

Screening for genital chlamydial infection: the agenda for general practice

GENITAL chlamydial infection is in the news. The Chief Medical Officer in England has recently published an expert advisory group report on *Chlamydia trachomatis*, which recommends action to reduce the prevalence and morbidity of this infection.¹ The report is the first pronouncement on the subject by the Department of Health, and its recommendations are of considerable relevance to general practitioners (GPs) and practice nurses.

What do we know about *Chlamydia*? Three facts have been known since the early 1980s. First, it is the most common curable sexually transmitted infection (STI) in the industrialized world. The best current estimate of the prevalence of genital *Chlamydia* in women attending general practice in the United Kingdom is 3% to 4%.² Secondly, chlamydial infection is difficult to diagnose clinically. It is asymptomatic in up to 70% of women and 50% of men, and symptoms of infection, when they occur, are often mild and non-specific.^{3,4} Thirdly, untreated infection in women may lead to complications that are costly to treat and a cause of significant morbidity. The three important complications that result are pelvic inflammatory disease (PID), tubal infertility, and ectopic pregnancy.³

Screening is the identification of preclinical disease in a defined population by a relatively simple test.⁵ It is only recently that the case for screening women for *Chlamydia* has been firmly established. An American randomized controlled trial shows that screening asymptomatic women deemed to be at 'high risk' for *Chlamydia* can lead to a clinically significant (56%) reduction in the incidence of PID in the intervention group.⁶ These findings are supported by observational data from *Chlamydia* control programmes in Sweden and the United States.^{7,8} A further advance is that the development of *Chlamydia* tests, based on nucleic acid amplification technology (polymerase chain reaction: PCR; ligase chain reaction: LCR), now means that laboratories have access to an acceptable screening test for *Chlamydia*.^{9,10} LCR can be performed on a urine sample and is highly sensitive (over 90%), although it has yet to be widely used in general practice.^{11,12} In contrast, enzyme immunoassay (EIA), currently the most commonly used diagnostic test,¹³ has a lower sensitivity (60% to 70%) and requires an endocervical swab.¹⁰ Given the evidence of effectiveness of screening and the availability of a relatively simple urine test for *Chlamydia*, the research question has moved on from 'does screening for *Chlamydia* work?' to 'what is the most appropriate screening programme for *Chlamydia*?' The expert advisory group have tackled this question by outlining a £3.2 million research programme. This would address the cost-effectiveness of screening for *Chlamydia* in non-genitourinary medicine settings (general practice and family planning clinics), the best test and specimen to use, and the most effective method of accessing partners of infected patients.¹

The expert advisory group's main recommendations, as they relate to general practice, are to offer *Chlamydia* testing to all men and women with symptoms of infection, to screen all women seeking termination of pregnancy (TOP), and to opportunistically screen sexually active women aged under 25 years and women over 25 with a recent change in sexual partner.¹ The report, however, is short on detail, and it is important that these recommendations are discussed critically from a primary care perspective.

The first recommendation is to test on clinical suspicion of *Chlamydia*. The problem here is that the symptoms of chlamydial infection in women are often non-specific, and GPs need advice as to which combination of symptoms or signs is likely to have the best diagnostic 'yield'. Unfortunately, the advisory group does not address this issue and makes all inclusive recommendations to the effect that, for example, all women with lower abdominal pain or intermenstrual bleeding should be tested for *Chlamydia*. What is required is the development of recommendations that are usable and evidence-based. This could be achieved by the development of valid guidelines for the management of chlamydial infection in primary care. These guidelines should be based on a systematic literature review, use an independent multidisciplinary guideline development group, make explicit the links between the recommendations and the quality of the supporting evidence, and be the subject of independent critical appraisal.¹⁴ Such guidelines have recently been developed in Leicestershire^{15,16} and are currently being developed by the Scottish Intercollegiate Guidelines Network (SIGN). The *Leicestershire guidelines* focus on raising clinical suspicion of infection and optimizing the management of cases diagnosed in general practice.¹⁵

Chlamydia testing is advised for all women seeking TOP. For such a strategy to be effective it will be necessary for gynaecologists, genitourinary medicine clinics, and referring GPs to work together at district level to ensure that all cases of infection are treated and contact tracing performed.¹⁷ It may also be more appropriate for such testing to be performed by the gynaecologist at the assessment clinic rather than by the referring GP.¹⁵ The report does not make a firm recommendation regarding screening before intrauterine device insertion. This is consistent with the available research evidence, as there is limited information on the prevalence of infection in this group of women.²

The most controversial of the recommendations is that GPs should opportunistically screen sexually active women aged under 25 years and women over 25 with a recent change in sexual partner. The rationale behind this is that the *Chlamydia* screening strategy best supported by research evidence is that of selective screening using known 'risk factors' for infection.^{2,6} A recent London study found that a screening strategy based on testing all women aged 25 years and all women with two or more sexual partners in the past year would have detected 87% of chlamydial infection, but only required screening of 49% of their study population of general practice attenders.¹¹ Opportunistic screening for *Chlamydia* in routine clinical practice would involve both GPs and practice nurses in offering testing to women attending for other services. One such opportunity might be when taking a cervical smear, but this would risk missing teenagers who have been shown to have above average prevalence rates of infection.¹⁸ Another opportunity might be to consider testing those presenting for contraception.

The uptake of opportunistic screening for *Chlamydia* in routine clinical practice is, however, likely to be low, as factors relating to the health care professional, practice organization, and the patient work against such testing. GPs and practice nurses are likely to require 'prompts' in the consultation, longer consultation times, and training in relation to *Chlamydia* and sexual health issues if they are to offer such screening to patients.¹⁹⁻²¹

Guidelines are also required regarding the frequency of screening and the management of patients with positive results and their partners. It is suggested that GPs would refer these patients to genitourinary medicine clinics, but this raises potential problems with patients who refuse to attend, as well as communication issues between the two services. As far as patients are concerned, there is a need to increase public awareness of *Chlamydia* in order to encourage 'safe sex' and to facilitate informed decision-making regarding having a screening test. Not only do the psychological and social consequences of any screening programme need to be carefully considered²² but also testing for an STI raises additional concerns regarding stigma and the effects on sexual relationships. Ways of minimizing these negative outcomes need to be identified.

Screening for genital *Chlamydia* is now firmly on the National Health Service agenda. Before introducing such a screening programme in general practice, opportunistic or otherwise, we need to be sure of two things. First, that there is good research evidence that it can be beneficial, and secondly that adequate financial, educational, and laboratory resources are available for these benefits to be achieved in routine clinical practice.

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Community development in the new NHS

ALL general practitioners (GPs) are aware of the extent to which the fundamental influences on their patients' health lie beyond the surgery door. In reaffirming the importance of neighbourhoods, schools, and workplaces, the Green Paper, *Our Healthier Nation*, places individual behaviour change in the context of wider socioeconomic influences on people's health.¹ It represents a key departure in aspiring to address inequalities.

Furthering the public health agenda will also involve primary care groups (PCGs) in new tasks. These include needs assess-

ment, service evaluation, public involvement, and working on health improvement programmes. How well equipped are GPs and PCGs to respond to these developments? The evidence from fundholding does not inspire optimism. Fundholders were not noted for their interest in needs assessment and their priorities were predominantly medical, often neglecting services such as health promotion.

Public involvement has long been a marginal activity in primary care. Work with different community interests can be

challenging and demands managerial skills of a high order. The principles of change management are poorly understood in primary care. Health professionals may need to relinquish established attitudes and behaviours in order to encourage the contributions of local people. Working with community development organizations can support GPs, practices, and PCGs in breaking through these barriers.

'Community development uses methods that mobilize and engage communities to enable more effective health needs assessment, increased uptake of more accessible and appropriate services, the creation of dynamic relationships between the public, providers and users, and healthy alliances to develop and stimulate inter-agency work.'² Through the 1950s and 1960s, community development became a common feature of Third World agricultural development programmes and work with the urban poor. Britain is a signatory to the 1981 declaration of Alma Ata³ that places community participation at the centre of the World Health Organization's policy framework for primary care. In addition, the Royal College of General Practitioners has long fostered participatory approaches to the development of communities' health.⁴ Community development projects across the country have, for some years, been carrying out lay-centred needs assessments, developing new approaches to health promotion, and involving local people in health care planning.

A range of activities are involved in community development. At one end are the relatively academic approaches to needs assessment such as rapid appraisal, where community informants build up a picture of key issues for the locality.⁵ This is an important mechanism; however, it will not lead to change unless there is additional commitment to joint action. At the other end of the spectrum is a fuller engagement in which local community groups set priorities and may work with health professionals who remain available for support. Activities, usually supported by trained community development workers, include self-help work, outreach, action groups, advocacy, and network building, depending on the needs being addressed.⁶ Communities have been involved in initiatives to improve education, housing, transport, nutrition, and the environment.

There are many examples of such initiatives. Community development in south east London has, with local people, developed innovative youth services, and, with the local authority, created a new bus service to help less mobile patients in a hilly area.⁷ Projects in Newcastle and Torquay have developed a locality users' forum⁸ and a food co-operative,⁹ respectively. Bradford's initiative has increased cervical and breast screening in women of ethnic minorities.¹⁰

Evaluation is difficult and the evidence for impact is of variable quality.¹¹ Community-based health promotion can rarely be subjected to the rigours of a randomized control trial. Outcomes are hard to define and can be difficult to predict. However, involving individuals and groups can encourage more appropriate and effective, sustainable health services. Change at both the individual and community level is more likely where patients share responsibility for planning and management decisions.¹² It is becoming increasingly clear that the engagement of communities is health-promoting in itself: local networks protect health,¹³ and this effect appears in a range of diseases.¹⁴

Community development is increasingly seen as an appropriate methodology for linking professionals and users. The last Chief Medical Officer emphasized the contribution community development can make to the health of the population.¹⁵ This was reinforced among the recommendations of the recently published *Independent Enquiry into Health Inequalities* (Acheson Report). The National Health Service Executive (NHSE) has endorsed it as

part of a strategy for public participation in the NHS.² Health Action Zones will break down long established financial and organizational barriers to the pooling of resources between, among others, health and local authorities. In one sense, they constitute significant examples of community development.

How can PCGs integrate this approach into their day-to-day work? Engaging with the community will be every PCG board member's business; however, lay members could become marginalized if their role is ill-defined or their work is unsupported. To avoid this, PCGs may choose to support independent community development agencies that would not only continue the traditional initiatives described above, but also coordinate lay activity on the ground. This could involve feeding ideas and recommendations from users into PCGs, voluntary bodies, and other local authority community initiatives. They could also respond to PCGs' requests, for example in addressing questions such as: 'What do our local users of mental health services want from local practices?' or 'How can we best configure emergency contraceptive services in order to meet young people's needs?' Such an agency, under the auspices of a reformed Community Health Council or an existing community development initiative, could set up public forums. It could be represented on the board as a step towards a wider system of accountability of the PCG to the local community. In this way, PCGs can begin to work more closely with their local population, drawing together existing strands of work to improve health.

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