

RATES OF PELVIC INFLAMMATORY DISEASE AND ECTOPIC PREGNANCY ARE NO LONGER DECLINING: AN ECOLOGICAL ANALYSIS OF AUSTRALIAN HOSPITAL ADMISSIONS AND EMERGENCY PRESENTATION DATA, 2009-2014

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Background: Pelvic inflammatory disease (PID) and ectopic pregnancy (EP) among women are important sequelae of sexually transmissible infections (STIs). We assessed recent PID and EP trends across the three most populous Australian states (Victoria, New South Wales, Queensland).

Methods: Hospital admission and emergency department presentation PID and EP rates among women 15-44 years were calculated for 2009-2014, using population and live birth denominators. Poisson models were used to assess variation in rates by year, age, socio-economic disadvantage and area of residence.

Results: PID admission rates in 2014 were 63.3 per 100,000 women (95%CI: 60.8-65.9) and PID emergency rates were 97.0 per 100,000 women (95%CI: 93.9-100.2). Between 2009 and 2014, PID admission rates did not change overall, but increased by 36% (Incidence rate ratio [IRR]: 1.36; 95%CI: 1.13-1.63) for acute PID and declined by 16% (IRR=0.84; 95%CI: 0.74-0.95) for chronic PID. Emergency PID rates increased by 34% between 2009 and 2014 (IRR: 1.34; 95%CI: 1.24-1.45). PID rates were highest among women 15-24 years. Between 2009 and 2014, EP admission rates per 1000 live births increased by 8% (IRR: 1.08; 95%CI: 1.06-1.11) to 17.8 (95%CI: 17.2-18.3) in 2014, and EP emergency rates increased by 27% (IRR: 1.27; 95%CI: 1.21-1.33) to 15.9 (95%CI: 15.4-16.5). Of all emergency cases, 68% of PID and 22% of EP were managed without admission. Increasing disadvantage and remoteness of area tended to be associated with higher PID and EP rates.

Conclusion: Increasing PID and EP rates could represent changing sexual practices, increasing STI transmission and re-infections in the population, or increased case detection. PID remains an important cause of morbidity in young people. A strengthened focus on reducing risk of these sequelae is warranted.

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