Women's experiences of general practitioner management of their vaginal symptoms

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SUMMARY

Background. *Little is known about the management of vaginal symptoms despite their frequency. Most vaginal symptoms in non-menopausal women are managed as thrush, although bacterial vaginosis is commoner.*

Aim. *The aim of this study was to measure the experiences of women attending their general practitioner with vaginal symptoms including self-reporting of symptoms, duration and severity, informal support, over-the-counter remedies, sources of information, gender of doctor, expected and actual vaginal examination, and explanations and knowledge of common vaginal infections.*

Method. *A postal questionnaire survey was conducted of 490 patients presenting with vaginal symptoms aged between 18 and 48 years who had attended 10 general practices within the previous 3 months in the East Midlands of England.*

Results. *A total of 85% of patients had suffered a previous episode, with 39% having had three or more infections in the previous year. Overall, 68% consult with each episode, and most consult within 7 days of onset of symptoms (median=4 days). In all, 68% discussed their symptoms with partners, families or friends, but 32% relied solely on their doctor. Some 33% bought over-the-counter remedies. A total of 65% informed themselves further from encyclopaedias, leaflets and women's magazines, but there was a strong request for more information. Out of those questioned, 75% expected a vaginal examination, whereas 57% had such an examination performed. Most were told their symptoms were caused by thrush (78%), but patients' ideas on causation were varied. Most believed sexual transmission played a role in transmission of symptoms. Women were socially embarrassed by their symptoms, with 46% admitting to having the condition on their minds all or most of the time. Twenty-eight per cent of women wished to see a female doctor, with gender being unimportant to the remainder.*

Conclusions. *Vaginal symptoms were commonly recurrent, socially embarrassing and managed as candidiasis. Just over half the patients had a vaginal examination. There is a shortage of suitable information on vaginal infections available to patients, many of whom used over-the-counter medications.*

Keywords: vaginal symptoms; GP management.

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Introduction

IN general practice, vaginal symptoms are common, affecting approximately 8% of non-pregnant women.[1] It has been suggested by an experienced practice nurse that women with vaginal symptoms delay consulting the doctor with symptoms they fear may be regarded as trivial.[2] Little is known about the outcome of the consultation for vaginal symptoms despite its incidence and distressing nature.[2,3] Ideally, to make a diagnosis, patients need to have vaginal examinations together with laboratory swabs, vaginal pH, amine test, wet mount microscopy[4] and Gram staining.[5] Such rigour is not always possible in general practice, and an assumption is often made by both doctor and patient that candidiasis is the cause and the symptoms are treated accordingly.

The commonest cause of abnormal vaginal discharge in the Western world is now believed to be bacterial vaginosis,[3] with candidiasis being next commonest. Patients with bacterial vaginosis complain of a profuse foul-smelling odour with little irritation, and those with candidiasis complain of itchiness and soreness. Both conditions can coexist in up to one-third of cases, which makes clinical diagnosis more difficult. It has become especially important to make a diagnosis in pregnancy in both primary and secondary care because bacterial vaginosis is now associated with premature delivery,[6,7] post-abortal pelvic inflammatory disease,[8] chorioamnionitis[9] and post-caesarean endometritis.[10]

This study set out to measure patients' experiences of the general practice management of a recent episode of vaginal symptoms, how vaginal symptoms affect aspects of their lives and their perceptions of the condition.

Method

Patients aged 18–48 years who had presented to their general practitioner with vaginal symptoms within the previous 90 days were recruited to a postal questionnaire study using the morbidity data held on MEDITEL computer systems. The practices were all members of the MEDITEL Users' Group and used computers during every consultation. They were briefed at a Users' Group meeting and subsequently supplied with the computer codes to carry out the search for patients fulfilling the inclusion criteria. Patients were sent a letter signed by their own doctor explaining the study and requesting the completed questionnaire to be returned to a researcher at Nottingham's Department of General Practice. The letter explained that personalized information would not be made available to the patients' doctors. Ethical approval stipulated that only one reminder should be sent. The questionnaire sought to establish the nature of symptoms, their morbidity and the duration before medical help was sought. It also requested information on recurrence and sources of advice. The most recent visit to the doctor was examined in detail. Patients were asked whom they chose to consult and if they expected to have a vaginal examination performed during the consultation. Details of explanations offered and treatments and response to treatment were requested. Patients were asked about their own views on causation. Finally, they were asked if they

had heard of four vaginal infections – thrush, bacterial vaginosis, *Chlamydia* and *Trichomonas*.

As not every patient was required to answer every question, and additionally, as multiple responses to certain questions were possible, we present the results as percentages of responses where appropriate; otherwise, results are expressed as percentage of cases.

Data analysis was carried out using SPSS/PC and Stata. The non-parametric Mann–Whitney and Kruskal–Wallis tests were used for two-group and multigroup comparisons, respectively, for quantitative measures. As appropriate, results are reported as medians and interquartile (IQ) range.

Results

A total of 490 questionnaires were sent to patients supplied by 10 practices in the East Midlands with 10 female and 39 male principals. Three hundred and forty-eight questionnaires were returned (71%), and of these 327 were usable (67%). Out of the 21 non-usable responses, 14 patients had genito-urinary problems that were not of vaginal origin, a further five were unknown at the address and two refused. One hundred and ninety-seven responders (61%) were in paid employment. Out of these, 36% of the women were employed in professional or managerial occupations, 37% were in non-manual employment and 6% were in skilled occupations, with 21% being in semi- or unskilled manual jobs.

Most women had two or three symptoms, with itchiness being the most common and discharge next commonest. A quarter of the patients complained of a bad smell (Table 1). Itchiness was also cited as the worst symptom by 57% of responders, whereas soreness was worst for 21% and discharge was worst for 10% (Table 2). Two hundred and seventy-eight patients (85%) had previous episodes, with 128 (39%) reporting three or more attacks of vaginitis in the past year. Out of the patients who had experienced past episodes, 68% stated that they consulted the doctor with every episode. There was a median delay in consulting the general practitioner of 4 days for women who had had previous symptoms, whereas the delay for those with no previous symptoms was 7 days (P=0.02). Overall, median delay was shortest for itchiness (4 days, IQ range 2–7 days) and longest for dryness (46 days, IQ range 2–90 days), with those having discharge and smell being prepared to wait 7 days (IQ range 2–14 days) (Table 2).

Patients often sought advice from several sources (Table 3). One hundred and five patients (32%) did not discuss their symptoms with anyone apart from their doctor and consulted quickly (median delay of 4 days, IQ range 2–7 days). Out of the remainder, 136 (42%) cited their partner, 91 (28%) another family member and 78 (24%) a friend. Twenty-eight (9%) discussed the problem with a pharmacist, although 106 (33%) bought remedies over the pharmacy counter. Those with no previous experience of symptoms were less likely to consult a pharmacist. The choice of remedies included antifungal and antiseptic creams, deodorant sprays, yoghurt, and herbal remedies. Women buying over-the-counter (OTC) medicines delayed consulting the doctor (median=5 days, IQ range 3–10 days) compared with those not buying OTC medicines (median=4 days, IQ range 2–7 days). The difference is suggestive (P=0.06), although not quite statistically significant at the conventional 5% level.

Two hundred and fifty-four (82%) out of the 309 women who responded to the question said that their usual doctor was male, and 54% chose to see him, whereas 16% chose a female doctor and only 2% chose the practice nurse, with the remainder not being concerned about gender. Out of the 55 women whose usual doctor was female, 55% chose to see her, whereas 4% chose a male doctor and 19% chose to see another female doctor who was not their usual doctor. Forty-nine (16%) of all respondents said it did not matter whom they saw for their symptoms, of whom 40 patients usually had a male doctor and nine usually had a female doctor (Table 4). Choice of doctor was not affected by

Table 1. Symptoms reported by 327 women recently consulting their GP with vaginal symptoms.

Symptom	No. of patients	Per cent
Soreness	199	61
Dryness	44	13
Itchiness	274	84
Discharge	238	73
Bad smell	82	25
Other	41	12

Table 2. Worst vaginal symptoms reported by patients, delay in consulting and time to symptom clearance following consultation with GP.

Symptom	No. of patients (%)	Delay in consulting (median days)*	Symptom clearing (median days)†
Soreness	63 (20.8)	5.0	4.0
Dryness	2 (0.7)	46.0	5.0
Itchiness	174 (57.4)	4.0	3.5
Discharge	31 (10.2)	7.0	3.0
Bad smell	22 (7.3)	7.0	4.0
Other	11 (3.6)	1.0	2.0

*Kruskall–Wallis test; P = 0.015. †Kruskall–Wallis test; P = 0.836.

Table 3. Sources of advice to women with vaginal symptoms and effect of advice in consulting GP.

Source	No. of patients (%)	Delay in attending GP (median days)
A friend	78 (24)	5
Family member	91 (28)	7
Partner	136 (42)	5
Pharmacist	28 (9)	4
No-one	105 (32)	4

*Kruskall–Wallis test; P = 0.015. †Kruskall–Wallis test; P = 0.836.

Table 4. Choice of practitioner by women with their vaginal symptoms.

Choice of practitioner	Usual doctor male (% women)	Usual doctor female (% women)
Usual doctor	54	55
Practice nurse	3	—
Male doctor	5	4
Female doctor	16	19
No choice available	6	5
Did not matter	16	17
Total responses	254	55

whether or not patients had previous symptoms, although 28% of all respondents would prefer to consult a female doctor given a free choice.

Two hundred and thirty-seven (75%) out of the 317 who answered the question expected a vaginal examination at the consultation. One hundred and eighty (57%) had such an examination performed, with 129 (71%) reporting that a vaginal swab was performed and 14 (8%) not knowing if a swab was done or not. If the patient's usual doctor was male, 74% expected a vaginal examination, whereas 80% expected an examination if their doctor was female. The performance of a vaginal examination was highly associated with stated expectation of such an examination ($P<0.001$). The carrying out of an examination was not found to be associated with whether the patient had had symptoms previously or with the gender of the doctor.

The explanations given to patients by their doctors for causation were: thrush (54%), antibiotics (9%), await test (8%), tight clothing (6%), bacterial (5%), or combinations of these. Although some patient ideas on causation were congruent with their doctors', they also included pregnancies, gynaecological problems and surgery, psychological distress, dietary factors, sexual and contraceptive factors, hygiene, and physical exercise in their explanations.

All but one of the women had heard of thrush, 26% had heard of *Chlamydia,* 18% of *Trichomonas* and 16% had heard of bacterial vaginosis.

Various combinations of antifungal pessaries, creams and tablets were prescribed. Compliance with treatment was high, with 86% using all the treatment supplied. Typically, symptoms cleared in a median time of 4 days (IQ range 2–7 days) after seeing the doctor, with itchiness clearing most quickly and discharge being the slowest to clear.

Most women (71%) believed their vaginal symptoms to be sexually transmissible, and a further 16% suspected that they might be. Partners developed symptoms in 24% of cases, with only nine women not knowing if their partner had symptoms. Two hundred and forty-six women (80%) avoided sex, with 50% having resumed intercourse by 7 days and 75% by 14 days. Socially, 81% of responders identified the urge to scratch as a source of embarrassment, 56% the need to change underwear and 27% the smell of their discharge. Forty-six per cent of patients admitted to having their symptoms on their minds all or most of the time. Although 12 (4%) patients took time off work, most women felt facilities at work were sufficient to cope with their symptoms.

Discussion

This study is based on a convenience sample of women attending practices that were in an advanced state of computerization. Such innovative practices are more likely to be located in rural or affluent suburban areas,[11] and indeed, the respondents were more likely to be in paid employment than a national sample.

The two refusals were accompanied by letters objecting to the questionnaire, but nearly one-third of respondents wished us to supply them with information about vaginal infections. This level of interest is not surprising because vaginal symptoms are common and recurrent, with over 80% of women in this study having had previous episodes, many in the previous year. The condition seems to be strongly medicalized by most women in the study who consulted the doctor each time they had symptoms and also consulted soon after their onset. However, this may merely reflect the manner in which the sample was chosen. In this study, one-third of women were using over-the-counter remedies, mostly without consulting the pharmacist.

Our participating practices are well motivated towards providing good clinical care. Nonetheless, vaginal symptoms were dealt with in a clinically restricted manner, with half the patients having a vaginal examination, most being told they had thrush and nearly all being prescribed antifungal medication. However, those patients on whom a vaginal examination was performed received the same antifungal treatment as those who did not have such an examination. This study cannot say whether patients had thrush or bacterial vaginosis. However, discharge was common as was a bad smell, and both symptoms point towards bacterial vaginosis. Although the symptoms cleared quickly on antifungal treatment, there was a very high rate of recurrence, with over one-third of the sample having had three or more episodes in the previous year. A more rigorous diagnostic and therapeutic approach may well reduce the numbers of recurrences. One woman in four did not expect a vaginal examination, which may have been based on previous experience. In a previous general practitioner study, 42% of women with vaginal symptoms said that they were nearly always examined but 23% were never examined.[12] While women have a wide variety of complex ideas on causation, they display a high level of ignorance about the microbiological causation of vaginal infections despite strong beliefs in the sexually transmissible nature of the condition. They seemed to have a greater interest in their underlying susceptibility to infection than in the actual infection itself. We also have little information on women's efforts at personal management of their vaginal symptoms and on the effects such infections have on women's perception of themselves.

None of the women in this study was known to be pregnant, and thus, they were not at risk of the sequelae of bacterial vaginosis. Little use was made of the skills of practice nurses in this study despite their skill and enthusiasm in the area of women's health. A vaginal examination can help to distinguish candidiasis from bacterial vaginosis by measuring vaginal pH, and looking for 'clue cells' on microscopy increases the power of the diagnosis.[8] Appropriate treatment of thrush is with antifungal drugs, whereas bacterial vaginosis responds to metronidazole tablets or clindamycin cream.[13,14]

Donabedian[15] has argued for the role of patients in quality assurance in reporting on their experiences in health care. In this way, the patient becomes a primary source of information but is not asked to judge. With the information they provide, others may judge and decide on standards. Based on the information provided by the patients in this study, it is evident that vaginal symptoms are recurrent for many women. An appropriate therapeutic standard in both clinical and research practice would be a reduction in the recurrence of episodes. To achieve this, we suggest that an appropriate standard would be for every patient with vaginal symptoms to receive the offer of a vaginal examination in a practice equipped with the knowledge and skills to diagnose and manage vaginal infections.

References

1. O'Dowd TC, West RR, Riberio CD, *et al.* Contribution of *Gardnerella vaginalis* to vaginitis in general practice. *Br Med J* 1988; **292:** 1640-1642.
2. Smail J. Women's problems – the role of the practice nurse. *Update* 15 April 1991; 776-782.
3. Easmon CSF, Hay PE, Ison CA. Bacterial vaginosis: a diagnostic approach. *Genitourinary Med* 1992; **68:** 134-138.
4. Blackwell A, Fox AR, Phillips I, Barlow D. Anaerobic vaginosis (non-specific vaginitis): clinical, microbiological, and therapeutic findings. *Lancet* 1983; **ii:** 1379-1382.
5. Nugent RP, Krohn MA, Hillier SL. Reliability of diagnosing bacterial vaginosis is improved by a standardised method of Gram stain interpretation. *J Clin Microbiol* 1991; **29:** 297-301.
6. Martius J. Krohn MA, Hillier SL, *et al.* Relationship of vaginal Lactobacillus species, cervical *Chlamydia trachomatis* and bacterial vaginosis to preterm birth. *Obstet Gynecol* 1988; **71:** 89-95.

7. Hillier SL, Nugent RP, Eschenbach DA, *et al.* Association between Bacterial vaginosis and preterm delivery of a low birth weight infant. *N Engl J Med* 1995; **333:** 1737-1742.
8. Larsson PG, Platz-Christensen, Henning T, *et al.* Incidence of pelvic inflammatory disease after first-trimester legal abortion in women with bacterial vaginosis after treatment with metronidazole: a double-blind, randomized study. *Am J Obstet Gynecol* 1992; **166:** 100-103.
9. Hillier SL, Martius J, Krohn MA, *et al.* A case-control study of chorioamniotic infection and histologic chorioamnionitis in prematurity. *N Engl J Med.* 1988; **319:** 972-978.
10. Watts H, Krohn MA, Hillier SL, Eschenbach DA. Bacterial vaginosis as a risk factor for post-caesarean endometritis. *Obstet Gynecol* 1990; **75:** 52-58.
11. Bosanquet N, Leese B. Family doctors and innovation in general practice. *BMJ* 1988; **296:** 1576-1580.
12. Tooley P. Management of vaginal candidosis: a survey in general practice. *Practitioner* 1990; **234:** 519-521.
13. Hillier S, Krohn MA, Watts DH, *et al.* Microbiological efficacy of intravaginal clindamycin cream for the treatment of bacterial vaginosis. *Obstet Gynecol* 1990; **76:** 407-413.
14. Schmitt C, Sobel JD, Meriwether C. Bacterial vaginosis: treatment with clindamycin cream versus oral metronidazole. *Obstet Gynecol* 1992; **79:** 1020 -1023.
15. Donabedian A. Quality assurance in health care: consumers' role. *Quality in Health Care* 1992; **1:** 247-251.

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