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PRACTICE OBSERVED

New Idea

Practice sharing: a way of providing services in unpopular areas?

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Over the past 20 years much effort has been spent on improving general practice. The specialty's academics have won a broad measure of agreement on the sort of service that general practitioners should be providing for patients, and the National Health Service has backed this up with the appropriate sticks and carrots. Yet there are still practices that provide unacceptably bad services for their patients. Most of these are in inner city or decayed industrial areas, where it has proved hard to recruit general practitioners. This is understandable; patient demand is high, proper premises difficult to find, and there are obvious problems in bringing up a family in a community that is socially disrupted, maybe even violent, and inadequately provided with facilities for education or recreation. But the people living there have as much right to—and probably a greater need for—a good general practitioner service than those who enjoy more salubrious surroundings.

For many years the NHS has relied on offers of inducement payments to tempt general practitioners into unpopular areas. Many of those who have taken the bait have overcome the disadvantages, survived, and prospered. Unfortunately, insufficient numbers of the new generation of vocationally trained general practitioners, who are conditioned by their apprenticeship in teaching practices to expect facilities that just do not exist in such places, are prepared to accept the bribe. Although there is now a considerable number of aspiring general practitioners looking for jobs, many family practitioner committee administrators in urban and industrial areas cannot find suitable applications to fill vacancies in their "black spots." The following fictitious account of "practice sharing" is not intended to provide an instant solution but is an attempt to suggest a more flexible approach to a problem that is by no means confined to Britain: the idea arose out of discussion of an identical dilemma in Italy.

Dr Urbanicus and Dr Rusticus

Outside the Wall End Surgery in Blackton there is a list of doctors. Two names are permanently recorded. The third is on a removable plate that alternately bears the names of Dr Rusticus and Dr Urbanicus. There is a similar board outside the surgery premises in the rural village of Woldham, 150 miles from the city. Dr Urbanicus and Dr Rusticus, general practitioners in both Blackton and Woldham, are the pioneers of practice sharing in Britain.

Dr Urbanicus had struggled in the Blackton practice for five years before the pressures of inner city life began to get him down. He was on the point of resigning and seeking a less demanding job in more pleasant surroundings when he met Dr Rusticus, who, after spending a similar period as a general practitioner in Woldham, 30 miles from the nearest district hospital, was getting bored and out of touch with advances in medical treatment. The two decided to do locums in each other's practices. Dr Urbanicus unwound contentedly in sleepy Woldham, and Dr Rusticus was invigorated by the challenge of the city. Their respective families also enjoyed the change of scene, and it was they who suggested that Dr Urbanicus and Dr Rusticus should find a way of permanently sharing their work.

The doctors agreed that merely making guest appearances in either practice would not be satisfying in the long term. They needed to share the responsibility for the care of the patients and the administration. After protracted negotiations with their partners, the two family practitioner committees, and the Department of Health an agreement was reached whereby Dr Urbanicus and Dr Rusticus were admitted by the family practitioner committees as joint principals (with no increase in their basic remuneration) and undertook to provide, between them, a partner's share of general practitioner services in each area.

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Both doctors admit that the initial difficulties were formidable. Commuting between Blackton and Woldham and maintaining accommodation in each place was expensive; agreeing a duty rota that did not conflict with their family responsibilities seemed, at times, to be almost impossible. But by the end of the first year they had begun to settle down, and after two years count the experiment a success.

In Dr Urbanicus's words: "Blackton and Woldham are completely contrasting areas, but our shared experience allowed one practice to fertilise ideas in the other. For example, I learnt from Woldham the importance of taking time to find out about the sort of lives our Blackton patients lead, and Rusticus has humanised our appointments system." Dr Rusticus agrees: "In Blackton I've had the chance to visit hospitals and postgraduate centres. I'm taking an interest in medicine again and I think my old patients in the country appreciate that. Urbanicus has done wonders with our administrative paperwork in Woldham."

Now that they are used to the rota their families are also enthusiastic. Mrs Urbanicus remarks: "The kids miss their father when he's away, but we go up whenever we can. He's a lot easier man to live with no v." The family practitioner committees asked the community health councils in both areas to question a sample of the patients affected. They found some complaints about the lack of continuity in care but these were more than balanced by the praise for improvements that had come about in both practices. Expressing an unofficial view, the administrator of the Blackton family practitioner committee remarked wryly, "The two halves of two doctors who are keen on their work is better than a whole one who isn't, and a lot better than no doctor at all."

Dr Urbanicus sums up: "We didn't think of practice sharing for the patients' sake. We did it because we were both in a rut, but I think they've felt the benefit as much as we have. It could work for other general practitioners, maybe even within a town doctors could share practices between the "good end" and the "bad end," not just to see how the other half lives, but as a way of being useful to the people who most need our services. I doubt whether anyone else will be tempted to try it, though, unless the National Health Service gives financial support. At present it is costing us both a packet. Couldn't the Royal College of General Practitioners take it up? I've heard them disapprove of the standards of practice in places like Blackton. Disapproval on its own will get nowhere. I reckon it's time they got down to doing something constructive."

Practice Research

Chlamydia trachomatis and lower urinary tract symptoms among women in one general practice

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Urinary frequency and dysuria are common symptoms among women. In a survey of women in the Rhondda Fach, Waters estimated that 22% of women aged 20 to 64 years had had dysuria in the previous 12 months.[1] The second national morbidity survey[2] estimated an annual reported incidence of "acute cystitis" of 44 per 1000 women aged between 15 and 44 years.

Although dysuria and frequency are commonly associated with urinary tract infection, less than 50% of women with these symptoms can be shown to have severe bacteriuria.[3] Those who cannot be shown to have bladder bacteriuria are said to have abacterial cystitis[4] or "urethral syndrome." Several explanations have been suggested for this syndrome and various cures advocated on the strength of them.[5]

Abacterial cystitis is in some ways analogous to the syndrome of "non-gonococcal urethritis" found in men, which is also characterised by dysuria, frequency, and urine which is sterile on routine culture. Between 52% and 68% of cases of non-gonococcal urethritis have been associated with *Chlamydia trachomatis*.[6,7]

Since the isolation of *C trachomatis* from the urethra of two women with symptoms of frequency and dysuria,[8,9] several case-control studies have associated the organism with lower urinary tract symptoms in women with odds ratios (approximate relative risks) ranging from 5·4 to 9·1.[10,11] (Sorbie J. Chlamydia: an important cause of urogenital symptoms in women. North American Primary Care Research Group, Nevada, March 1981.) Stamm *et al*[12] have also shown that doxycycline is more effective than a placebo in the treatment of women with lower urinary tract symptoms associated with *C trachomatis*. Furthermore, Paavonen[13] noted a higher prevalence of urinary tract symptoms in women when *C trachomatis* was isolated from the urethra than when the organism was isolated only from the cervix.

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The aim of this study was to test whether an appreciable number of women who complained of lower urinary tract symptoms in general practice had a genitourinary tract infection with *C trachomatis*.

Methods

All women aged 16-44 years who were not pregnant and presented at the Lambeth Road group practice between February 1981 and January 1982 with symptoms of urinary frequency or dysuria were included in the study. The control group consisted of asymptomatic women who came for cervical cytology or for family planning advice over the same period. The women's histories and the results of physical examinations and urine cultures were recorded on a pre-coded form. The practice nurse taught the women how to provide a specimen of urine with minimum contamination and a dipslide was taken and sent to the laboratory for culture.[14]

Secretions were taken from the cervical os using a dry cellulose sponge.[15] These were assayed for type specific IgA and IgG against *C trachomatis*[16,17] using pooled antigens in a modified microimmunofluorescent test. Blood was not taken because this was not thought justifiable in general practice.

Using Exogen sterile cotton wool swabs,[18] specimens were taken from the cervical os and from the urethra, put into transport medium, and frozen in a portable liquid nitrogen container at −170°C[19] for transport to the laboratory. These specimens were cultured on cycloheximide treated McCoy cells.[20] The cultures were stained by Giemsa's method and examined after 68 to 72 hours.[21]

TABLE I—*Symptoms and details of women studied*

	Symptomatic women (n = 84)	Asymptomatic women (n = 39)
Age (years) (median)	25·5	27·7
Married (%)	42	41
Caucasian (%)	81	87
Housing		
Owner occupied (%)	10	0
Local authority housing (%)	69	78
Privately rented (%)	21	20
Not recorded (%)	0	2
Contraceptive use		
Oral (%)	42	51
Intrauterine contraceptive device (%)	19	20
Other (%)	25	5
None (%)	17	23
Not recorded (%)	2	0
Past history of "cystitis"		
In past year (%)	44	13
Not in past year (%)	32	26
Never (%)	21	51
Not recorded (%)	2	10

TABLE II—*Results of dipslide test for 122 women according to symptoms*

Results	Symptomatic women (n = 84)	Asymptomatic women (n = 39)
Positive	35*	4
Negative	11	18
Contaminated	38	16
Missing	0	1
Total No tested	84	38

*Includes three with *C albicans* and two with bacterial counts < 100 000/ml (see text).

Results

During the year 2213 women aged 16 to 45 were registered at the practice. Of these, 123 were examined and 84 had lower urinary tract symptoms. The other 39 were asymptomatic and had come for cervical cytology or for family planning advice and were included as controls. Of the 84 women presenting with symptoms, five had frequency, 12 had dysuria, and 67 had both. Seventy four (88%) of these women had had symptoms for less than a week. None of the 39 women in the control group had either dysuria or frequency. The characteristics of the women in the two groups are compared in table I.

Dipslides were obtained from 122 of the women in the study (table II) and provided a possible explanation for the symptoms of 35 of the 84 symptomatic women (42%). Thirty had "significant bacteriuria," defined as pure bacterial growth >100 000 organisms/ml; two had pure bacterial growth < 100 000 organisms/ml[22]; and three showed infections with *Candida albicans*. Four of the 38 asymptomatic women who had dipslides taken also had "significant bacteriuria" as defined above.

Table III summarises the evidence for chlamydial infection. Cervical secretions were obtained to estimate antichlamydial antibodies from 120 of the 123 women in the study. The other three women had had hysterectomies: all had lower urinary tract symptoms, all had negative chlamydial cultures from the urethra, and two had *Escherichia coli* infections of the urine. Three of the symptomatic women, but none of the asymptomatic women had antibodies against *C trachomatis* types D-K. Two of these women, who had low titres of IgG (1/8) and no detectable IgA, had negative dipslides. The other woman, who had a higher titre of IgG (1/32) and a low titre of IgA (1/8), had a "contaminated" dipslide. She was the only woman in the study who had a positive chlamydial culture, and this was from the cervix only.

The last batch of specimens for chlamydial culture went missing between the practice and the laboratory. A further 16 cervical and 13 urethral cultures failed to produce a valid result because the cell cultures did not survive. Of the 75 valid cervical cultures, only one was positive. None of the 77 valid urethral cultures was positive.

Table III also shows that the estimated prevalence of genital tract infection with *C trachomatis* in women presenting with lower urinary tract symptoms is between 1 and 4%. If those women whose symptoms could be accounted for by the results of the dipslide test had been excluded, this estimate would be increased to roughly 2 to 6%.

Discussion

In this survey evidence of a low prevalence of chlamydial infection was found in women presenting with lower urinary tract symptoms in a London group practice. Of the three women with evidence of chlamydial infection, two had negative results on the dipslide test, and the third, who had the most convincing evidence of infection with *C trachomatis*, had a contaminated dipslide. No evidence was found of past or present infection with *C trachomatis* in 39 asymptomatic women.

The low prevalence of chlamydial infection in this study is unlikely to be due to the loss of some of the specimens. The missing specimens were from the last group of patients to be seen at the end of the study. All three women with serological evidence of infection were examined by culturing specimens from both the cervix and the urethra. This is circumstantial evidence that the group whose culture results are known had a higher rather than a lower overall prevalence of infection.

TABLE III—*Evidence of infection with C trachomatis in 123 women according to lower urinary tract symptoms*

	Symptomatic women (n = 84)				Asymptomatic women (n = 39)				All women (n = 123)		
	Positive	Total No tested	NT*	Prevalence (95% confidence limits)	Positive	Total No tested	NT*	Prevalence (95% confidence limits)	Positive	Total No tested	NT*
Cervical IgA titre ≥ 1/8	1	81	3†	1·2 (< 6·7)	0	39	0	0·0 (< 9·0)	1	120	3†
Cervical IgG titre ≥ 1/8	3	81	3†	3·7 (0·7-10·4)	0	39	0	0·0 (< 9·0)	3	120	3†
Cervical culture	1	49	35†	2·0 (< 10·8)	0	26	13	0·0 (< 13·2)	1	75	48†
Urethral culture	0	52	32	0·0 (< 6·8)	0	25	14	0·0 (< 13·7)	0	77	46

*NT = Not tested or test invalid.
†Three women had had hysterectomies.

The culture method used in this study is very sensitive. It was successful in growing *C trachomatis* from the cervix of 90% of women with sexually transmitted paratrachoma,[18] and from 68% of men with severe non-specific urethritis.[7] Although culture is less sensitive in chronic infections,[7,23] 88% of the symptomatic women in this study had had symptoms for less than a week. The assay of genital tract secretions for local antibody is more specific than the estimation of antibody concentrations in blood,[16,24] and local antibodies do not seem to persist for as long after infection as serum antibodies do.

The discovery of such a low prevalence of chlamydial infection in this group of women with lower urinary tract symptoms leaves open the question of whether *Chlamydia* may be a common cause of such symptoms in populations with a higher overall prevalence of the organism. The prima facie evidence for thinking that the organism could cause these symptoms has been summarised already. The epidemiological evidence is, however, contradictory and not altogether satisfactory since it is based on three case-control studies.

Case-control studies are notoriously susceptible to bias,[25] particularly in the selection of controls. Of the three studies mentioned, Stamm *et al* used volunteers as controls,[10] Sorbie (Chlamydia: an important cause of urogenital symptoms in women. North American Primary Care Research Group, Nevada, March 1981) excluded women with vaginal symptoms from the controls but not from the cases, and Weil *et al* chose their controls from a different clinic.[11] Some studies have looked at the prevalence of chlamydial infection in groups of women selected as a single sample rather than as separate samples of cases and controls. Six of these[26-31] have reported the prevalence of symptoms in both the infected and uninfected groups. None of these studies supports an association between lower urinary tract symptoms and chlamydial infection. Arya *et al* also claim to have found no association between chlamydial infection and lower urinary tract symptoms in women in a similar study,[32] though they gave no figures. All these studies may be criticised, but in particular they all looked at cervical infection only and were drawn from less general populations than the case-control studies.

Conclusions

The results of our study show that lower urinary tract symptoms reported by women in one British general practice are not commonly associated with chlamydial infection. This may be because the overall prevalence of *C trachomatis* in this group of women is low—between 1% and 4%. It is still possible that when there is a high prevalence of the organism it may be an important cause of "abacterial cystitis." Though chlamydial infections in women should be treated, there are few facilities available at present for isolating the agent. The low prevalence of the organism in this study suggests that *C trachomatis* should not be sought routinely in women with lower urinary tract symptoms in general practice when there are no other indications of chlamydial infection, such as cervicitis or suspected pelvic inflammatory disease. Since the strength and nature of any association between chlamydial infection and lower urinary tract symptoms are still unclear, whether this policy should also obtain in practices with a high prevalence of *C trachomatis* has yet to be determined.

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