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What is the Gonococcus Telling Us?

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Biologically and politically the gonococcus could hardly be more different from the human immunodeficiency virus (HIV). Yet both organisms speak the same language. Each is rare among heterosexual, non-injecting, non-prostitute, non-indigenous Australians who have not had sex overseas ("us").[1] Instead, they are concentrated among "them": the faceless, the stigmatized, the under-served, "the other".[2]

Because it killed so obviously, HIV demanded our attention. Considerable resources have been committed to surveillance, clinical and social services, research, and health promotion programs which include removing institutional barriers to HIV control. The HIV-affected communities have been central players and skilled advocates. Australia nets an excellent return on its AIDS-dollar.[3]

By contrast, the curable gonococcus was left to its own devices along with the other sexually transmissible infections (STIs). Remarkable declines in the incidence of gonorrhoea and some other STIs in our cities during the 1980s[1] were viewed as unintentional but positive spin-offs of HIV control programs. Unfortunately, many community advocates still choose to ignore the overwhelming evidence that most other STIs directly promote the sexual transmission of HIV.[4] With some justification, the other STIs are seen as trivial distractions from the Main Game, HIV control. "HIV control in a broader sexual health context"[3] has sometimes been positioned as a threat to singularity of purpose and a potential diffusion of precious resources. The opportunity to complement behavioural HIV control strategies with biological interventions (control of other STIs) has been resisted. STI control has only been conceded as relevant for indigenous Australians.

Left out in the political cold, the gonococcus has thrived. Elegantly documented in this issue by the Australian Gonococcal Surveillance Program (AGSP),[5] the gonococcus is relentlessly returning to the hyperendemic levels that contributed to the peak incidences of HIV infections among our gay communities in the early 1980s. In Sydney the number of gonococcal isolates examined by the AGSP to the end of July 1998 exceeded the total number for 1996 (Prof J Tapsall, unpublished). At the Sydney Sexual Health Centre 67% of all cases of gonorrhoea since 1995 have been among gay men, a third of whom were HIV positive (unpublished data). The largely unspoken hope that advances in anti-retroviral therapy could yield a less infectious HIV-infected population overall (even if this cannot be assumed for individuals) could be at least partially offset by the gonococcus increasing that population's infectiousness or their partners' susceptibility to HIV infection.

So what is the gonococcus telling us to do? We could start with some national leadership and policy structures commensurate with the morbidity, mortality (direct and indirect) and controllability of the other STIs. Though they are inter-related it is naïve to assume that good HIV control is synonymous with good STI control. Each STI is different.[1]

To use the gonococcus as an example, education programs – for health professionals, policy makers, key communities and community leaders – which include the role of the gonococcus in enhancing the transmission of HIV may be timely. The much greater infectiousness of the gonococcus and its wide clinical spectrum need to be better understood.

New combined gonorrhoea/chlamydia polymerase chain reaction (PCR) screening tests are already being used among indigenous populations. PCR testing has the advantages of being able to use urine or other self-collected specimens, overcoming many of the cultural and logistic barriers to case-finding. PCR testing is likely to become standard in most clinical settings but, in its current form, it does not yield antibiotic sensitivity information. Modifications to the Medical Benefit Schedule (MBS) will need to be negotiated to ensure that this vital clinical information remains available from large representative samples.

The MBS also has structural barriers to screening for the gonococcus among gay men with HIV. A standard HIV

monitoring visit to a GP (full blood count, biochemistry, T-cell subsets, viral load test) already exceeds the "3-test rule", under which the GP's pathologist(s) is only rebated for the three most expensive tests. Concurrent multi-site tests for gonorrhoea and chlamydia may be more than the pathologist can afford to absorb financially and is likely to be discouraged. Tests deemed to be of public health importance, such as the Pap smear, are already exempted from the 3-test rule. STIs could also be deemed to be of public health importance, at least in selected populations, if screening is to be encouraged.

The exclusion of sex workers from MBS rebates for STI testing is not only questionable from public health and economic perspectives, it is also legally dubious: all recent studies among sex workers have found their private risk greatly exceeds their professional risk of STIs.

As highlighted in the current report[5] Australia no longer has access to a reliable oral treatment for gonorrhoea. Cefixime is such a drug. It is recommended and used by the U.S. Centers for Disease Control and Prevention. Unfortunately the small market and licensing fees in Australia make it uneconomic for the drug's manufacturers to bring cefixime to this country. This too needs to be negotiated.

Finally, because a substantial proportion of people with gonorrhoea develop symptoms within weeks of becoming infected, it has proven to be the model disease for studying how STIs move through populations. Insights into the epidemiology of gonorrhoea informed the study of HIV epidemiology and are likely to continue to do so as our ability to discriminate between gonococcal strains improves. Rarely manifesting as point-source outbreaks, the epidemiology of gonorrhoea and HIV is predominantly based on multiple small clusters of infections which reflect broader social trends and system failures. The AGSP has begun the task of translating the message. Are we prepared to listen?

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Editor's column

This issue

This issue of *CDI* has a focus on Neisseria with the publication of the 1997 Annual Reports of the Australian Meningococcal Surveillance Programme (p 205) and the Australian Gonoccocal Surveillance Programme (p 212). While the meningococcus and the gonococcus have different means of transmission and cause very different diseases, each is showing changes in epidemiology and patterns of antimicrobial resistance which have important implications for treatment and for public health management and control. In his thought-provoking editorial, Donovan (p 216) draws out these implications for the gonococcus and challenges us to respond to prevent the organism from again becoming hyperendemic. We continue our series on important issues in immunisation with the article by Botham et al (p 218) on the immunisation of preterm infants. Media reports will have made many readers aware of the current outbreak of Newcastle disease (ND) in poultry in NSW. The outbreak report (p 222) provides useful information for reassuring the public about the very low risk to human health from the ND virus. The report of an outbreak of Q fever in an abattoir in NSW (p 222) provides a reminder of the importance of vaccination for abattoir workers throughout Australia.

More changes in the editorial team

Since my last column, the *CDI* editorial team has farewelled another member, our deputy editor, Corrine Rann. Corrine worked with us for 15 months and was the person of first contact for many of our readers, contributors and reviewers. She implemented many improvements to the *CDI* layout and her editorial skills ensured that each issue of *CDI* was produced to a high standard. Her skills and contributions are missed. This is my last editor's column as I am moving shortly to a new position within the Department of Health and Family Services. Pending the appointment of a new Editor and Deputy/Assistant editors, the remaining members of the *CDI* editorial team will continue to publish national surveillance data and outbreak information. However, publication of the 1997 Annual report of the National Notifiable Diseases Surveillance System will be delayed, as will a number of the articles currently in preparation. Please be patient as it will not be long before *CDI* will be back to normal.

Bronwen Harvey