uncertainty about whether chlamydia screening can reduce the prevalence of infection, it is not surprising that the prevalence of chlamydia is not vastly different between Indigenous and non-Indigenous communities.⁶

The obvious question, then, is why do Indigenous communities, particularly remote communities, have rates of gonorrhoea that are hundreds-fold higher than those of

non-Indigenous Australians? Studies in the mid 1990s suggested that it was related solely to poor access to health care. This prompted widespread testing for sexually transmissible infections (STIs).⁷ However, despite widespread frequent testing, only relatively small falls (twofold) in gonorrhoea prevalence have occurred.⁸ It may be that for gonorrhoea prevalence to fall dramatically, men (who are almost always symptomatic) need to be tested and treated within a few days of onset of symptoms.³ If men cannot or do not access treatment, annual screening would reduce the average duration of infection from 6 to 4.5 months. This is still nowhere near the average duration of infection of just a few days observed in men in urban areas, where they can access health care relatively quickly. The much lower rate of gonorrhoea infections observed in Indigenous Australians living in urban areas, compared with the high rate observed in remote areas, is consistent with this explanation.¹

This pattern of much higher rates of gonorrhoea (but not of chlamydia) infection in one group of heterosexual people compared with other groups is not unique to Australia. In the United States, for example, the rate of gonorrhoea infections in white women is 26 per 100 000, and 431 per 100 000 in African American women, or about 17 times as high.⁹ In contrast, the prevalence of chlamydia, adjusted for other risks, was only 1.9 times as high in African American women as it was in white American women.¹⁰ Access to health care in the US is limited more by finance than by distance, and the disparity between races may

Christopher K Fairley
FRACP, PhD, FACSHP,
Director, Melbourne Sexual
Health Centre

Jane S Hocking
MPH, MHlthSc, PhD,
Associate Professor

School of Population
Health, University of
Melbourne,
Melbourne, VIC

cfairley@unimelb.edu.au

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become worse as STI treatment centres are closed around the US.¹¹

So how do we create an environment in which access to testing and treatment can occur within days? Individuals need to recognise the significance of symptoms and act quickly, and services will need to be accessible within days. Individuals should have enough community support that they can prioritise treatment for a urethral discharge. Work is underway on this issue, and government recommendations are available.¹² Priority areas include increased STI testing and treatments; improved health promotion and health literacy; a stronger focus on the health of people in same-sex relationships and transgender people; and improved human papillomavirus vaccination rates.¹²

The second article, by Silver and colleagues, deals with the direct complications that a community faces when STI rates are high,² and describes a simple, clever and significant retrospective study. The study showed that among young women presenting with abdominal pain, the diagnosis of pelvic inflammatory disease (PID) was missed in about 80% of presentations of PID, and even when it was diagnosed, no case was treated according to the guidelines. These mistakes are not the fault of individual clinicians but occur because of system failures in health services.¹³ As the authors point out, one solution is to redesign the health systems so these mistakes happen less.¹³ One important suggestion is to make PID the default diagnosis for every sexually active woman with lower abdominal pain, once other causes are excluded, without the need to identify specific symptoms or signs. Changes to training have not substantially improved diagnosis and treatment of PID, and its diagnosis varies greatly when clinicians use symptoms and signs to guide them.¹⁴

These articles provide important and practical information on how the health of Indigenous Australians can be improved, as we struggle to "close the gap".

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