Shared care in the management of genital *Chlamydia trachomatis* infection in primary care

B Armstrong, S Kinn, A Scoular, P Wilson

**Objectives:** To investigate the impact of a health adviser in genitourinary medicine as a training and support resource on the management of *Chlamydia trachomatis* in a large inner city health centre.

**Methods:** A large, inner city health centre was selected at random for the intervention, with another selected as control. The health adviser offered support and training in the management of *C. trachomatis* to clinical staff in the intervention health centre for 6 months. Data on testing activity were collected over the period of the intervention and during the equivalent period in the previous year. Data on partner notification activities were collected from case notes.

**Results:** The research intervention was effective in increasing *C. trachomatis* testing activity. However, the majority of tests were offered to women over 20 years of age and no increase in the proportion of positive results was observed.

**Conclusions:** The intervention was effective in increasing *C. trachomatis* testing activity, but did not improve the overall detection rate. Health centre staff accommodated opportunistic testing for *C. trachomatis* into existing healthcare practices, as opposed to introducing new screening systems designed to reach the target population.

Optimal settings for opportunistic testing and screening for genital *Chlamydia trachomatis* infection are currently being considered in the United Kingdom. A minority of sexually active people under 25 years of age (the age group most at risk) use specialist sexual health services. Other settings must therefore be utilised if opportunistic testing and screening are to be introduced. Links between primary care and genitourinary medicine (GUM) services are an important component of any *C. trachomatis* screening programme: one key undetermined issue is how to ensure effective collaboration. There is some evidence that current links are unsystematic and ad hoc and there is a need for research to investigate more effective models. We investigated the impact of an improved training and support link between GUM and primary care by observing the effects of placing a health adviser in genitourinary medicine in an inner city health centre.

**METHODS**

**Setting**

All local healthcare cooperatives (LHCCs) in one NHS health board area were contacted by letter and invited to participate. Interested LHCCs identified health centres that could take part in the research. Two LHCCs provided information on four health centres; the populations for two were well matched in terms of socioeconomic status, and were therefore recruited.

Health centre A was selected at random for the study intervention, with health centre B acting as a control. The health adviser worked in health centre A for 6 months (June to November, 2001). His activities included raising awareness of *C. trachomatis* among staff and patients and offering training in general sexual health work designed to enable clinical staff to adhere to the Scottish Intercollegiate Guidelines Network (SIGN) guideline on this topic. The health adviser was available to support staff in managing difficult cases and to advise on administrative systems for effective partner notification work. A case note review of all *C. trachomatis* positive patients was conducted to investigate documented partner notification activity.

**Laboratory data**

Data on numbers of tests for *C. trachomatis* carried out at both health centres and age and sex of patients tested were collected from the local laboratory computer systems. Data were collected for the intervention period (June to November, 2001) and for the comparison period in the previous year (June to November, 2000). Laboratory test request forms from health centre A were examined to identify what proportion of *C. trachomatis* tests were requested by general practitioners and by practice nurses in the intervention period.

The local research ethics committee approved the research.

**RESULTS**

**Laboratory data**

Table 1 shows numbers of tests and percentage changes from 2000 to 2001 at both health centres.

There was an overall increase of 120% in testing at health centre A and an increase of 11% at health centre B. In health centre A, 11% of the increase was accounted for by testing of patients aged 15–19 years; 43% was accounted for by testing of patients aged 20–24 years and 46% in patients aged 25 years and over.

The proportion of positive results obtained at health centre A fell by 3% (from 10% to 7%), while at health centre B it remained stable at 5% for both years.

There was an increase in the number of urine (as opposed to endocervical) samples taken—at health centre A, 119 in the intervention period compared with four during the comparison periods; at health centre B, 55 in the intervention period and 33 in the comparison period.

Most *C. trachomatis* tests (70%) carried out at health centre A were offered by practice nurses: 83% of patients aged 15–19 years attended a general practitioner and 17% a practice nurse, whereas 62% of patients aged 20–24 years attended a general practitioner and 38% a practice nurse.

Partner notification work was either undocumented or was very briefly noted in case notes: names of partners were not requested or documented.
The intervention was effective in increasing *C. trachomatis* testing activity, but did not improve the overall detection rate. The majority of tests were offered to women over 20 years of age. Health centre staff incorporated opportunistic testing for *C. trachomatis* into existing practices, rather than introducing new targeted screening systems. These results emphasise the importance of defining and exploring the current barriers to opportunistic *C. trachomatis* testing in primary care settings.

Constraints are imposed by lack of time and robust advice, training, and support is in itself insufficient to sufficiently active to obtain good results. The support and training provided by the health adviser increased awareness of chlamydial infection. Testing of the target population for *C. trachomatis* (aged between 15 and 24 years) increased, both in absolute terms and as a proportion of the total number of tests carried out. However, much of the increase (46%) was in patients aged 25 years and over and only 11% of the increase was in patients aged 15–19 years. This may account for the lower proportion of positive results obtained during the intervention period compared with the previous year. Although the training provided by the health adviser emphasised the targeting of younger, sexually active patients and involved rehearsal of practical strategies, most consultations with patients in the target age group did not result in *C. trachomatis* tests.

Two possible explanations are proposed. Firstly, compared with general practitioners, practice nurses (who collectively requested 70% of all *C. trachomatis* tests for patients at health centre A during the intervention) were more consistent attenders at training sessions and more regular users of the health adviser for information and support. Since most patients aged 15–19 years were seen by doctors, training deficiencies may have led to missed opportunities for testing. Secondly, routine cervical sampling for *C. trachomatis* was already established as an adjunct to cervical screening in women over 20 years and was reinforced by the intervention, skewing the pattern of opportunistic testing towards older, lower risk patients.

Partner notification was limited in extent and was poorly recorded. Time limitations were identified by staff as a major practical constraint. There were also difficulties in obtaining information on partners attending another doctor. Ascertainment of partner notification outcomes depended mainly on obtaining accurate feedback from index patients. Both general practitioners and practice nurses were concerned about the sensitive nature of partner notification and several were reluctant to record partner notification discussions in case notes. A limited case note review confirmed that partner notification work was not recorded or was insufficiently active to obtain good results.

In conclusion, a health centre based health adviser offering advice, training, and support is in itself insufficient to improve management of chlamydial infection significantly. Constraints are imposed by lack of time and robust organisational systems specifically designed to support management of chlamydial infection in primary care. This study highlights the difficulties faced by general practitioners in attempting to accommodate opportunistic testing into their already overflowing consultation agendas; as they currently see most young people attending the practice, screening systems almost certainly need to be constructed around their consultations, not incorporated within them. A recent study of opportunistic screening in settings including primary care found that management of cases by community health advisers was vital to a successful intervention. In our study, the health adviser offered training but did not manage cases. Provision of community health advisers, and alternative models for sexual health provision, such as “one stop” drop-in clinics and enhanced Level 2 sexual health services should be evaluated in the context of chlamydia prevention and management.

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**CONTRIBUTORS**
SK, AS, and PW designed the study; BA, SK, AS, and PW analysed and interpreted the results; BA coordinated the study and led the writing of the paper. All authors contributed to the writing of the manuscript.

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**REFERENCES**
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