1995, this problem has been rectified in data from Scottish GUM clinics. Scotland is now in a unique position in the UK, in that we now collect statistics on individuals (with all due attention to preserving anonymity, by using unique identifiers), rather than diagnostic events. These changes have been introduced in tandem with a major review of case definitions and more clinically relevant coding categories.

Our data can now be linked to both demographic and sexual behaviour data, as well as to a clearly definable denominator population. To this end, therefore, the deficiencies to which the authors refer in their paper will no longer apply in Scotland. We are shortly due to commence a local study of sexual behaviour in GUM clinic attenders in Glasgow compared with a control population (in a nearby family planning centre) and we hope that many similar developments will be possible in the future, as a result of this fundamental improvement in the methodology of our data collection.

ANNE SCOLAR

Department of Genitourinary Medicine & Sexual Health,
Glasgow Royal Infirmary
University NHS Trust,
Queen Elizabeth Building,
16 Alexandra Parade,
Glasgow G3 7ER, UK
DAVID GOLDBERG
Scottish Centre for Infection
and Environmental Health,
Ruchill Hospital, Glasgow
PETER KNIGHT
Information Services Division,
NHS in Scotland,
Trinity Park House, Edinburgh

Correspondence to: Dr A Scolar.

Urinary symptoms, sexual intercourse and significant bacteriuria in male patients attending STD clinics

We read with interest the recent paper by David *et al*¹ on urinary symptoms and bacteriuria among male STD clinic attenders. The authors state that *urethritis and UTI cannot be distinguished on clinical grounds and/or urethral smears*. We were surprised that no mention was made of the "two glass urine test" as a means of distinguishing pure urethritis from a combined urethritis/cystitis. We find this a useful test—from January to July this year 11 men attended our department with a documented UTI; nine of these had a cloudy second catch urine (not due to phosphaturia). We would, therefore, be interested to hear whether the authors can provide details of the two glass urine test results in their patients with both bacteriuric and non-bacteriuric urinary symptoms.

SARAH EDWARDS
GORDON DOCKERTY
CHRIS SONNEX

Department of Genitourinary Medicine,
Addenbrooke's NHS Trust Hospital,
Hills Road, Cambridge CB2 2QQ, UK

- 1 David LM, Natin D, Walzman M, Stocker D. Urinary symptoms, sexual intercourse and significant bacteriuria in male patients attending STD clinics. *Genitourin Med* 1996; 72:266–8.

The authors reply:

Although the "two glass urine test" is a time honoured practical in house clinic test, we did not include it in our study. This test in our opinion is subject to observational

variation and interpretation. We think that looking under the microscope for quantitative assessment of inflammatory cells is less subject to observer variation and is more scientific. In the Cambridge group only nine of the 11 patients with urinary tract infections had a cloudy second urine, while all the 13 patients with urinary tract infection in our study were found to have pyuria.

LOAY DAVID
DAN NATIN

Antibiotic treatment for gonorrhoea in the UK

The emergence of resistance to quinolones in *Neisseria gonorrhoeae* was highlighted in the review by Ison¹ and in the report by Abeyewickreme and others.² However, in the UK quinolones are becoming ever more widely used and have now overtaken penicillin as the drug of first choice. The National Audit of gonorrhoea management questioned all clinics in the UK about cases diagnosed in the first three months of 1995 and received data on 1308 cases, 59% of all reported in the quarter. The antibiotics used fell into the following classes: quinolones 48%, penicillins 40%, spectinomycin 3%, others/not recorded 9%. For those patients known to have acquired their infection outside Europe, and when penicillinase producing *Neisseria gonorrhoeae* (PPNG) was presumably thought to be more likely, the choice (ignoring single use and unspecified drugs) was: quinolones 73%, penicillins 23%, spectinomycin 4%.

Ciprofloxacin resistance is still rare in the UK, but in 1995 the highest ever annual total of ciprofloxacin resistant strains was identified by the Gonococcus Reference Unit, while PPNG isolates were still below their 1992 figure.³ The Reference Unit data rely on voluntary reporting with its attendant limitations. The National Audit figures show that antibiotic choice has moved away from penicillins, so it is now particularly important that information monitoring the extent of ciprofloxacin resistance is available to UK genitourinary physicians.

MARK FITZGERALD

Taunton and Somerset NHS Trust,
Department of Genitourinary Medicine,
Taunton and Somerset Hospital,
Musgrove Park, Taunton,
Somerset TA1 5DA, UK

- 1 Ison CA. Antimicrobial agents and gonorrhoea: therapeutic choice, resistance and susceptibility testing. *Genitourin Med* 1996;72:253–7.
- 2 Abeyewickreme I, Senaratne L, Prithiviraj VB. Rapid emergence of 4-fluoroquinolone resistance with associated decline in penicillinase-producing *Neisseria gonorrhoeae* in Colombo, Sri Lanka. *Genitourin Med* 1996; 72:302.
- 3 CDR 1996;6:110–1.

Epidemiology of gonococcal and chlamydial infections in Harrow and Brent

Matondo and colleagues report on gonococcal and chlamydial infections in Harrow and Brent.¹ I would agree that it is important to perform such work since it can define "the extent of the problem in the community" and allow for the development of "a profile of STDs in our catchment population".

Sadly, they have done neither of these two since their sampling is limited solely to those using the genitourinary medicine (GUM)

clinic at Northwick Park. An earlier study (not mentioned by the authors), also carried out in Brent and Harrow, was able to do both of these.² This study was conducted to identify and estimate the proportion of female patients suffering from gonorrhoea, trichomoniasis and candidosis, both with and without symptoms, seeking care or failing to seek care at all. Samples of women in Brent and Harrow were studied in antenatal, gynaecology, family planning, and GUM clinics, and in general practice. This comprehensive study took into account both multiple agencies, subsamples of non-consulters on general practitioner lists, and residents seeking care at STD clinics elsewhere in England, and thus gave a true population incidence and prevalence.

The authors recognise that there are limitations to their study from only sampling attenders at one clinic within Brent and Harrow, but they should not then make claims that infections occur along major transport routes, that there are sex differences among those with gonorrhoea and chlamydia, that the proportion of infected teenagers is small, and about the efficacy of male to female transmission and diagnostic tests. It is a shame that a study that could have formed the basis of important public health interventions within Brent and Harrow has, by its limited sampling, not been able to do so. The asymptomatic nature of many STDs, the fact that even those with symptoms do not always seek care, and that partner notification is not always as effective as one would desire, must mean that people with STDs within the community are potentially not identified by samples taken from clinic attenders. Public health strategy should be based on true population samples, and not limited to attenders at specialist clinics.

MICHAEL W ADLER

Department of Sexually Transmitted Diseases,
University College London Medical School,
Mortimer Market Centre, Mortimer Market,
off Capper Street, London WC1E 6AU, UK

- 1 Matondo P, Wall R, Morgan K, Hickman M, Dore C, Kapembwa M. Epidemiology of gonococcal and chlamydial infections in Harrow and Brent. *Genitourin Med* 1996; 72:352–7.
- 2 Adler MW, Belsey EM, Rogers JS. Sexually transmitted diseases in a defined population of women. *BMJ* 1981;283:29–32.

Epidemiological treatment and tests of cure in gonococcal infection: evidence for value

In his otherwise excellent review article,¹ Chris Carne makes the classic mistake in his conclusions of quoting somewhat spurious percentages rather than absolute values. He says that 42.6% of treatment failures will be missed if tests of cure are not routinely performed on men with gonococcal infection. However, a closer look at these figures shows that out of the original 4897 men, only 183 (3.7%) were treatment failures, of whom only 78 (1.6%) were asymptomatic; therefore, only 78/4897 (1.6%) of the total would remain infected after treatment if a policy of test of cure for asymptomatic men were not followed; a more meaningful statistic. As Carne himself points out in the article, the cost of identifying each of these very small numbers of cases in America was estimated to be in the range \$4900 to \$109 800 per case. It might therefore be argued that a more cost effective use of this money would be to