

# ‘Yes wee can’– a nurse-driven asymptomatic screening program for chlamydia and gonorrhoea in a remote emergency department

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**Abstract.** *Background:* A nurse-driven, urine-based screening program for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* was conducted in a remote emergency department targeting asymptomatic youth. *Methods:* Individuals who presented to the Emergency Department with non-genitourinary complaints between the ages of 16 and 34 were offered free opportunistic urinary testing for gonorrhoea and chlamydia. *Results:* In total, 178 eligible patients were offered screening, 65% consented for testing and 14 patients (12%) returned positive results, with 10 diagnoses of chlamydia, 9 of gonorrhoea and 5 with both. *Discussion:* Emergency departments are an underutilised interface between difficult to reach at risk youth populations and public health services.

**Additional keywords:** Australia, opportunistic testing, STI.

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## Background

In Western Australia, 15- to 34-year-olds are responsible for 90% of chlamydia and 78% of gonorrhoea notifications.<sup>1,2</sup> In rural and remote settings, identified barriers to sexual health screening include limited primary health services, lack of specialised sexual health clinics, shame associated with seeking testing, long clinic waiting times, concern over specimen collection and cross-cultural issues.<sup>3,4</sup> The burden of disease is disproportionately high in rural communities. In the Kimberley region of Western Australia, the age-standardised rates are three times higher for chlamydia and over 20 times greater than the state average for gonorrhoea. Despite comprising just 2% of Western Australia's population, the Kimberley is responsible for 37% of the state's gonorrhoea notifications.<sup>5</sup> The predominance of asymptomatic infection in conjunction with endemic levels of disease creates an environment whereby proactive screening is not only vital for improving health status but also represents a cost-effective measure.<sup>6,7</sup>

## Methods

Based in an Emergency Department, we conducted a nurse-initiated, urine-based asymptomatic screening program for gonorrhoea and chlamydia in 16- to 34-year-olds. The aim

was to work within the existing health infrastructure, purposefully making research staff redundant in the daily workings of the project and creating a sustainable, nurse-driven initiative. All patients aged between 16 and 34 years old who presented to the Emergency Department were eligible for entry into the study. Failure to sign a consent form, symptoms consistent with a genitourinary complaint and any triage Category 1 patients were excluded from the study.

Eligible patients were enrolled into the study from August 9 to December 9 2010.

## Results

There were 178 eligible patients that were offered testing, 87 identifying themselves as being Aboriginal or Torres Strait Islander, and 91 as non-Aboriginal or Torres Strait Islander. Acceptance of consent for entry and results by sex are represented in Table 1. Five samples were not processed due to incomplete labelling or leaked samples.

Of the 116 subjects that consented for entry, 14 patients (12%) returned a positive result, 9 male and 5 female. Five patients were positive for both chlamydia and gonorrhoea. Ten diagnoses of chlamydia (9%) and nine cases of gonorrhoea (8%) were made. Of the 14 cases, 10 resided within the jurisdiction of the Community Health team. From these 14 cases, 29 contacts

Table 1. Consent for entry and results by sex

	Male	Female	Overall
Accepted total	52 (68%)	64 (63%)	116 of 178 (65%)
Accepted Indigenous	25	31	56 of 87 (64%)
	25 of 36 = 69%	31 of 51 = 61%	
Accepted non-Indigenous	27	33	60 of 91 (66%)
	27 of 40 = 68%	33 of 51 = 65%	
Declined total	24 (32%)	38 (37%)	62 of 178 (35%)
Declined Indigenous	11	20	31 of 87 (36%)
	11 of 36 = 31%	20 of 51 = 39%	
Declined non-Indigenous	13	18	31 of 91 (34%)
	13 of 40 = 32%	18 of 35 = 51%	
Positive result – chlamydia	8	2	10 of 116 (9%)
	8 of 52 = 15%	2 of 64 = 3%	
Positive result – gonorrhoea	6	3	9 of 116 (8%)
	6 of 52 = 12%	3 of 64 = 5%	

were identified, and offered screening and ‘ZAP packs’ (1 g Azithromycin, 3 g Amoxycillin plus 1 g Probenecid) in accordance with routine practice.<sup>8</sup> Twelve of these contacts had positive results, 10 for chlamydia, 3 for gonorrhoea and 1 for infectious syphilis. This represents a positive pick-up rate of 42% in these contacts.

## Conclusion

In the context of a busy emergency department, there is widespread potential for screening an at-risk and often difficult to target youth population. High rates of consent to screening may reflect the ubiquitous offering of testing, normalising the process and minimising the ‘shame’ associated with self-presentation specifically for screening.

Attention in the literature is being drawn to the reluctance of young male adults to present to general practitioners. When they do present, they are offered screening for sexually transmissible infections roughly half as often as women, 6.9% versus 3.7%.<sup>9,10</sup> There is building evidence that failure to detect and treat infection in men may counteract any gains in the attempts to control disease.<sup>11,12</sup> The predominance of males who received positive results in this study supports this hypothesis. The successful screening of 68% of men approached for this study suggests that emergency departments not only pose as a suitable environment to access and offer opportunistic asymptomatic screening in young men, but a forum to achieve dramatic results that will positively feedback to the whole community.

## Conflicts of interest

None declared.

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