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The vaginitis monologues: women's experiences of vaginal complaints in a primary care setting

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Abstract

Vaginal complaints are a common presenting problem in primary care settings. A disease model has dominated current research and treatment paradigms, with little attention to the illness or experiential dimensions of vaginal complaints. In this paper, we report data from a qualitative study of the experiences of women diagnosed with vaginitis. In semi-structured interviews with 44 women in New York City, United States, we investigated women's interpretations and explanations of their illness, their accounts of its impact on their lives, their experiences with treatment, and the role of vaginal symptoms in communicating distress and anger. We found that women's explanations of vaginal complaints differed strikingly from the current medical model described in the literature on vaginitis. Vaginal symptoms often occasioned extreme anxiety; their impact on social and sexual functioning could be severe. Finally, vaginal symptoms often functioned to express distress and gender conflict. These findings have important implications for the management of the disorder. © 2002 Published by Elsevier Science Ltd.

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Introduction

Vaginal complaints are a common presenting problem in primary care settings. They are usually diagnosed as "vaginitis", a general term that refers to inflammation of the vaginal wall generally caused by one of three disorders: yeast infections, bacterial vaginosis, and trichomoniasis.

Current approaches to the clinical management of vaginal complaints emphasize a disease model: the diagnosis of one of the three disorders and the elimination of the microbial pathogen associated with it (American College of Obstetrics and Gynecology, 1996). Vaginitis is described as a non-debilitating, self-limited condition, which is treated effectively by antibiotics (Sobel, 1997). Yet even on its own terms, the infectious disease model appears inadequate to account for vaginal complaints in many women. Available tests lack specificity and sensitivity and there is a poor

correlation between the identification of microorganisms and patients' reports of symptoms. For example *Gardnerella*, the microorganism associated with bacterial vaginosis, normally inhabits the vagina; and many women testing positive for *Candida* or *Trichomonas* are entirely asymptomatic (Berg, Heidrich, Fihn, & Berman, 1983; Ohlemeyer, Hornberger, Lynch, & Swierkosz, 1999). Conversely, no infectious pathogen can be identified in a large proportion of women complaining of symptoms (Berg et al., 1984; Schaaf, Perez-Stabile, & Borchardt, 1990, Mayard, ka-Gina, & Cornelissen, 1998): fifty percent of women with symptoms remain undiagnosed even after extensive diagnostic workup (Schaaf et al., 1990). Furthermore, the presence of symptoms associated with vaginitis, including discharge (Stone & Gamble, 1959; Godley, 1985) odor (Doty & Huggins, 1975), and itching or discomfort (Priestley, Jones, Dhar, & Goodwin, 1997) do not necessarily indicate the presence of disease, since evidence suggests that these symptoms occur in the normal population.

In this study, we sought to investigate how women interpret vaginal sensations as symptoms and construct

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these symptoms as a problem requiring medical care. Studies of illness cognition suggest that people consider medical consultation when a bodily sensation is interpreted as abnormal and potentially threatening—that is to say, a symptom (e.g. Leventhal, 1989). The interpretive criteria used by an individual to distinguish a symptom from a non-symptom derives from the illness models currently available within a given social and cultural context (Shorter, 1992). In the case of vaginal complaints, one such model is the biomedical description of vaginitis.

Medical sociology has provided numerous examples in which modern medicine re-interprets normal manifestations of female anatomy and reproductive processes as disease, often resulting in the application of oppressive diagnoses and noxious treatments (Katz-Rothman, 1982; Martin, 1987; Scambler & Scambler, 1993). We wondered how the current medical model of vaginitis might influence symptom interpretation and treatment seeking, and whether women in our sample had experienced having a medical diagnosis of vaginitis imposed on what they had considered normal vaginal signs.

In addition, we investigated whether women drew on alternate medical or lay models in interpreting vaginal symptoms. Studies of treatment seeking have found that cultures differ in both the salience they attach to particular symptoms (Zola, 1963) and in the constellations of social factors that precipitate medical consultation (Zola, 1973). Given the symbolic significance of the vagina, we thought it likely that women's experiences with vaginal symptoms might be suffused with meanings related to sexuality, morality, and women's gender roles. Though there has been little research in this area (see Nichter, 1981) some evidence suggests that culture or ethnicity shape women's interpretations of vaginal normalcy and the significance of symptoms. For example, a study of African American and white American women found ethnic differences in patterns of treatment seeking for vaginal symptoms, suggesting that the two groups interpreted the significance of their vaginal symptoms differently (Foxman, Marsh, Gillespie, & Sobel, 1998). Studies from the ethnographic literature on South Asia report the existence of a syndrome in which "normal" vaginal discharge is re-interpreted by the patient as a sign of disease called "dhat syndrome", precipitating extensive treatment seeking (Chaturvedi, Chandra, Isaac, & Sudarshan, 1993; Chaturvedi, 1993; Nichter, 1981). Data from a focus group study of Pakistani women with complaints of leucorrhoea, a culturally shaped disorder similar to dhat syndrome, indicate that the vagina is viewed as a particularly vulnerable, illness-prone organ, susceptible to the influences of weather, temperature, overwork, sexual dissatisfaction, and marital problems (Karasz & Anderson, 2001).

In addition to addressing the question of how women interpret their vaginal symptoms and the medical and cultural models influencing these interpretations, we had a second, more pragmatic goal in this study. We sought to document the experiential dimensions of vaginitis and its treatment that might have implications for improved clinical management. We analyzed women's illness narratives (Kleinman, 1988) for insights into the psychological and social sequelae of the disorder in order to discern whether women's social and emotional concerns were addressed through the treatment they received. Studies of doctor-patient communications show that such concerns play a major role in women's health seeking decisions. Yet they are often ignored during the medical consultation, in which the physician's biomedical agenda tends to dominate the interaction (Todd, 1989). One of the authors (MA) observed in his own medical practice that women presenting with vaginal complaints sought consultations and pelvic exams because they wished to determine whether their partners had been unfaithful to them. Presentations of vaginal symptoms often touched on issues of fear over sexual safety and anger over partners' infidelity. We sought to explore such concerns systematically in our study and to investigate whether they were typically addressed in women's interactions with their physicians. Finally, we sought to learn how women judged treatment success and whether they were satisfied with the treatment they received in our clinic setting.

Methods

Study design

The study was carried out at the Montefiore Family Health Center, New York City, an academic community health center serving a multi-ethnic, largely working class population that includes many immigrants. We conducted semi-structured interviews with 44 women who had recently presented to a family physician or nurse practitioner and been diagnosed with vaginitis. Interviews were not taped; interviewers were trained to take in-depth notes. Six interviewers, including the authors and four medical students, contacted participants and conducted the interviews by telephone. No one declined to be interviewed.

Participants

Patients were eligible for the study if they were over 18 years of age and had received an ICD-9 code of 616.10 (Vaginitis and vulvovaginitis, unspecified). Eight women were recruited from the practice of one of the authors (MA). The remaining women were identified from the clinic's billing database. This database includes ICD-9

diagnoses in addition to billing data. Potential participants were selected from the database if they had received the 616.10 diagnosis within the four months prior to the beginning of the study. Eligible participants were sent a letter, signed by their physicians, which explained the study and included a number to call if they did not wish to be contacted. Interviewers then telephoned potential participants at home, explained the study again, and obtained oral consent to participate.

One of the investigators (MA) interviewed several of his own patients: the fact that these participants were interviewed by their own physician did not appear to affect either the interview process or the quality of the data. The interviews ranged in length from 30 to 45 min. Interviewers were trained to follow participants' lead and prompt for rich, detailed accounts. Participants occasionally requested interviewers for information. Interviewers were instructed to respond warmly to such questions but to refer patients back to their providers for information.

Participants' countries of origin included the United States, Jamaica, the Dominican Republic, Puerto Rico and Antigua. Educational level ranged from primary school to graduate school. Six women were interviewed in Spanish by a fluent Spanish speaker.

Development of the interview and data analysis

We developed an interview instrument to explore various aspects of illness experience. Participants were asked to generate illness narratives focusing on symptom and treatment experiences. We also included a semi-structured component to the interview, which was based on a model of symptom interpretation from the health psychology literature called the Illness Representation Model (Leventhal, Leventhal, & Cameron, 1997). The model proposes a five-dimensional structure of illness representation: label, cause, consequences, timeline, and treatment/management, and has been used successfully across a variety of diseases and illness conditions. We added an additional conceptual domain: the perception of stigma, which we believed to be relevant to the experience of vaginal complaints. In our effort to understand the process of symptom interpretation, we invited participants to share with us some more general ideas about vaginal normalcy.

The goal of this study was to generate, rather than confirm, hypotheses. We utilized an approach common to many qualitative studies: designing our initial questions as broadly as possible and subsequently adding new domains of inquiry as we proceeded further with data collection (e.g. Glaser & Strauss, 1967; Miller & Crabtree, 1999). Consequently, the study instrument was developed in three broad stages. The initial version of the interview was tested on a

group of 10 women. Several additional themes were identified and a second version of the interview was then administered to a group of 20 women. The two authors then reviewed 15 randomly selected interviews. Again, new themes emerged and several questions were added to the final version of the interview. At this point the authors also developed coding categories for grouping responses. A final version of the interview was then administered to 14 additional women. The coding categories were revised to fit the new data and incorporated into an Access database. As a consequence of this method, not all women were asked all of the questions.

Coding decisions were made by consensus. The authors coded the first five interviews together. The first author subsequently coded and entered all of the data. The second author then reviewed the coded data. There were no disagreements on coding decisions.

Results

Symptoms

Eighty-five percent of women complained of some combination of itching (30/44), discharge (30/44), and odor (12/44). Four of the remaining seven patients complained of dysuria, two of non-specific pain. One woman was asymptomatic and had been diagnosed as having vaginitis by her provider. Other complaints included wetness, discomfort and a cut on the vaginal wall.

Diagnoses

Thirty-four women were asked what diagnosis they had received. Twenty reported being diagnosed with a yeast infection, five with bacterial vaginosis, and two with trichomoniasis. Six stated they did not know their diagnosis and one woman reported both a yeast infection "and a touch of trich". No patient reported gonorrhea or chlamydia.

Conceptions of the normal

Women ranged widely in their conception of a normal vagina. Most judged normality by the characteristics of vaginal discharge: its quantity, color, odor, and consistency.

A normal vagina should have some secretions in it, but not as much as I had. (#12)

Normal discharge doesn't smell. When it starts to have an odor and I know I just bathed, I know [the infection is] coming on. (#24)

Color was considered to be an important indicator of normalcy, though women differed sharply in what they considered to be a normal color.

[Normal is] yellowish. If it gets any darker than light yellow, something is wrong. It's like my urine. If it's yellow that means it's dirty and I have to make a lot of water. That cleans my urine. I don't know if it cleans my secretions. (#30)

If it turns dark brown, that's abnormal. (#13)

Timing also played a role. Some women believed that normal discharge occurred at midcycle, while others thought it occurred either before or after menses.

Normally there is no discharge; it changes with my period only...[at that time] I get a very slight discharge. I don't know if it's from the period even or the pad gives you a little irritation... (#23)

A couple of weeks before my period there is more discharge and some itching. (#12)

After my period I get a cleansing discharge. (#18)

Most felt that some amount of vaginal discharge was normal; but a fifth of women in our sample judged that a normal vagina should be dry and odor free. Women questioned friends and family regarding what was normal and some were concerned to discover that other women had different experiences from their own. Some women anxiously questioned the interviewer:

OK, what I'd like to ask you is—is it normal to have discharge? Is it normal to have wetness? Because until I was eighteen I was a virgin and I didn't have anything at all. No problems at all, no discharge and no smell. But after I met my husband it totally changed, and it started getting wet and there was a smell that is always there. (#42)

Causation

Respondents proposed a wide variety of possible causes for vaginal symptoms. Infectious causes were most common and were mentioned in about half of all responses. Many women made little distinction between sexually transmitted diseases and vaginitis. A common theme was the suspicion of infidelity in a sexual partner.

I'm not sure what caused it, but my first reaction was to ask my partner if he's been with somebody else. I wasn't really too afraid of STDS because we use condoms but I thought maybe one broke or had a hole in it and I didn't know and maybe he could have given me an STD. (#26)

The other thing I'm thinking—this is completely confidential, right? It might be something my

boyfriend gives me... Sometimes I think it might be him. (#32)

Bacteria and protozoa are carried from men to women: protozoan infections are in your genes and it is difficult to detect them and get rid of them. (#43)

Most women mentioned several possible causes of vaginal symptoms.

A fall, a trip, walking too much. If you are worried and you walk too much. I am small and I could hurt my ovaries. You can also hurt your ovaries in sexual relations with your spouse. If he is very big, or rough, it can rub [the vagina] and make a scratch, an ulcer. That causes the discharge... (#40)

Women offered possible causes of vaginal symptoms that were based on idiosyncratic models of female anatomy.

Your body chemistry gets real dry and everything backs up there [in your vagina]. Like your body is dehydrated and so this is what happens when the chemicals get out of balance. (#21)

A number of women were worried about cancer as a possible cause of vaginal symptoms:

I thought there was something wrong inside of me that makes me feel this way. I had a biopsy done in the past and the doctor found some cancerous cells on my cervix and he had removed a part of my cervix. Still I continue to have this itching, burning and flowing all the time. (#2)

A number of women cited their own past sexual misbehavior as the cause of their vaginal symptoms. Some viewed their sexual behavior as having permanently affected their vaginal health:

I got married at 18 and until five years ago I only had one sex partner. We were going through some changes and we broke up, and so at one time I had two partners... Well...nowadays you don't expect a woman to only have one partner. Still I really wonder sometimes if that was what did it...after that I used to get [vaginal symptoms]...It wasn't the same after I started having two partners! [The discharge] seemed like it changed. My husband commented that he knew I was with someone else, (because) the smell was different...I feel kind of terrible about it. (#42)

Consequences

Many women experienced considerable distress over their symptoms. Two-thirds saw their symptoms as "somewhat serious" or "very serious". Patients worried about the consequences of non-treatment, often expressing their fears in vivid terms. Some women feared that

their presumed infection might spread to involve other reproductive organs, leading to sterility, perhaps even death. The infection might lead to cancer in the cervix, the uterus or the bladder.

I could lose a piece of my body. The infection could spread to my fallopian tubes, even as deep as my uterus. The vaginal walls could get infected. (#39)

I'm worried that the discharge could be something else or that it could develop into something else. It could transform into cancer. And I'm worried about my reproductive system...I'm thirty-one, I only have my one daughter. (#4)

Pregnant patients worried that the infection might somehow compromise the health of the fetus. One woman believed that *Trichomonas* might climb into her womb and "eat" her baby. Most patients had not discussed these concerns with their providers. Symptoms resulted in significant functional problems. Six women reported staying home because of symptoms, missing work or school and avoiding socializing. Several expressed concern that colleagues at work or sexual partners could smell their vaginal odor. To avoid this they showered, douched or changed panties, often several times a day. About a quarter of participants reported problems with sex as a result of symptoms. Some mentioned dyspareunia, while others were concerned they might pass an infection on to their partners. Several women said they had avoided entering a new relationship because of chronic vaginal symptoms.

I am not in any intimate relationship right now, but I am afraid that I may get into one...[but I wouldn't want to because] I would be embarrassed and afraid of giving something to him. I am afraid it's something he could get from me...it worries me because I wonder where it is coming from and if it means something is wrong with me. (#12)

I don't really want to move on to someone else. I don't want a new partner. I think I feel like being alone right now, because if I get a new partner, it might make the discharge worse... I'm kind of stuck in this situation. I don't want no more problems. (#42)

Chronicity of Symptoms

Only a minority of women (about a quarter) reported an isolated incident of symptoms. For about half the sample, symptoms recurred regularly at intervals ranging from a few months to a few years. For another quarter of participants, symptoms were chronic and hardly ever absent. Women with chronic or persistent symptoms tended to be more worried than women with transient symptoms:

It worries me because I wonder where it is coming from and if it means something is wrong with me. My friend had it and hers went away, so I think mine might be more serious. (#12)

Treatment and management

Some women sought medical attention at the first sign of symptoms. A more typical pattern was to seek medical consultation after a variety of other options had been tried and had failed. Women sought advice about vaginal problems from family members or friends. Other patients turned to magazine articles, textbooks, and, in the case of one woman, the Internet. Women engaged in a wide variety of preventative and self-treatment practices. One-third of women in the sample had used an over the counter yeast infection medication prior to consultation, often resorting to consultation when self-treatment did not work. Women often used medication left over from previous infections.

I used both some of my left over yeast infection medication and some medicine for a bacterial vaginitis infection. (#9)

One woman reported she used "antibiotics—ampicillin from the Dominican Republic". Others used left over medication given by friends:

My friend gave me cream. It was Mycelex-7 and something else, a white tube with blue letters. She gave it to me so I could control the itch. But it didn't work that good. (#17)

Women engaged in various hygienic practices to both treat and prevent their symptoms.

I bathed with vinegar and water, I used cocoa oil which was recommended by my mother—it didn't work—and I used cuava soap. We women use cuava soap for our vaginas. There is a liquid form as well that's good for microbes. (#45)

I tried everything, I used Massengil special soaps for down there, tried all kinds of panty liners, different panties, and some deodorant spray. (#36)

I tried changing soaps, changing towels and washing the towels more often and changing the pads I used during my period but none of these helped. I also tried this special soap from my country for vaginas. It's this green vagina soap from the Dominican Republic. (#18)

I used Lemisol. It's not exactly a treatment, but I use it to feel fresh. It's for 'down there.' A lot of Spanish people use this one. My mom told me it was good. I use it to make me feel fresh. It dries me up and makes me feel dry and comfortable. (#8)

Douching was common in the sample. The most common reason for douching was to feel “fresh and clean” especially after menstrual periods. Several women felt that menstrual blood was inherently dirty—“bad blood”—that needed to be removed from the vagina or it would cause a variety of harmful health effects. Women with symptoms douched before intercourse in order to temporarily decrease symptoms. Many of these women were generally aware or suspected that douching might be harmful and a possible cause of vaginal symptoms. Although they had considered giving up the practice, they did not since they liked the feeling of cleanliness and dryness that resulted from douching.

Treatment outcomes

We had data from 31 women on the outcome of the medical consultation. Twenty-four reported that their symptoms remitted, usually within a few days of treatment. Four did not improve, while three improved, but subsequently experienced a relapse. Treatment satisfaction was related to treatment outcome. Women who had experienced relapse or little improvement felt that their treatment had been inadequate. Satisfaction with treatment outcome, in general, was strongly associated with the chronicity of symptoms. While most women in the sample were satisfied with their treatment experiences, more than half of women reporting chronic symptoms were dissatisfied. Some complained about symptom recurrence; others were concerned about the fact that their physician seemed unable to explain the chronicity of their symptoms. These women wanted explanations of why symptoms kept returning, and they wanted stronger, more efficacious medicines that would provide a “permanent cure”.

Stigma and disclosure

Women’s engagement in rigorous douching and other hygienic practices was often related to strong feelings of disgust and shame over vaginal symptoms. A number of women viewed even a healthy vagina as unclean; many women felt that their usual vaginal odor was unpleasant.

Many women in the sample avoided disclosure about their symptoms or used disclosure selectively. Typically, women discussed symptoms with family members, most often a mother, sister or friend.

People don’t like to tell you things but you hear people and you hear hints and you know what it is. You know you hear someone has itching and you know what it is...you don’t get many women who talk about it, they don’t talk about itching...(#4)

Women don’t talk about it. I can talk more about my fibroids than I can about the yeast infection, which is

more private. I don’t want to talk to anyone about it...(#5)

Much of the stigma associated with vaginal symptoms was related to the fact that many women did not distinguish between vaginitis and sexually transmitted disease. These women assumed that vaginal symptoms were caused by sex and might thus be construed as evidence of promiscuity.

It’s a lack of knowledge. People may go back and say she is promiscuous. And a lot of men think you can get it from fooling around, but you don’t. (#4)

Some women were reluctant to discuss vaginal symptoms even with their physicians, worrying that they might be seen as sexually promiscuous.

As for talking to doctors, women are more likely to talk to their doctor. The doctor is more confidential (sic). But if they are not knowledgeable enough, they may not feel comfortable. It depends on the doctor’s confidentiality. (#4)

I’m uncomfortable talking with my doctor about these symptoms because I feel like I’m exposing myself. (#6)

The decision to discuss vaginal symptoms with sexual partners was a complex one. Some women feared that such a discussion might lead to a confrontation over the male partner’s sexual infidelity. Alternatively, some women hesitated to discuss their symptoms because they might be seen—rightly or wrongly—as having been unfaithful.

I was bugging...where did it come from? Why me? I was afraid to mention it to my partner. Even once I knew what it was, I was afraid to tell him. I thought he would look at me different or think I was messing around or think I was nasty. I didn’t know how to tell him even though I understand it’s not an STD. So I just kept it to myself and hid my medicine. I have unprotected sex but just with him so I even thought maybe he already had it from me and...was freaking out inside. Maybe he thought I gave it to him and he wouldn’t even want to deal with me anymore. (#27)

Many women raised issues of sexual safety and trust.

I asked him, “Do you fool around?” but he said it must be something else and I should get myself checked out. I guess he could be lying but there is no way to know...(#26)

What can cause it? Sexual contact with your husband. If he has another woman out there... (In my case) I have him alone, but I don’t know if he (also) lives with another woman. (#44)

Anger over male behavior was common.

STDs are carried by men who do not show any symptoms and the women are the ones who react and get sick. [Men] are the ones who go out to cheat and bring these infections to us women. (#43)

Discussion

The findings in the study provide insights into the current cultural models of female anatomy and disease that shape symptom interpretation and treatment seeking for vaginal complaints. We found evidence that the current medical model of vaginitis influences symptom interpretation, at least among women seeking medical consultation. According to the model, vaginal signs such as heavy discharge, itching and odor are associated with disease: many women in our sample concurred unquestioningly with this view. However, in other ways, women's understanding of their symptoms differed sharply from the conventional view. Current accounts of vaginitis represented in the research literature presents the disorder as a self-limited, not particularly serious condition caused by microscopic pathogens which are effectively treated by antibiotics and anti-fungals (Sobel, 1997). Many women in our study saw vaginitis very differently, drawing on alternative medical models, such as contemporary discourse on sexually transmitted disease, in representing their symptoms. Though vaginitis, in its two most common forms at least, is non-contagious, women often assumed that vaginal complaints were evidence of sexually transmitted disease.

But a variety of other themes emerged. A concern with dirt, infection and contagion colored many participants' accounts. Other explanations for vaginal symptoms included tight clothing, hot weather, spicy food, menstrual blood, sexual intercourse, and stress. Such associations pointed to popular, non-medical models of health, sickness, and reproduction. More research is needed on the cultural factors shaping these models.

Associations between vaginal symptoms and serious disease contributed significantly to women's anxiety, leading in some cases to severe emotional distress. Many participants were frightened about the origin of their vaginal symptoms and believed they could result from, or result in, life threatening diseases such as cancer or HIV. Many women feared for their own reproductive health.

For participants in the study, concerns over sexually transmitted disease merged in subtle ways with other concerns about sexual morality. Vaginal symptoms were often associated with too much sexual activity or sexual activity of the wrong kind. Several women noted that their problems began with the onset of sexual maturity. For some of these women, the dry, odorless, practically imperceptible vagina of the virgin seemed to represent

the pinnacle of health as well as virtue. The fact that a fifth of our sample believed that a healthy vagina should be completely dry raises the question of whether women's models of vaginal normalcy may result in increased or unnecessary treatment seeking.

For some women, vaginal symptoms appear to serve as a symbolic battleground for conflicts between sexual partners, functioning as concrete evidence of male infidelity or serving as an indicator that the woman herself did not deserve her partner's affection and love.

Implications for management

Although we did not examine doctor–patient communications in this study directly, our data suggest that interactions between doctors and patients around the treatment of vaginal symptoms are shaped by an emphasis on the conventional disease model of vaginitis, with little attention to patients' own representations or psychosocial concerns. Numerous writers have indicated the importance of open communication about patients' lay models of illness and disease, suggesting that when physicians do not understand their patients' concepts of their illness, the result can be poor management, under recognition of psychosocial sequelae, patient dissatisfaction, and adherence problems (Kleinman, 1988). Our data suggest that the management of vaginitis would be improved if physicians inquired patients' explanatory models as a routine part of the clinical management of the illness.

Our findings also suggest that treatment outcomes are frequently unfavorable and that recurrent episodes are common. For women with recurrent cases, some follow-up may be necessary as part of routine management. Clearly, functional impact should be assessed as carefully as symptoms. Practitioners need to be aware of the level of functional difficulties and other social and emotional sequelae experienced by some women. Effective management should address the impact of symptoms on the patient's self-image and lifestyle.

The question of diagnostic uncertainty presents special issues for the management of the disorder. We initially expected that some participants would report that a vaginitis diagnosis had been imposed on what they themselves considered normal vaginal phenomena. However, this was rare in our sample: only one woman told us that she had been "informed" she had vaginitis during the course of a routine pelvic exam. Instead, the identification of symptoms occurred prior to consultation; research in a community, rather than a clinic setting would be necessary to gain better understanding of this process. During the consultation, patients and doctors appeared to engage in an opaque negotiation around vaginal symptoms that inevitably resulted in the prescription of treatment. Of course, we do not know how many women presented with vaginal symptoms in

the clinic but did not receive a diagnosis, since these women were not included in our data set. Further research is needed to gain a better understanding of doctor and patient communication around vaginal complaints.

We propose in this paper that the conventional disease model of vaginitis is an inadequate conceptual framework both for understanding and for managing this common disorder. That is not to say, however, that the sharing of a disease model is never an appropriate model for treating vaginitis. While the literature contains many examples of the ways in which normal female biology has been medicalized, to the detriment of women patients, there are also examples of destructive confrontations between patients who claim biomedical status for their symptoms and physicians who deny it: this has occurred recently in the case of chronic fatigue syndrome (Ware, 1992); and chronic illness associated with breast implants (Zimmerman, 1998.). Instead, it seems important for physicians to find a way to problematize the model for their patients, at least if standard diagnostic procedures and treatments are not working well. Open dialogue about symptoms, about their meaning and implications, and about the normal variation among individuals in vaginal wetness, odor and itching might be reassuring to some patients and reduce unnecessary treatment seeking.

Conclusion

Our exploration of the experiential context of vaginal symptoms opened a door into the psychological and social worlds of these primary care patients. Patients' psychosocial concerns, and the distress they occasion, has great importance for the care of vaginitis patients in primary care settings. Understanding what vaginal complaints "say" about social context could greatly increase physicians' ability to provide care for their patient as a "whole person". To do so it may be necessary to carefully sort out and address concerns over cancer, sexually transmitted disease and future reproductive health.

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References

American College of Obstetrics and Gynecology. (1996). Technical Bulletin No. 226. Washington, DC.

- Berg, O., Heidrich, P., Fihn, S., & Berman, J. (1984). Establishing the cause of genitourinary symptoms in women in a family practice. *Journal of the American Medical Association*, 251, 620–625.
- Chaturvedi, S. (1993). Abnormal illness behavior and somatization due to leucorrhoea. *Psychopathology*, 26, 170–176.
- Chaturvedi, S., Chandra, P., Isaac, M., & Sudarshan, C. (1993). Somatization misattributed to non-pathological vaginal discharge. *Journal of Psychosomatic Research*, 7(6), 575–579.
- Doty, R., & Huggins, G. (1975). Changes in the intensity and pleasantness of human vaginal odors during the menstrual cycle. *Science*, 190, 1316–1318.
- Foxman, B., Marsh, J., Gillespie, B., & Sobel, J. (1998). Frequency and response to vaginal symptoms among White and African Americans: Results of a random digit dialing survey. *Journal of Women's Health*, 7(9), 1167–1174.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Chicago, IL: Aldine.
- Godley, M. (1985). Quantitation of vaginal discharge in health volunteers. *British Journal of Obstetrics and Gynaecology*, 92, 739–742.
- Karasz, A., & Anderson, M. (2001). Pakistani women's experiences of leukorrhea. Unpublished raw data.
- Katz-Rothman, B. (1982). *In labor Women and power in the birthplace*. New York: W.W. Norton.
- Kleinman, A. (1988). *The illness narratives: Suffering, healing, and the human condition*. New York (NY): Basic Books.
- Leventhal, H. (1989). Illness behavior in old age. *Journal of Aging Studies*, 3(4), 325–340.
- Leventhal, H., Leventhal, E., & Cameron, L. (1997). Representations, procedures, and affect in illness self-regulation: A perceptual-cognitive model. In A. Baum, T. Revenson, & J. Weinman (Eds.), *Handbook of health psychology*. New York: Earlbaum.
- Martin, E. (1987). *Woman in the body: A cultural analysis of reproduction*. Boston: Beacon Press.
- Mayard, P., ka-Gina, G., & Cornelissen, J. (1998). Validation of a WHO algorithm with risk assessment for the clinical management of vaginal discharge in Mwanza, Tanzania. *Sexually Transmitted Infections*, 74(Suppl 1), S77–84.
- Miller, W., & Crabtree, B. (1999). Clinical research: A multimethod typology and qualitative roadmap. In B. Crabtree, & W. Miller (Eds.), *Doing qualitative research*. Thousand Oaks: Sage.
- Nichter, M. (1981). Idioms of distress. *Culture, Medicine, and Psychiatry*, 5, 379–408.
- Ohlemeyer, C., Hornberger, L., Lynch, D., & Swierkosz, E. (1999). Diagnosis of *Trichomonas vaginalis* in adolescent females: InPouch TV culture versus wet-mount microscopy. *Journal of Adolescent Health*, 22, 205–208.
- Priestley, C., Jones, B., Dhar, J., & Goodwin, L. (1997). What is normal vaginal flora? *Genitourinary Medicine*, 73, 23–28.
- Scambler, A., & Scambler, G. (1993). *Menstrual disorders*. London, New York: Tavistock/Routledge Press.
- Schaaf, V., Perez-Stabile, E., & Borchardt, K. (1990). The limited value of symptoms and signs in the diagnosis of vaginal infections. *Archives of Internal Medicine*, 150, 1929–1933.

- Shorter, E. (1992). *From paralysis to fatigue: A history of psychosomatic illness in the modern era*. New York: Free Press.
- Sobel, J. (1997). Vaginitis. *New England Journal of Medicine*, 337, 1896–1903.
- Stone, A., & Gamble, C. (1959). The quantity of vaginal fluid. *American Journal of Obstetrics and Gynecology*, 78(2), 279–281.
- Todd, A. (1989). *Intimate adversaries: Cultural conflict between doctors and women patients*. Philadelphia: University of Pennsylvania.
- Ware, N. (1992). Suffering and the social construction of illness: The delegitimization of illness experience in chronic fatigue syndrome. *Medical Anthropology Quarterly*, 6(4), 347–361.
- Zimmerman, S. (1998). *Silicone survivors: Women's experiences with breast implants*. Philadelphia: Temple University Press.
- Zola, I. (1963). Socio-cultural factors in the seeking of medical aid—a progress report. *Transcultural Psychiatric Research Review*, 14(62), 62–65.
- Zola, I. (1973). Pathways to the doctor: From person to patient. *Social Science & Medicine*, 7, 677–689.