

Where are we going with chlamydia?

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Chlamydia continues to perplex us. Throughout much of the industrialised world, notifications have been relentlessly rising for a decade. Several countries have launched national screening programs. Chlamydia infection is a generalised epidemic; while there are well recognised risk factors for individuals, no major segment of the population is spared.¹

Even among the minority of the public that know what it is, in its own right chlamydia represents an insufficient threat to drive most people to abstinence, life-long exclusive relationships, or the consistent use of condoms. By the time chlamydia results in infertility or an ectopic pregnancy the organism has usually moved on. Thus, the true culprit is rarely implicated and is almost never publicly singled out as causing major disease in an individual. Only high profile and 'incurable' conditions like HIV infection are capable of achieving sustained behaviour change, however patchy. Nevertheless, many Australian jurisdictions and New Zealand have launched targeted education programs with goals that include encouraging condom use, raising awareness of chlamydia among the public and health professionals and recommending screening.

A consensus has emerged that more intensive and focussed population screening is needed, along with improved partner management strategies. With only 7 to 8% of women under the age of 25 years tested for chlamydia each year,¹ Australia clearly has a lot more case finding to do.

From 2006, with a program budget of AU\$12.5 million, the Australian Government has begun to fund a series of pilot screening projects involving a wide range of clinical services and a variety of priority populations, and with geographical diversity. This program is also funding national projects that are investigating chlamydia reinfection rates; education packages for general practitioners, rural and remote health workers, teachers, parents and young people; and a system of enhanced sentinel surveillance.² A particularly encouraging feature of the program is that over 100 applications for project funding were received, indicating a high level of enthusiasm among many organisations.

In this context, it is timely for *Sexual Health* to contribute to a growing body of literature exploring enhanced

chlamydia surveillance and screening strategies in various populations,^{3–8} including barriers to testing^{5,6,9} and contact tracing.^{10,11} In Canberra, no significant difference was found in chlamydia prevalence among men who have sex with men between clinical and community settings, from which a need for more screening of anal swabs was concluded.⁴ As suggested by the work of Gaydos *et al.*⁶ in Baltimore, momentary embarrassment and confidentiality concerns may be among the foremost barriers to chlamydia testing. Perhaps we need to adjust our clinical model so that the process is less intimidating for our patients. 'Simple and inexpensive' online resources can then be made available to the family doctor to facilitate partner management.¹¹

An interesting hypothesis – that chlamydia prevalence may be suppressed at a population level by antibiotics given mainly for other purposes – also warrants further research.¹² Using Australian cost parameters and a traditional methodology, screening women annually up to the age of 25 years is shown to be cost effective.¹³ It would be interesting to also examine cost effectiveness using a dynamic model. In such a model, the possibility that widespread screening could lower the population prevalence of chlamydia, thus averting incident infections could be examined. This ongoing benefit would be in addition to the prevention of complications in those women who are already infected. Alternative screening models, including screening men, also need to be assessed for cost effectiveness.

Almost certainly, with increasing testing, chlamydia notifications will continue to rise. Because it is a largely asymptomatic condition, chlamydia statistics are vulnerable to testing artefact,^{14,15} making notification data very difficult to interpret. A rise in notifications could be plausibly interpreted as either success (because more asymptomatic cases are being detected and treated) or failure (because more transmission is occurring) of a more widespread testing campaign.

Clearly, we need surveillance strategies that can differentiate these outcomes. Repeated cross-sectional chlamydia prevalence surveys of the same populations are one option. Enhanced sentinel surveillance in a range of

clinical services that are capable of denominating their priority populations, determine testing rates and report positive yield in a longitudinal fashion is another option. With the abandonment at the end of 2005 of the Medicare item specific to chlamydia testing, a crucial surveillance tool was lost for the time being. It is rumoured that commonsense will prevail and the item number can be restored soon. No single surveillance method will give us all the information that we will need to know where we are going.

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