

Leukorrhea: An Evaluation of Physical and Mental Burden among Women in Family and it's Biomedical Interpretation

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Abstract : *Leukorrhea is an extraordinarily common phenomenon among women in Bangladesh. This symptom is the evidence of Reproductive Tract Infection (RTI) among women in this country. However frequency of RTI is proportionately low. But the symptom of vaginal discharge is reported by the women who do not have any of RTI. Genital secretions are extremely purified form of 'dhatu' according to traditional concepts of health, or bodily substance, and loss of genital secretions may result in fatal weakness or even death. A variety of somatic symptoms such as dizziness, backache and weakness is associated vaginal discharge. The link between unexplained gynaecological symptoms and mental health concerns has been explored by both psychiatrists and anthropologists in Bangladesh. Health workers are trained in the field for the assessment of sexually transmitted infections (STIs) to provide treatment based on history, risk and estimates of women (but without clinical conformation). Which is known as the syndromic procedure. But there are frequent cases of using antibiotics inappropriately among women who have vaginal discharge but do not have RTI. Over reporting of vaginal discharge concerning about it's cultural and anthropological assessment rather than biomedical framework.*

Keywords: *dhat syndrome, dhatu loss, leukorrhea, reproductive tract infection, syndromic management, Bangladesh*

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I. Introduction

The symptom of vaginal discharge is extraordinarily common among women in Bangladesh (Gittelsohn et al. 2 1994; Bhatia & Cleland 1995). From a biomedical perspective, women's self-reported complaints of vaginal discharge suggest that the prevalence of reproductive tract infection (RTI) in Bangladesh may be high. However, there are potential difficulties in an approach that equates self-reported symptoms with the presence of a specific disease. Lambert (1998) draws attention to the anthropological literature on the 'semen loss' disorders among men in Bangladesh, and makes the point that genital secretions appear to have complex cultural meanings in the South Asian context. She poses the question: Do high self-reported rates of the symptom of vaginal discharge actually indicate that there is a huge burden of reproductive morbidity and human immunodeficiency virus (HIV) risk - or may the symptom have different meanings as well? From a biomedical perspective, the symptom of vaginal discharge is most often associated with reproductive tract infection or cervical pathology. RTI includes both endogenous infection with organisms such as *Candida* and *Gardnerella*, as well as sexually transmitted pathogens such as gonorrhoea and Chlamydia. Recent research provides evidence that the prevalence of clinically significant RTIs among Bangladeshi women is much lower than was previously thought (Brabin et al. 1998; Hawkes et al. 1999). In Bangladesh, loss of genital secretions (often called 'dhatu loss') is regarded with concern by both men and women, even when the loss may be non-pathological. Self-reporting of symptoms in this cultural context could lead to significant over-estimation of biomedical pathology, when symptom reports are taken to represent disease prevalence. From an anthropological perspective, the body has been described as both a biological entity that is affected by disease, as well as a template for the expression of human emotion (Lock 1993). Symptoms that have particular ethno-medical significance often become the focus of culturally shaped illnesses, in which emotional distress is expressed through the physical body. In Iran, women suffering from 'heart distress' complain of palpitations and chest pain, yet organic pathology referable to

the heart is seldom associated (Good 1977). Nervios, a culturally shaped illness most often described among Latino populations, is characterized by symptoms including dizziness, shortness of breath and anxiety (Low 1985; Guarnaccia et al. 1989). Traumatized by years of revolution and oppression, women and men in China suffer from the culturally shaped condition of neurasthenia, and complain of weakness, exhaustion and dizziness (Kuo & Kleinman 1989). For people in structurally powerless situations, the body may be the only available way of expressing dissent (Nichter 1981). In Bangladesh, the complaint of loss of genital secretions in both men and women, along with a constellation of associated symptoms, may often represent a culturally shaped illness in which anxiety, a sense of powerlessness and concerns around sexuality are expressed through the body. While considerable anthropological work has been carried out on the 'dhatu loss' disorders among men in Bangladesh, the literature on a similar condition in women is thin. This paper explores the cultural and biomedical meanings of the symptom of vaginal discharge in the Bangladeshi context and comments on the significance of these meanings for public health programs in the region.

II. Ethnographic Reflections on Reproductive Tract Symptoms in Rural Areas of Bangladesh

Many young men who consulted to Registered medical practitioners (RMPs) had complaints related to 'semen loss' - either loss of semen through involuntary nocturnal emissions, or of passing semen mixed in with their urine. They also complained of vague physical symptoms such as headache, dizziness and weakness. Physical examination of these young men seldom revealed any pathological findings. Often, they were facing significant social stresses such as an employment crisis or a marriage problem. Ayurvedic physicians treating these young men would say their condition was because of loss of dhatu (dhat rog) and prescribe herbal and dietary treatments. The 'dhatu loss' disorders have been described as bodily expressions of anxiety, often centring around issues of powerlessness or sexual concerns. Considerable anthropological work has been carried out on this culturally shaped disorder, which has also been termed 'dhat syndrome', 'semen loss', as well as names arising from local terminology (Carstairs 1956, 1958; Nag 1972; Malhotra & Wig 1975; Nakra et al. 1977; Kakar 1982; Edwards 1983; Bhatia & Malik 1991; Bottero 1991; Mumford 1996). Among women attending the hospital, one of the most common health concerns was vaginal discharge (leukor-rhea).

A variety of local terms across Bangladesh for this symptom. Women complaining of 'sada panni' often also complained of vague somatic symptoms that include burning hands and feet, dizziness, backache and weakness. Women were very concerned about their condition, and would say that when 'sada panni' is lost from the body, progressive weakness will develop. Many women felt that undergoing the tubectomy operation had caused the condition; others feel that diet was at fault. Gynaecologists with whom I worked would treat these women with topical antibiotics when signs of local infection were present, and with systemic antibiotics only when regional signs of infection, such as adnexal tenderness, fever or lower abdominal pain, were present. Cervical erosion was thought to be an important cause of vaginal discharge, and women with cervical erosions were treated with electrocautery.

The majority of women complaining of vaginal discharge had little clinical evidence of infection. Even the discharge of which they complained seemed no more than normal physiological discharge, or the mildly increased discharge associated with over-growth of naturally occurring vaginal organisms. Local gynaecologists gave several explanations about possible causes of the vaginal discharge in these women, including poor personal hygiene, poor nutrition and overwork, and sexual anxieties. Women with few physical findings would be treated with Ayurvedic tablets, multivitamins, iron, and advice on nutritious diet, personal hygiene and rest.

Registered medical practitioners (RMPs) are men who obtained their biomedical training while working as assistants (compounders) to biomedical practitioners in large cities. These men work out of tiny, shop-front clinics and practice a mixture of biomedical, Ayurvedic and folk treatments. The RMPs usually treat women complaining of vaginal discharge with Ayurvedic medicines or antibiotics, and will occasionally administer an infusion of intravenous glucose, a treatment that has acquired powerful indigenous meanings as a 'cooling' therapy.

III. Cultural Perspective of Leukorrhea in Bangladesh

The complaint of vaginal discharge accompanied by a host of somatic symptoms does not fit a particular biomedical diagnostic category, and can best be understood within the ethnomedical context of Ayurveda, that densely elaborated network of ideas that constitute the cultural prism through which men and women throughout Bangladesh tradition-ally viewed the self and the body (Kakar 1982). The body's boundaries are permeable, with constant exchanges of fluid between the body and environment (Daniel 1984). The view of the body in flux shapes a class of illnesses in which a person falls ill because of his or her conviction that an inordinate loss of a bodily substance (particularly a fluid substance) has taken place. When the substance being lost is perceived to have great symbolic significance, the illness is perceived to be of serious import. Both males

and females possess dhatu and may suffer from a disorder as a result of 'dhatu loss'. The Sri Lankan psychological anthropologist Gananath Obeyesekere (1976) has written about these in both men and women in Sri Lanka. Dhatu leaves the woman's body as a whitish, odourless discharge which is often associated with 'heaty' symptoms such as burning hands and feet, dizziness and joint pain. When women consult a biomedical practitioner they are often told that this problem is not a disease. Weakness, which is considered to be a consequence of white discharge, appears to be a term for a general state of unwellness that includes physical, mental and sexual elements. Bang's rich ethno- graphic description illustrates a broad range of cultural meanings for vaginal discharge in Bangladesh. Yet vaginal discharge in this cultural context needs to be interpreted more broadly than this - clearly, it is a polysemic symptom, which speaks to both emotional as well as physical concerns. Patel and Oomman (1999) note that the symptoms commonly associated with leukorrhoea are similar to those associated with depression, and suggest that unexplained gynaecological symptoms may represent a somatic idiom for depression in Bangladesh. They note the linkage between non-specific gynaecological symptoms and mental health concerns in the psychiatric literature worldwide, and call for a broader understanding of women's mental health in specific cultural contexts.

IV. Biomedical Meanings of Leukorrhoea

According to a biomedical view of the body, vaginal discharge is most often associated with RTI. RTI includes local infection because of naturally occurring organisms of the reproductive tract as well as the more serious sexually transmitted infections (STIs), which have the potential to cause infertility and chronic pelvic pain. Also, the presence of STIs has been shown to enhance the transmission of the HIV, a cause for concern in Bangladesh where the HIV prevalence is rising. Early biomedical studies reported a high prevalence of positive vaginal cultures among rural Bangladeshi women (Bang et al. 1989; Wasserheit et al. 1989); however, many of the organisms cultured may not represent pathogens of clinical significance. More recent community-based studies in Bangladesh provide evidence that prevalence of STIs is substantially lower than was originally thought. Hawkes et al. (1999) used techniques to diagnose STIs that were both sensitive and specific and found that the prevalence of STIs among rural women in Bangladesh was only 1.73%, and the prevalence of positive cultures because of endogenous vaginal organisms about 32%, a moderate rate. The authors note that unless criteria for diagnosis are stringent, the potential for over-diagnosis of presumed STIs is significant. These studies challenge the concept that clinically significant RTI is prevalent among Bangladeshi women and stimulate an exploration of other reasons for the high prevalence of reported symptoms. In the study by Hawkes et al. (1999), nearly 70% of the women who complained of the symptom of vaginal discharge did not have evidence of RTI. A possible explanation for this finding is that some women are interpreting the discharge associated with normal hormonal fluctuations as pathological, because of the cultural significance of the symptom. This hyper-vigilance to a particular symptom could lead to significant over-reporting. The complaint of vaginal discharge may be a way of 'speaking through the body' about a variety of psycho- social concerns, as Nichter (1981), Chaturvedi et al. 4 (1993), Trollope-Kumar (1999) and colleagues have suggested. In Bangladesh, genital secretions metaphorically represent the body's vital essence. Perhaps when a woman feels powerless or weak, her experience of loss of genital secretions takes on a deeper meaning. The complaint of leukorrhoea becomes a way of communicating through the body a complex set of cultural messages. The cultural messages of leukorrhoea are understandable to Ayurvedic practitioners, who share the same concepts about the body. To biomedical practitioners, vaginal discharge is a symptom that most often represents organic disease, and the broader cultural meanings of the symptom are missed. Local biomedical models of leukorrhoea are at some variance with international models of leukorrhoea. Erosions are seen as reddened areas around the cervical os, and are now increasingly thought to be a normal variant of female anatomy, in which part of the endocervical canal is more visible in some women than others. In international biomedical discourse, vaginal discharge is interpreted as RTI, even when positive cultures may be no more than bacterial colonization. In both local and international models of leukorrhoea, vaginal discharge is taken to be biomedically significant. Carstairs, in the first sustained description of 'dhat syndrome' in men, eloquently describes how he sought biomedical explanations for the complaint of semen loss, only to conclude several years later that the symptom is better understood through an anthropological rather than biomedical lens (Carstairs 1958).

V. Syndromic Treatment of STIs in Bangladesh

As the presence of STIs enhances transmission of HIV, considerable research effort has focused on ways in which community health workers could potentially diagnose and treat STIs, and thus lower the transmission rates of HIV. In the syndromic approach to the management of STIs, basic health workers are trained to use treatment algorithms for women complaining of vaginal discharge based on history and a risk assessment, but without clinical or laboratory confirmation of infection (National AIDS Control Organization 1994). This approach is based on the assumption that a self-reported symptom likely represents biomedical disease, an assumption which is problematic in the Bangladeshi cultural context. In the recent evaluation of the

syndromic approach to the management of STIs, Hawkes et al. (1999) found that the poor specificity of this approach leads to significant over-treatment of women for presumed STIs.

Antibiotic over-use is expensive, puts women at risk for side-effects and promotes antibiotic resistance. Also, an inappropriate diagnosis of a sexually transmitted disease may cause couple conflict and put women at risk for domestic violence. Mertens et al. (1998) point out that the syndromic approach to treatment of STIs was originally developed in an African context, and note the importance of validating public health programs in different cultural contexts prior to implementation. Shelton (1999) comments that there is no convincing evidence that the syndromic approach to the treatment of STIs is cost-effective as an HIV prevention strategy. He advocates primary prevention approaches as being more appropriate.

The syndromic approach to the management of STIs needs to be reconsidered for Bangladesh. A focus on communities where the prevalence of STIs is high may be more appropriate - however, attention to the cultural meanings behind vaginal discharge is essential in this group as well. Doctors treating women with leukorrhoea noted that these women often appeared to have no more than physiological discharge. In this situation, a purely biological interpretation of the symptom of vaginal discharge misses the point.

VI. Conclusion

The development literature is replete with descriptions of the challenges many Bangladeshi women face: economic poverty, relatively low social status and limited ability to make key life decisions. Studies among rural populations in Bangladesh indicate that mental health concerns are extremely prevalent, particularly among rural women who face a host of difficulties in daily life (Mumford et al. 1997; Patel et al. 1997). Women's mental health concerns are often under-diagnosed by primary care providers, or are medicalized and treated as physical complaints. A better understanding of the emotional dimensions of symptoms in cross-cultural context is clearly needed (Patel 1998). Studies in cross-cultural psychiatry may help to clarify the associations between emotional distress and unexplained gynaecological symptoms. If leukorrhoea may represent a somatic idiom for depression, as Patel and Oomman suggest, then a sensitive diagnostic approach is needed in order to treat these women appropriately. Epidemiological studies of women who complain of vaginal discharge but have no signs of pathology might clarify the linkages between this culturally shaped disorder and variables such as socio-economic status, age and psychosocial indicators (i.e. family conflict, bereavement, financial losses, etc.). In-depth anthropological study of women complaining of leukorrhoea would be helpful to explore the range of cultural meanings of this condition. In a meaning-centred interpretative framework, loss of genital secretions, the most refined dhatu of the body, speaks metaphorically to a loss of one's essential strength, an ebbing away of one's power. Genital secretions have deep sexual significance and 'dhatu loss' may also reflect concerns about a sexuality repressed or denied. Burning hands and feet as well as dizziness are two associated complaints which may reflect a feeling of being 'out of balance'. In this interpretive framework, leukorrhoea may be seen more broadly as an 'idiom of communication' rather than simply as 'depression'. Like 'dhat syndrome' in men, leukorrhoea may have a spectrum of meanings, conveying different messages at different times through the medium of the body. Leukorrhoea may be both a discourse of distress or resistance, as well as a way of communicating about social or sexual concerns. Further anthropological research may explore the ways in which the illness serves as an active communicative agent of the self. Comparative studies of women and men suffering from 'dhatu loss' could explore the dimensions of meaning this illness may have, and could contribute to scholarship in the field of cross-gender comparisons in cultural physiology. Both biomedical and cultural meanings of the symptom of vaginal discharge have relevance. Women who complain of vaginal discharge may well have reproductive tract infection; women who complain of burning hands and feet and weakness may well be anaemic and under-nourished. It would be a grave mistake to interpret the complaint of vaginal discharge as purely related to social stressors. But to focus only on the biomedical interpretation of these symptoms is to ignore the important cultural and metaphorical meanings of the symptom. When serious physical illness is not present, biomedical practitioners can still play an important role by promoting women's health in a broader sense, addressing key concerns such as women's workload, nutrition and social stress. At the interface between culturally shaped illness and biomedical disease, there is significant potential for mistranslation. When women who complain of vaginal discharge are presumed to have RTI and treated with antibiotics, they face all the negative consequences of inappropriate treatment. Also, when this illness is medicalized as RTI, the deep psychological and/or spiritual dimensions of this condition will go unattended.

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