

**SPEAKING THROUGH THE BODY: LEUKORRHEA AS A BODILY IDIOM OF
COMMUNICATION IN GARHWAL, INDIA**

**SPEAKING THROUGH THE BODY: LEUKORRHEA AS A BODILY IDIOM OF
COMMUNICATION IN GARHWAL, INDIA**

by

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ABSTRACT

Speaking through the Body:

Leukorrhea as a Bodily Idiom of Communication in Garhwal, India

Among women in South Asia, the complaint of vaginal discharge (often called leukorrhea) is extraordinarily common. Genital secretions, according to Ayurvedic concepts of the body, are considered a highly purified form of "*dhatu*", or bodily substance, and loss of this precious substance is thought to result in progressive weakness or even death. Women suffering from "*dhatu* loss" complain of vaginal discharge as well as somatic symptoms such as dizziness, backache and weakness. The link between unexplained gynecological symptoms and mental health concerns has been explored by both psychiatrists and anthropologists in South Asia. Cross-cultural psychiatrists have suggested that leukorrhea and its associated symptoms may represent a somatic idiom for depression. In this research report, I explore a more broad construction for leukorrhea as a "bodily idiom of communication", in which the woman's body serves as a template for the expression of deep emotion. I suggest that leukorrhea may represent a discourse of distress; of resistance to social oppression; a discourse about sexuality; a way of reflecting upon a rapidly changing society. Leukorrhea has entirely different meanings in the dominant biomedical discourse, where it has come to represent reproductive tract infection (RTI). Early biomedical studies suggested that RTI was prevalent in South Asia, although these studies were limited in scope and flawed in methodology. Women suffering from sexually transmitted infection are at higher risk for the transmission of human immunodeficiency virus, an issue of increasing concern in South Asia. A public health program entitled "the syndromic approach to the management of STIs" has been launched in South Asia to treat women presumptively for STI based on the reported symptom of vaginal discharge. Despite evidence that the approach is resulting in significant over-treatment of women with antibiotics, the program continues. I explore the way in which the polysemic symptom of leukorrhea has been medicalized, and comment on the negative effects of this construction of the South Asian woman's body. I conclude with a discussion of the interface between ways of knowing, and the role of the anthropologist who works at this interface, which is invariably fraught with political and ideological tensions.

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CHAPTER ONE

INTRODUCTION

SPEAKING THROUGH THE BODY: LEUKORRHEA AS A BODILY IDIOM OF COMMUNICATION IN GARHWAL, INDIA

Mauss has written that the body is the first and most natural tool of humans (Mauss 1979 <1950>). Our experiences of living within a body - “embodiment”- are manifold. We experience our bodies biologically, as natural objects which have the capacity for pain and pleasure, which may reach extraordinary heights of physical perfection, and which may suffer from an agonizing breakdown of function. Yet we experience many other forms of “embodiment” - our bodies may eloquently express belonging or dissent, reflecting our inner life-world. Our bodies display group identification and cultural associations. We alter our bodies in innumerable ways - by tattooing; by overeating or undereating; by physical training;

by plastic surgery. When we fall ill, our illnesses have metaphorical meanings within our cultural context, meanings that may be empowering to us or may be profoundly disempowering. Sometimes the symptoms we manifest have underlying somatic referents - the malfunction of a body part. Sometimes the symptoms we manifest have little or no somatic referent in our physical body. These symptoms often have encoded meanings that reflect the symbolic, moral and spiritual life-worlds of those who suffer from them. To understand these meanings, we need to be prepared to set aside a biomedical lens of analysis, and search for other ways of viewing the body, ways that take into account the larger context within which the body has fallen sick. We need to be prepared to view the body as a site of a struggle for social power- between man and woman, or between the individual and society, or between one nation and another. We also need to view the body as a template for the expression of emotions about the self - emotions that cannot be expressed verbally. When we are able to view the body in some of these ways, we begin to see the sick body in many dimensions, as a "lively participant in the social order" (Lock 1993:142) rather than merely as a passive sufferer.

The journey towards seeing the sick body through different lenses is all about the project of contemporary medical anthropology. Anthropologists have worked on many ways of viewing the body, each illuminating one dimension of what it means to suffer in a human body. The critical medical anthropologist sees the sick body reflecting the wider social and political context; the meaning-centred or interpretive anthropologist seeks to decode some of the layered cultural meanings of the illness.

My own journey toward viewing the body through an anthropological lens began nearly twenty years ago when I first travelled to India as a medical student. Later, I married an Indian pediatrician and worked as a physician in community health projects in the Garhwal Himalayas over a period of eleven years. My work in Garhwal awakened a desire to understand more deeply the social and cultural dimensions of health, and this led me to begin graduate studies in anthropology in 1993. In the process of learning how to see as an anthropologist, I had to learn how to set aside my biomedical lens, a process that was life-changing. I began to think reflectively about the community health work in which I was engaged in India, and the way in which that type of work is structured and represented internationally. More specifically, I began to study a particular illness that many South Asian women suffer from - leukorrhea - a condition that is shaped by the cultural context and reflects the life-worlds of these women. I describe this illness in its social, cultural and political context, attempting to link structural inequalities in society with development of the condition. From a somewhat different analytical perspective, I describe leukorrhea as a “bodily idiom of communication”, in which South Asian women express through the physical body emotions that cannot be directly named.

1.1 Illness as a Bodily Idiom of Communication

Margaret Lock writes that sickness is a form of communication - the “language of the organs” through which nature, society and culture speak simultaneously. To understand this dimension of illness, we must study the way the body acts as an active communicative agent

of the self, imbued with its own wisdom, intentionality and language. This secret language of the body is a subtle form of embodied wisdom (Scheper-Hughes and Lock 1991). Anthropologists who seek to decode this secret language of illness create thick descriptions of illness idioms, attempting to tease out the finely nuanced meanings of the illness idiom that allow the sufferers to communicate many different messages through the medium of the body. An in-depth understanding of the meanings must be grounded in the ethnography itself - what the sufferers and those who treat them say about their illness. These verbal accounts must then be interpreted within a theoretical framework of an indigenous cosmology of the body, in order to understand the symbolic and metaphoric meanings of the illness idiom.

The concept of the "three bodies" provides a theoretical grounding for work on anthropology of the body (Scheper-Hughes and Lock 1989). The first level of analysis is the individual body - the embodied self or subjective body. The second level of analysis is the social body, referring to the representational uses of the body as a natural symbol, with which we think about nature, society and culture. The third level is the body politic, referring to the regulation, surveillance and control of bodies both individual and collective. The individual body, the social body and the body politic are all deeply interlinked. In creating a thick description of a culturally shaped illness, a finely drawn description of the social and cultural context is needed, wherein the individual body plays out its roles. As Scheper- Hughes and Lock state:

"the individual body should be seen as the most immediate, the proximate terrain where social truths and social contradictions are played out, as well as the locus of

personal and social resistance, creativity and struggle.” (Scheper-Hughes and Lock 1987:31)

The sick body expresses itself through symptoms which have deep metaphorical significance. The metaphors of the body are culturally shaped, related to emotional, aesthetic and moral worlds (Kirmayer 1988; 1992). Matsuoka’s ethnographic work on fox possession in Japan provides a compelling example of how bodily metaphors reflect cultural life-worlds (Matsuoka 1991) .

The symbolic significance of various body organs differs within cultural contexts. Good describes the metaphorical significance of the heart in Iran, conceptualized as the seat of emotions (Good 1977; 1988). The liver has a particular importance among the Spanish and the French and the backbone has a particular cultural and ethnomedical significance in America (Scheper-Hughes and Lock 1987). In the South Asian context, genital secretions (semen in men and leukorrhea in women) have deep cultural meaning, and a study of these layered meanings forms a central part of my analysis of leukorrhea in Garhwali women.

The anthropologist studying bodily idioms of communication is most interested in the symbolic and metaphoric meanings of a symptom - the ways in which symptoms express through the body the secrets of the heart. But symptoms have other meanings as well, meanings that have awesome power in a world dominated by a Cartesian view of the body. The biomedical meanings of symptoms are those that are linked to the dominant discourse about the body, the twentieth century’s authoritative knowledge of the body. The meaning

of the symptom of “*dhatu* loss” in South Asia has come to be dominated by biomedical discourse, particularly within the last decade. “*Dhatu* loss” has been constructed as a sign of disease of the reproductive tract, the sign of a body both defective and infected. This construction of bodies infected with sexually transmitted disease underpins a major public health program in South Asia called “the syndromic approach to the treatment of sexually transmitted infection”. Despite recent evidence that this program is neither identifying nor appropriately treating people with sexually transmitted disease, the program continues, at enormous public expense.

1.2 Contemporary Discourse about Leukorrhea: the Public Health Perspective

The symptom of vaginal discharge is extraordinarily common among women in South Asia (Gittelsohn et al 1994; Bhatia and Cleland 1995). From a biomedical perspective, the symptom of vaginal discharge is most often associated with reproductive tract infection or cervical pathology. Reproductive tract infection (RTI) includes both local infection due to 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, there is evidence that the presence of STIs has been shown to enhance the transmission of the human immunodeficiency virus (Grosskurth et al 1995; Hayes et al 1997), a cause for concern in South Asia where HIV prevalence is rising. Early biomedical studies in South Asia suggested that the prevalence of reproductive tract infection was high (Bang

et al 1989; Wasserheit 1989). Within international health discourse, an increasing focus on reproductive tract infection in the Third World became apparent during the late 1980s and throughout the 1990s. Reproductive tract infection (RTI) in women was described as one of the world's most neglected health problems, and the "culture of silence" surrounding RTI was identified as a major factor that prevented women from accessing care (Dixon-Mueller and Wasserheit 1991:1).

The World Health Organization responded to this growing focus on reproductive tract infection by exploring ways in which RTI could be treated at a community level in resource-poor settings. In late 1988 the World Health Organization began pilot-testing the "syndromic approach to the treatment of STIs", in which health workers are trained to treat women and men complaining of symptoms suggestive of RTI using history taking and risk assessment alone, without clinical or laboratory confirmation of infection. The approach is described as a way of reducing women's suffering due to reproductive tract infection, as well as being an effective method to decrease the risk of HIV transmission.¹ Currently, the syndromic approach to the management of STIs represents one of the major HIV prevention strategies worldwide and has been extensively used, particularly in sub-Saharan Africa. In South Asia, the approach is being widely promoted, and World Health Organization and the Population Council have called for integration of the syndromic approach into the delivery

¹For a detailed discussion of the rationale behind the syndromic approach, see the WHO document entitled Integrating STI Management into Family Planning: what are the benefits. Occasional Paper no 1, Geneva, WHO 1999.

of family planning services in the South Asian region (WHO 1999).

A detailed critique of the syndromic approach will be developed in subsequent chapters. For the moment, I will confine my critique to a specific aspect of the syndromic approach - it is based upon the assumption that particular symptoms are likely to represent particular diseases. In the most commonly used of the four syndromes, women complaining of vaginal discharge are assumed to have reproductive tract infection, and are treated with antibiotics to cover the most common causes of such infection. Lambert, a British anthropologist, makes a powerful critique of public health programs that are based on the attribution of biomedical meanings to symptoms that have cultural significance (Lambert 1998). She notes that genital secretions in south Asian context have multilayered meanings, and draws attention to the anthropological work on "*dhat syndrome*" among South Asian men. Men suffering from "*dhat syndrome*" fear that they are losing "vital fluid", and Lambert speculates that the loss of genital secretion in women may have similar meanings.

Clearly, the cultural meanings associated with the symptom affect the way women perceive and report the symptom to health care providers. As Bhatia and Cleland point out, perceived seriousness of the symptom is likely to be a key factor in the decision to seek medical help.(Bhatia and Cleland 1995). The self-reported symptom may or may not be a marker of significant organic disease. Following Lambert's line of reasoning, we need to unpack some of the multilayered meanings of leukorrhea by a study of the indigenous system of thinking about the body in sickness and in health. From an indigenous point of view in

South Asia, what is psyche? What is soma? A perception of the body based on a different philosophical system may lead to a very different construction of illness and its meanings.

1.3. Psyche and Soma in the Ayurvedic World-View

The development of an Indian perception of the self and the body that stands in sharp contrast to Western notions can be understood by a study of the ancient Indian system of health and healing, Ayurveda. The Ayurvedic view of the body forms part of an overall cultural orientation that includes understandings of many aspects of daily life, such as climate, agriculture, environment, and religion. Sudhir Kakar, a prominent Indian psychiatrist, writes that Ayurveda is much more than a system of medicine - it is a densely elaborated network of ideas about the nature of the person and his or her connection with the cosmos, the natural world and the psyche (Kakar 1982). These ideas constitute the cultural prism through which men and women throughout India traditionally viewed the self and the body. Kakar maintains that Ayurveda has been less a mirror of the cultural belief system than one of its chief architects - a major contributor to the shaping of the Indian consciousness.

Ayurvedic practices probably developed somewhat before the beginning of the Common Era, and were written down and codified during the first through fourth centuries AD. The Ayurvedic system arose within a philosophical context of ancient Hindu metaphysics, and represented quite an epistemological change (Zysk 1991:26). The word Ayurveda means "science of life", and the approach is essentially an empirico-rational way

of conceptualizing the body, which represents an earthy, practical approach to living. The most ancient source texts of an Ayurvedic understanding of the body are the Charaka and the Susruta, classics of early Ayurvedic medicine. A vast pharmacopeia drawn from plant and mineral sources forms the basis of Ayurvedic therapy, combined with therapeutic diet and instructions on modification of the habits of daily living.

There is a close identification of physical components of the cosmos with physical components of the human body. Everything in the universe is made up of five forms of matter - earth, fire, wind, water and akas (ether). Under favourable conditions, matter becomes organized into living creatures, which absorb the five elements and are transformed by the fires of the body into a fine portion (*prasada*) and refuse (*mala*). The fine portion of the food is transformed successively into the seven physiological elements (or *dhatu*s) of chyle (*rasa*); blood (*rakta*); flesh (*mansa*); fat (*meda*); bone (*osthi*); marrow (*majja*); and semen (*sukra*). Each *dhatu* becomes successively purified by the "digestive fires" of the body (Kutumbiah 1962:40). The most refined *dhatu*, semen, is thought to "tone" and energize the body (Kutumbiah 1962:34). Ayurvedic texts report that 60 drops of blood (some sources say one hundred drops of blood) are required to make one single drop of semen. As Alter describes, these cultural meanings accord deep significance to semen as being essential for health (Alter 1997).

The healthy body, according to Ayurveda, is in a state of dynamic equilibrium of the bodily elements. The "*tridoshas*" or three humours, comprise wind, bile and phlegm.

Disturbance in any of the *tridosas* may lead to illness, and classical Ayurvedic therapy is aimed at correcting the disturbed *dosa* (Kutumbiah 1962: 71) An imbalance of the humours can occur due to changes in the natural environment, such as a change in seasonal conditions. It can also be due to upsets in the personal and social world such as the inappropriate use of the senses or improper action or speech (Zysk 1991:29). Besides the three humours, there are three essential psychological elements in the human constitution known as the three *gunas* ("psychosomatic strands"): *sattwa* (purity, compassion), *raja* (action, impulsivity) and *tamas* (inertia, negativity). The three humours and the three *gunas* together constitute the primary coordinates of health. In popular renditions of Ayurvedic practice, illnesses are often classified as "heating" or "cooling" and therapies are directed to restore humoural balance. Therapeutic diet and administration of herbal treatments form the mainstay of Ayurvedic therapy to restore the balance of the humours. The seasons, plants and constituents of the body are integrated into a complex and elegant theory of physical health as an equilibrium of somatic, environmental and constitutional elements (Sanyal 1964).

1.4. The Concept of Self in the Indian World-View

Clifford Geertz has argued that the Western notion of self as bounded and unique is a rather peculiar idea within context of the world's cultures (Geertz 1987). Following Geertz, many anthropologists have commented on the historical development of the autonomous concept of the self in Western tradition, and contrast this concept with other ways of thinking

(Foucault 1973; Geertz 1980; Lock 1993). Manning and Fabrega point out that many ethnomedical systems do not distinguish between mind and body as separate entities in the same way biomedicine does (Manning and Fabrega 1973). The body may not be seen as a machine but rather as a microcosm of the moral and social universe. McKim Marriott argues that Indian perceptions of self and body differ in two fundamental ways from Western notions. First of all, the body is perceived to be in a state of dynamic flux with its environment, a body with permeable boundaries (Marriott 1990; Daniel 1984). Second, the concept of self in Indian thought is monistic, in which an essential unity lies beneath diversity, transcending all dualisms (Marriott 1976). Marriott argues that the individual is not primary or indivisible but rather the product of more primary "dividual" elements and processes such as humours, elements, "strands" and human aims, that relate to an integrated fluid sphere of a psychosomatic reality which animates the self (Marriott 1990).

Views of the self have been shaped by Hindu metaphysics, which perceives the self in terms of multiple overlapping and interpenetrating layers. The individual consists of three bodies - the physical body (*sthula sharir*), the subtle body (*linga sharir*) and the causal body (*karana sharir*). The causal body is a metaphysical construct - the pure self of philosophy. The subtle body is the body that persists throughout the cycles of birth and death. The mind (*manas*) is one aspect of the subtle body, and therefore the subtle body is more than just the psyche. This concept of the subtle body is the Indian solution to the mind-body problem of the West. In this monistic view, reality is perceived in terms of an overarching one-ness that transcends dualisms.

Psychosomatic medicine in Ayurveda differs in significant respects from its counterpart in the West. The mysterious leap from mind to body, the problem of somatization, continues to plague anthropologists in the West and remains one of the most thorny points of theory in contemporary Western thinking about the body (Kleinman 1996). In Ayurveda, this problem does not arise in the same way due to the different theoretical stance toward the body. The Ayurvedic physician would suggest that any disturbance, physical or mental, must manifest in both the somatic and in the psychic spheres. The three bodily humours have both physiological and psychological correlates. Wind (*vata*) is associated with the emotions of lust, grief and fear, and also with illnesses such as palpitations, dizziness and aching of bones and joints. Bile (*pitta*) is associated with anger and impulsivity, and also with illnesses such as gastric burning and headache. Phlegm (*kapha*) induces lethargy, infatuation, greed, and is also associated with symptoms such as cough, obesity, fatigue (Kutumbiah 1974:74). The Ayurvedic physician speaks at the psyche-soma level simultaneously, and gives treatment which are intended to affect both psyche and soma. Most of these treatments in classical Ayurveda are herbal and dietary. However, there is a long tradition extending back to Vedic days of magical and ritual treatments for disturbances of the psyche, which are also documented in Ayurvedic texts (ibid:x-xi).

1.5. Body Image in Ayurvedic Thought

The view of the body in Ayurvedic thought emphasizes its intimate connection with the cosmos. The body is perceived to be in a state of ceaseless flux with the natural and

supernatural environment, simultaneously accompanied by ceaseless change within the body. Bharati has written extensively on the permeable nature of the body's boundaries, with exchanges of fluid between the body and the environment (Bharati 1976). Francis Zimmerman, writing about Indian body image, says there is no map or topography of the body but rather an economy of the body that is composed of constant fluid transactions (Zimmerman 1978). Imagery of bodily functioning comes from the vegetable kingdom - the rising of sap, drawing nourishment from roots. EV Daniel describes how the boundaries between a person and his outer world are permeable, with energy both positive and negative moving fluidly across walls of a house and through the skin of an inhabitant (Daniel 1984).

Fluid transactions occur not only between the human and the natural environment but also with the supernatural environment. Wendy O'Flaherty writes that fluidity and the transaction of fluids between humans and gods are central Hindu preoccupations (O'Flaherty in Kakar 1982). This theme is taken up in Marglin's study of temple dancing in Orissa (Marglin in Lynch 1990). Here, the *devadasi*, or temple dancer, mediates between the gods and humans through her body and her dance. The *devadasi* is referred to as the mobile goddess, a metonymic embodiment of the power of fertility and abundance, a female power. The midday meal offering to the temple gods includes five tantric food offerings: meat (*mamsa*); fish (*maca*); wine (*madya*); black grain cakes (*mudra*); and the fifth (*maithuna*), which refers to the sexual fluid of the *devadasi*. When dancing, the *devadasi* is believed to drop tiny amounts of her sexual fluids onto the floor of the temple. Worshippers then roll in the dust of the temple to absorb her *shakti* (power).

1.6 The Shaping of Symptoms in the Indian Life-World

The shaping of the symptoms of illness arises from within the symbolic worlds the sufferers inhabit. Cosmologies of the sufferer provide the mythic and metaphoric raw material which shape some of the diverse manifestations of illness (Scheper-Hughes and Lock 1987). In India, 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. According to Ayurvedic concepts of physiology, the bodily elements or *dhatu*s are refined further and further until the extremely refined substance called *sukra* is produced. *Sukra* is most commonly translated as semen in English versions of Ayurvedic texts, but it refers both to male and female genital secretions, the most refined "*dhatu*". *Sukra* is symbolically associated with one's vital energy, a pure form of bodily substance, whose function is not only in procreation but in the general "toning" and wellbeing of the body in health.

James Edwards, in his review article on "semen anxiety" in South Asian cultures, makes the point that anxiety about semen loss is also present in China (Edwards 1983). In the Chinese tradition, both sexes are thought to possess a vital essence called *jing* (semen, sexual fluid) which is essential for health and is the basis of *qi*, or life energy. Men should limit their sexual activities for fear of depleting *jing*. There are deep symbolic connections between food, sex and health in Chinese tradition, as in the Indian tradition (Edwards 1976).

Among young men in South Asia facing significant social stresses, the complaint of loss of semen through nocturnal emissions or by passing semen with the urine is widespread. Ayurvedic physicians treating these young men would diagnose their condition as "*dhatu* loss" ("*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. In India, the first sustained anthropological treatment of "*dhatu* loss" disorders was written by Morris Carstairs, a psychiatrist with anthropological training, who described his experience as a physician in rural Rajasthan in the 1950s. A common patient complaint related to "semen loss" - either concerns about the involuntary loss of semen, worries about weakness, dizziness and headache associated with semen loss, or concerns about the quality and quantity of semen (Carstairs 1957; 1958). Carstairs discovered that two-thirds of his patients either suffered from semen loss (called *jiryan* in that area) or took measures to prevent it. Many of these patients had associated vague symptoms such as weakness, giddiness, and body aches. Men complained of a wasting-away of the body due to semen loss - yet this wasting was not visible to the observer's eye. There are many proprietary remedies for this problem. Venereal diseases were also present among the Rajasthani villagers with whom Carstairs worked, but this condition was usually recognized as something different from semen loss. Among the Bhil tribal people, a group of different cultural origins, Carstairs found that the concern about semen loss was almost non-existent.

Kakar describes a condition called *svapanadosha*, in which young men complain of body ache, headaches, enervation and feelings of unreality about the body. The cardinal

symptom of concern in this condition is nocturnal emission (Kakar 1982). Bottero has also described the problem of "consumption by semen loss" in India and other Asian cultures which leads to increasing enervation and debility (Bottero 1991). Malhotra and Wig term the disorder "*dhat syndrome*" and link its appearance to sexual anxieties among men (Malhotra and Wig 1975). Considerable anthropological work has been done on "*dhatu loss*", which has also been termed "*dhat syndrome*", "*semen loss*", as well as names arising from local terminology (Carstairs 1956 and 1958; Nag 1972; Malhotra and Wig 1975; Nakra, Wig and Varma 1977; Edwards 1983; Bottero 1991; Bhatia and Malik 1991; Kakar 1982; Mumford 1996).

Women who complain of the symptom of vaginal discharge in South Asia very often also complain of a host of somatic symptoms, including burning hands and feet, backache, dizziness and weakness. This illness is one of the commonest illnesses at outpatient clinics all over South Asia. Women with these symptoms attend biomedical practitioners as well as practitioners of Ayurveda and homeopathy. The complaint of vaginal discharge accompanied by a host of somatic symptoms is most often called "*leukorrhea*" by biomedical doctors, "*dhat rog*" by Ayurvedic practitioners and "*safed panni*"(white water) by the women themselves. Like "*dhat rog*" in men, the condition is best understood within an Ayurvedic ethnomedical context.

Both males and females possess "*semen*" or "*dhatu*" and may suffer from a disorder due to "*dhatu loss*". The Sri Lankan psychological anthropologist Gananath Obeyesekere has

written about the "*dhatu loss*" disorders in both men and women which in Sri Lanka are called illnesses of *prameha* (Obeyesekere 1976). *Dhatu* leaves the woman's body as a whitish, odorless discharge. The discharge 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. Ayurvedic practitioners, however, consider this a serious illness which will lead to progressive weakness if left untreated. They advocate herbal and dietary therapy. In a contemporary textbook of Ayurvedic treatment, Dash describes leukorrhea as a significant illness that is often associated with mental tension (Dash 1974:66).

Nichter includes leukorrhea as a symptom of a "bodily idiom of distress" in his study of women visiting an outpatient clinic in South Kanara District in Karnataka State (Nichter 1981). Among women who were facing significant social stress, leukorrhea, dizziness, burning hands and feet, menstrual concerns and weakness were commonly reported symptoms. Nichter explores the cultural meaning of leukorrhea and its associated symptoms, relating them to Ayurvedic concepts of health. In a study by Chaturvedi, seventy women who complained of more than two somatic symptoms underwent a psychiatric assessment. White vaginal discharge was reported by nearly half of these women, and depression was more frequently diagnosed among these women than among controls. Chaturvedi calls this illness "psychasthenic syndrome" and notes its similarity to "*dhat syndrome*" found in South Asian men (Chaturvedi 1988). Chaturvedi also notes the link between the complaint of vaginal discharge and mental health concerns, and urges further research to clarify the sociocultural

factors that shape this “hidden illness”(Chaturvedi et al 1995).

In a study of perceptions about "white discharge", both men and women speak about white discharge in Ayurvedic terms as the loss of *dhatu*, and state that this is their most important health concern. (Bang and Bang in Gittelsohn 1994). 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 ethnographic description illustrates a broad range of cultural meanings for vaginal discharge in South Asia. Bang maintains a biomedical framework, however, and concludes the article by linking vaginal discharge with reproductive tract infection. 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.

In a meaning-centred interpretative framework, genital secretion, or “*dhatu*”, is considered to be the most pure substance of the body. In South Asia, a preoccupation with the loss of this precious “*dhatu*” has shaped symptoms of a group of illnesses that symbolically speak to deep cultural anxieties about loss of vital essence or energy in the body. The bodily sign is the semen or vaginal discharge which is lost involuntarily from the body. This sign, in the Indian cultural context, has a deep metaphorical significance as the essence of life and health. The text of the message speaks of a loss of energy, vitality, strength. Women who speak about their experiences of “*dhatu* loss” may be speaking at several levels about their life experience. They may be speaking about an experience of their physical body,

debilitated by physical disease in the form of anemia, undernutrition, overwork and exhaustion. They may also be speaking at a more metaphoric level about a loss of energy and vitality in the social sphere, an expression of the powerlessness and oppression within their daily lives. Genital secretions also have sexual significance in the South Asian life-world, and loss of genital secretion may also speak of a sexuality repressed or denied.

In this interpretive framework, leukorrhea may be seen as a “bodily idiom of communication”, which may have a spectrum of meanings, conveying different messages at different times through the medium of the body. Leukorrhea may be both a discourse of distress or resistance, as well as a way of communicating about physical, social or sexual concerns. Like “*dhat rog*” in men, it is a condition that is prevalent throughout South Asia, and health practitioners of all persuasions are called upon to treat those who suffer from the illness. An extraordinary variety of treatment options exist, including folk, Ayurvedic and biomedical treatment.

1.7 Gynecological concerns and mental health: the biomedical perspective.

The development literature is replete with descriptions of the challenges many South Asian women face: economic poverty; relatively low social status; limited ability to make key life decisions. Studies among rural populations in South India and in Punjab indicate that mental health concerns are extremely prevalent, particularly among rural women who face a host of difficulties in daily life (Patel et al 1997; Mumford et al 1997). The Global Burden

of Disease reports that of the ten leading causes of disability worldwide, half are neuropsychiatric disorders and depression is the most common diagnosis within this category (Murray 1996). 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).

Studying leukorrhea from a perspective of cross-cultural psychiatry, Patel and Oomman note that the symptoms associated with leukorrhea are also associated with depression, and suggest that unexplained gynecological symptoms may represent a somatic idiom for depression in South Asia (Patel and Oomman 1999). They note the linkage between non-specific gynecological 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.

Culturally shaped illnesses are often given the label "somatization" by medical practitioners and psychiatrists. In the construction of somatization, there is a recognition that the mind plays a central role in the shaping of bodily symptoms. Yet much of the work on somatization tends to reproduce Cartesian dualities through the creation of "psychosomatic" illness categories (as opposed to "real" or "organic" illness categories). A tendency to pathologize the body's expression of illness has also been evident in the literature on somatization in which somatic disorders are thought of as a psychiatric disorder characterized

by the failure of an individual to cope with the problems of daily living. The most widely described of these culturally shaped conditions is nerves (*nervios, nevra*), a condition is often medicalized as a form of somatization. Anthropologists counter this pathologizing approach by explaining specific cultural meanings attributed to attacks of nerves and try to point out relationships between attacks and structural inequalities in society. “Nerves” can be empowering, along with spirit possession and other forms of cultural performance. As Lock points out, “a performance approach to sickness has the potential to foreground the sickening social order, while paying attention to body semiosis and individual distress.....”(Lock 1993:142).

1.8 Theoretical Positioning

My study of leukorrhea as a complex culturally shaped illness draws on several theoretical frameworks within the discipline of medical anthropology. I situate my work within the sub-discipline of anthropology of the body, and draw upon several emerging trends in the field of illness representation. A key theoretical challenge in the field of illness representation today is to bridge the micro/macro dichotomies, creating a bridge between the social and the physical bodies. Anthropologists hold the premise that the social and physical bodies are deeply interlinked - yet how do individual bodies reflect the local moral worlds in which they live? In this work on leukorrhea as an idiom of communication, I attempt to bridge the micro/macro perspectives by describing through the ethnography a detailed context in which women speak through their bodies. In creating this thick description of women’s

bodies, I blend theoretical approaches in order to illuminate different facets of this multidimensional illness. I take the body as central to my analysis, rather than focussing on cognitive renderings of illness. The richness of leukorrhea as an illness idiom makes it an ideal subject for the type of thick descriptive work that the French theorist Pierre Bourdieu pioneered, weaving a description of suffering in which analogies are made between parts of the body, daily life, social structure and the cosmology of cultures (Bourdieu 1977). In creating such a description, I attempt to make a contribution to the theoretical gap between the physical body and the social world.

Drawing upon a critical analysis of illness, I sketch the social and political context within which Garhwali women live, and demonstrate linkages between oppressive social forces and the manifestations of illness in women's lives. I describe the way that the international health discourse on "women's reproductive health" has medicalized an indigenous illness idiom, and trace the costs of this process of medicalization to South Asia and to the women themselves. I use an interpretive, "meaning-centred" approach to unpack some of the meanings of leukorrhea within the lived experience of Garhwali women. In a field as complex as the representation of human illness, multiple perspectives are needed. In this work, I attempt to blend political economy perspectives with interpretive and existential understandings, and to integrate historical and global perspectives with rich cultural analysis in order to do justice to the richness of leukorrhea as an indigenous illness idiom. I study the cultural ordering of the self and the layered meanings of leukorrhea, illuminating the meanings of the illness from multiple perspectives. Finally, I use an existential approach in order to

explore the symbolic and metaphorical meanings of the symptoms of this illness, relating the shaping of the illness to an underlying life-world that is informed by an Ayurvedic conception of the body. My rendering of leukorrhea as an idiom of communication speaks to the extraordinary depths of this illness - I wish to honour the suffering of these women without reducing their experience either to a biomedical category of depression, or to a sociological category of oppression. In my theoretical approach, I therefore follow DiGiacomo, Kleinman, Kirmayer and others, who call for an anthropology of illness that is critical, interpretive and existential, an "experience-near" anthropology (DiGiacomo 1992; Kirmayer 1992; Wikan 1992; Kleinman 1995).

1.9. Conceptual Framework

My project functions simultaneously on several levels: I explore the complex interface between biomedicine and anthropology, particularly with respect to the construction of the meaning of symptoms. I examine the process of medicalization of symptoms that have deep cultural meanings, and comment on a major public health program of South Asia, the "syndromic approach to the treatment of sexually transmitted infection". I analyse the theoretical underpinnings of the cultural as well as the biomedical meanings of the symptom of leukorrhea. In my discussion of the biomedical preoccupation with "leukorrhea as sexually transmitted disease" I draw on an historical account of colonial representations of Indian bodies, and the ways that biomedicine has been used as a tool for control and domination in the subcontinent, using a Foucauldian analysis. I contrast the stark biomedical meanings of

leukorrhea as a symptom with the richly layered cultural meanings of the symptom, exploring some of the metaphors of the illness that link to a South Asian cosmology of the body in health and illness. Ethnographic material from my years of work in India is used to draw women's voices into the analysis, bringing in a perspective that illustrates the way women speak about their illness, and through their illness about many dimensions of their lives. I attempt to create a finely nuanced description of leukorrhea as a bodily idiom of communication, drawing from material from Ayurvedic sources as well as from the ethnography. I conclude by returning to issues of the complex interface between "ways of knowing", and explore some of the difficulties that anthropologists face when attempting to represent indigenous understandings of illness, speaking from a point of view that does not represent "authoritative knowledge". This study of leukorrhea as a culturally shaped illness provides a compelling example of some of the hazards that lie in mistranslations at epistemological boundaries.

CHAPTER TWO

METHODOLOGY

In this chapter, I describe the research methods used in the formulation of this thesis. A narrative account of the research process highlights the central importance of my years of participant observation in women's community health programs in Garhwal. It was through this experience that I came to the understanding that leukorrhea as an illness idiom is deeply culturally shaped, and must be set within a densely constructed context of women's lives and work. I describe the scope of the ethnographic material used, the methods used to analyse the interview data, and the effort made to link research with action, in order to make the insights from the research relevant on a policy level.

2.1 The Research Process

I travelled to India first as a medical student, in 1981, where I met my husband-to-be, who was completing his training as a pediatrician at King George Medical College in Lucknow. I lived and worked in Garhwal, Uttar Pradesh, India from 1985 until 1996, with a break in 1993 when I returned to Canada to study for a Master's degree in medical anthropology. During the years that I lived in India, I worked with non-governmental organizations (NGOs), designing and implementing primary health care programs. Many of the insights in this thesis were generated during that eleven-year period, insights that arose out of my work as a doctor, as a trainer of primary health care workers, and as a consultant in the NGO sector.

At the hospital where I worked during the early years I spent in India, I saw hundreds of women suffering from leukorrhea in consultation, assisting a well-known Indian gynecologist in her medical work. This clinical work convinced me that a purely biomedical analysis of leukorrhea is untenable. I became increasingly interested in studying leukorrhea through an anthropological lens. The illness appeared to be deeply culturally shaped, perhaps representing a somatic manifestation of emotional or social distress. This

would explain its high prevalence in a community where women live harsh and difficult lives, and would also provide an explanation for the associated symptoms which commonly go along with leukorrhea.

In mid-1994 I began an anthropological research project on traditional midwifery and women's health in Garhwal. This project was funded in its early stages by an IDRC Young Canadian Researchers' Grant, and in later stages by a grant from McMaster University Graduate Studies Department. My Master's thesis in anthropology concerned perceptions of obstetrical complications by traditional birth attendants. During the course of this work, women described leukorrhea as their primary health concern. My growing perception of leukorrhea as a culturally shaped illness idiom set the women's narratives into a context of meaning that had layered dimensions. I was struck by the many ways in which women spoke about the condition, and the different perspective on the illness that Ayurvedic practitioners and medical practitioners held. It became increasingly apparent to me that leukorrhea was not only a "bodily idiom of distress" but a way of communicating many messages about life experience.

During these years, I was also working as a health consultant in Garhwal, and was frequently in contact with international aid agencies that had women's reproductive health

as one of their key priorities. In the international health discourse, leukorrhea in South Asia is interpreted as “reproductive tract infection”, without recognition of any social or emotional dimension to the condition. When leukorrhea is narrowly interpreted as reproductive tract infection, considerable potential for mistranslation exists. I had begun to read about HIV prevention strategies being planned for South Asia, and was deeply concerned about one of these strategies: “the syndromic approach to the management of STIs”, that involved treating women with the complaint of vaginal discharge with antibiotics. Since I was convinced that most women complaining of vaginal discharge do not have RTI, it seemed clear that this approach would result in massive over-treatment of women with antibiotics with all its attendant side-effects.

I applied for funding both from IDRC and the Population Council to do an anthropological study on leukorrhea, linking in-depth qualitative work that would explore cultural meanings of the condition with a community based survey design to assess prevalence of the condition in the study community. The study was not funded, and the Population Council responded with a detailed letter discussing leukorrhea as reproductive tract infection.

This was a serious blow to my plans to do doctoral research on leukorrhea. It

seemed likely that an anthropological formulation of this condition was simply not comprehensible to agencies who were thinking about leukorrhea in a purely biomedical framework. I thought that perhaps I should change the topic of my research altogether, and planned to write a proposal on women's mental health, following an initiative I was working on with one of the NGOs.

In late 1995, I was asked to assist an NGO with the development of a "safe motherhood" program by doing a participatory needs assessment. Another NGO asked me to assist in strengthening health input into NGO workers' training. During these two participatory projects, I was again engaged with Garhwali women who were saying that leukorrhea was their most pressing health concern. Throughout 1995-1996 I continued to be involved as a medical practitioner, assisting an Indian gynecologist in the provision of women's health services in the region. By this time, international aid agencies with whom we worked were beginning to promote the syndromic approach to the management of STIs, and pilot programs had been started in several sites in South Asia, with plans to implement the approach on a much broader scale. I felt more strongly than ever that a formulation of leukorrhea as a culturally shaped illness needed to be done. I decided that I would write a doctoral dissertation on leukorrhea after all, using interview material from several different projects that I was engaged in over the years that I lived in India.

The primary research site for this project was Sri Bhuvaneshwari Mahila Ashram (SBMA), an NGO located in Anjanisain, District Tehri-Garhwal, U.P., India. This NGO has been involved with community health programmes for a number of years. Another important research site was SIDH, an NGO located in Mussoorie, U.P. This NGO has as its primary focus educational initiatives, both formal and non-formal. The research was linked in this NGO with a curriculum revision for the training of NGO workers, to incorporate more of a focus on women's health. Both SBMA and SIDH were interested in having some of their workers trained in qualitative research methods. I conducted two training programmes for each organization and also involved some of their workers in part of the field interviewing in this research. Building capacity for qualitative data collection within particular NGOs can be a useful intervention, generating data useful for programmatic interventions by the NGO as well as producing data of wider academic interest.

2.2 Scope of the Research

My original research design had included a quantitative survey to assess prevalence of the condition, as well as qualitative interviews to explore the meanings of the condition.

However, due to the problem with funding, the full study as it had been designed could not be conducted. The interview material used for this thesis has been extracted out of the qualitative work done in a previously funded study on traditional birth attendants, as well as from a large quantity of interview material done as part of a "Safe Motherhood" health needs assessment, from health curriculum work done in coordination with another NGO, and from material collected during health camps.

My construction of leukorrhea as a culturally shaped illness is supported by my years of experience in Garhwal as both a medical doctor and an anthropologist; from the qualitative data described previously, and from an extensive review of the biomedical and anthropological literature on women's reproductive health. Much more detailed studies need to be done; my work is but a preliminary step in re-formulating a view of the body, in which leukorrhea is constructed as an indigenous illness idiom.

My research on traditional birth attendants began in July 1994 and ended in June 1995. The study on traditional birth attendants was primarily focussed on indigenous perceptions of childbirth - however, the subject of leukorrhea was frequently explored in the interviews because the TBAs perceived this to be such a significant health problem of women. In the work done with TBAs, 8 of the in-depth interviews and 3 of the focus

group interviews contained substantial information about leukorrhea. The participatory needs assessment project and the health curriculum development projects were conducted in coordination with two Garhwali NGOs during 1995-1996. During the participatory needs assessment project, 8 focus group interviews of village women were held (68 women in all), along with 12 in-depth individual interviews, to explore women's health concerns. Eleven in-depth individual interviews were held with health care practitioners who treat women suffering from leukorrhea. The practitioners interviewed included 6 obstetricians, 2 registered medical practitioners (RMPs), 1 government medical officer and 2 traditional herbalists (*vaidyas*). They provided a variety of perspectives on leukorrhea. Those interviewed were informed about the nature and purpose of the research. Names and certain identifying details of case studies were changed to preserve confidentiality. A constant effort was made to ensure that the research responded to the needs of the health programme of the NGO and in turn, the needs of women who acted as informants. At the medical camps, an Indian gynecologist provided women with appropriate medical treatment. For serious illness, a referral system to Dehra Dun was in place. The participatory needs assessment was used in the development of a proposal for the funding of a Safe Motherhood program for Sri Bhuvaneshwari Mahila Ashram, one of the NGOs with whom we worked

My work during the early years I lived in India (1986-1989) was mainly medical, assisting Indian gynecologists and physicians in their work in a hospital-based setting. From 1989 to 1996, I became more involved in community health work in a rural setting. Participant observation of TBAs at work in the village, and of women attending medical camps, was primarily done between 1994-1996. I attended and participated in many training programs for TBAs and for women health workers over this period. My multiple roles as a doctor and health trainer as well as an anthropologist each provided different perspectives, a way of triangulating the primary data.

2.3 Data Collection and Analysis

Most interview data were collected directly by the principal researcher, with the interviews conducted in Hindi. Since the local dialect, Garhwali, is somewhat different than Hindi, a Garhwali-speaking interpreter was present during all interviews to clarify any points which were not clear. Techniques used in interviewing and in participant observation followed the methods described by Patton (1990). These observations were recorded in field notebooks and later entered into WordPerfect data files.

Wherever possible the interviews were tape-recorded. Some of the interviews

could not be recorded, and in those cases notes were taken during and after the interview. Tape-recorded interviews were transcribed in Hindi, and then translated. Translated interviews were entered on WordPerfect files. A sample of the translated interviews were given to another translator for verification of accuracy of translation.

A hierarchical coding system was developed, and was used on a small segment of the data, rechecked and then modified. Analysis was aided by the use of the computer software Folioviews.

2.4 The Research Process - Followup

Unfortunately, serious political and organizational crises affected SBMA, the principal NGO we worked with, during the latter part of this research process. These crises affected the functioning of the NGO and my ability to continue to work with this group. The planning process was never fully implemented due to these problems, and the crisis caused me to engage in a serious re-thinking of NGO work. The essence of this conflict lay in the increasing dependence of local NGOs in Garhwal on large international funding agencies, which often have little understanding of local realities. I felt increasingly uncomfortable in my role as a “cultural broker” between the large agencies and small local

NGOs. I began a radical process of questioning what we had been doing in our health and development work. Ultimately, this led to a decision to leave the NGO sector, and India - a profoundly painful decision.

After our family's move to Canada, I tried to stay in touch with the issue of leukorrhea and the syndromic approach to the management of STIs. The syndromic approach was being implemented at different sites throughout South Asia. A field report appeared in 1998, published in World Health Forum, and clearly there were major difficulties in its implementation. I felt strongly that the syndromic approach should be evaluated. In early 1999, I wrote a "hypothesis" paper for The Lancet, urging an evaluation study and predicting that if the approach is evaluated it would be found that most women complaining of vaginal discharge do not have evidence of infection. I then discussed the cultural shaping of reproductive tract symptoms in South Asian women. The paper was not accepted by The Lancet at the time; however, several months later I was asked to write an Editorial Commentary article about the results of a paper that had been recently accepted for publication by the journal (Hawkes et al 1999). It was an evaluation study of the syndromic approach to the management of STIs in Bangladesh. The authors found that the syndromic approach was resulting in significant over-treatment of women with antibiotics, and they commented that 70% of the women who complained

of the symptom of vaginal discharge had no evidence of infection at all. The authors concluded that the approach was ineffective, wasteful of resources, and was exposing women to the risks of antibiotic overuse. The evaluation study and my commentary piece appeared in the Nov 20, 1999 issue of The Lancet. Since that time an active debate has been developing among health policy-makers about the appropriateness of the syndromic approach, and about the cultural shaping of reproductive tract symptoms. Unfortunately, the syndromic approach continues to be official policy, and no significant changes have yet been made. I continue to be involved in the international debate about the syndromic approach to the management of STIs with policy-makers and researchers at WHO and in India.

CHAPTER THREE

THE SOCIOCULTURAL CONTEXT OF WOMEN'S HEALTH IN GARHWAL

An exploration of women's health concerns must be set within a specific sociocultural context. This is particularly important when the health concern is culturally shaped, as is the case for leukorrhea. In this chapter, I describe women's lives in this part of India, exploring gender issues, women's work, health and health-care seeking, and mental health issues. This description of the fabric of women's lives sets a sociocultural context within which the ethnographic material about women's experience of leukorrhea can be presented. The ethnography is then used to illuminate the multilayered meanings of leukorrhea as a somatic idiom of communication.

3.1 Garhwal: Political Geography

Garhwal and Kumaon comprise the two administrative divisions of the Uttarakhand region of northern Uttar Pradesh, often known as the Central Himalayas. Garhwal borders Kumaon to the east, Tibet to the north, and Himachal Pradesh to the west. The hill regions of Uttar Pradesh have a special cultural and religious significance, as the sources of the sacred Ganga river lie within these mountains. Regarded as "*dev bhoomi*", the land of the gods, the Himalayan region is sacred for both Hindus and Buddhists.

People who live in the central Himalayas face special challenges. The rugged terrain makes road construction difficult, and roads once built are often damaged by landslides, particularly during the monsoon season. Access to essential goods and services is poor. Economic activities in the mountains are hampered by lack of access to the well-organized market economy of the plains. Educational opportunities in the hill regions are limited, and unemployment is extremely high. In many mountain areas, the centre of political and administrative power is located far from the mountains. Government policies are seldom created to reflect the realities mountain people face. Many policies result in exploitation of resources which the mountain peoples depend upon. An example of this is forest policy in U.P., which has resulted in reservation of huge tracts of forest where villagers have no usufruct rights. This has resulted in the alienation of village people who are forced to put increasing pressure on small areas of legally accessible forest. The hill regions of U.P. have a strong history of people's movements to protect the environment (Chipko and the anti-Tehri

dam movement). During the late 1980s and the 1990s, a people's movement for a separate state (Uttarakhand) has acquired tremendous momentum in the U.P. hills. ¹

Subsistence agriculture is more common in the hill regions than is cash-cropping. Land holdings are small and fragmented. Unemployment is a major problem of the region, and migration of males in search of a cash income is common. Literacy tends to be low, particularly among women. In District Tehri-Garhwal, where the research was conducted, the 1991 national census reports literacy figures of 72.1% for males and 26.4% for females - this male/female difference in literacy is the highest in the state.

3.2 Gender Issues

In Garhwal, most people are caste Hindus, with minority populations of Muslims and *adivasis* (aboriginal people). Among the Hindu population of Garhwal, kinship patterns follow similar patterns to those found all over North India. Fundamental to North Indian kinship structures is exogamy in marriage, in which spouses are unrelated in kinship reckoning and often come from physically distant communities. Marriages are arranged by parents and the woman to be married has minimal input into this process. The patrilineal descent group

¹On November 9, 2000 the hill districts of Kumaon and Garhwal were officially merged to create the state of Uttaranchal. The long process leading to the creation of this state has reached a successful conclusion; now the challenge lies in the development of a system of governance that responds more appropriately to the unique needs of mountain people.

controls the inheritance of property and in-marrying females are neither able to inherit property nor able to act as links to transfer property rights to their children. An in-marrying female is expected to cut her ties with her family of origin and transfer full allegiance to her husband's kin. The family of the bride is expected to provide a substantial dowry and is socially and ritually inferior to that of the groom.

North Indian kinship structures create a climate where female autonomy is unusually low, and decision-making is controlled almost exclusively by men. Reproductive decision-making is most often made by older men of the patrilineage or by the mother-in-law who generally favour high fertility. A woman's social status is enhanced through bearing children, particularly sons. Preference for sons results in gender discrimination within Garhwali society which affects the quality of life of the girl child. Traditionally, the son is the one who cares for elders in their old age, and sons are also considered essential for social and ritual purposes. They play key roles in many family ceremonies, and they are the ones who must light the parent's funeral pyre.

When many girls are born, the woman is often blamed, and sometimes the man will even take a second wife, believing that his first wife has been unable to produce a son. This unfair treatment is resented by women, and a strong element of resistance emerges in their discussion of gender issues. Women, faced with discriminatory situations, do attempt to negotiate alternative understandings of gender roles, sometimes successfully.

In recent times, the advent of the ultrasound test for selective sex determination is rapidly expanding villagers' options when they wish to ensure the birth of a male offspring. The test is only available in expensive private clinics in Rishikesh and Dehra Dun, many hours bus ride from remote rural Garhwal. However, awareness of this option is surprisingly high, and village midwives often advise the test in families in which having a son is an urgent priority. Despite slowly increasing levels of education among men and women, the desire for male offspring remains a key orientation in most Garhwali families.

Opportunities for paid employment are limited in Garhwal, and many men migrate to the plains of India in search of jobs. The educational level of Garhwali men tends to be low, and most often men work in low-paid factory jobs or as servicemen in the Indian Armed forces. The men of Garhwal have a reputation in north India for honesty, and many get jobs as watchmen (*chowkidars*) for wealthy urban families. Many Garhwali women see their husbands only two or three times per year when the men return home for occasional visits. The women live within a joint family arrangement in which an elderly father-in-law acts as head of the household. Among men who remain behind in Garhwal, a pervasive sense of disempowerment prevails. Subsistence farming does not provide an adequate living and opportunities for further education or local business initiatives are meagre. Alcoholism is a significant problem with these men. This causes a serious problem for Garhwali women, and alcoholism has been a focus for a number of women's social action initiatives in the region.

Subsistence agriculture forms a major part of the economic base of Garhwali villages. Most families own houses and a small amount of land, which usually consists of small terraced fields. The land is intensively cultivated with mostly subsistence crops such as wheat in winter; mustard in the spring and rice in the summer. Vegetables such as potatoes and onions thrive well in the dry soil of the mountains, but green vegetables requiring moister soil are only occasionally grown. Cash-cropping is rare, due both to the difficulties of transport to a market and to lack of irrigation facilities.

Farm work follows strictly gender-based lines. Men do the ploughing, but it is women who are responsible for nearly all other farm-related chores, including planting, weeding, transplanting, harvesting and processing crops. Women are responsible for collecting fuelwood, a task that has become more onerous with each year due to the significant deforestation in Garhwal. Women must also collect water for use in the home and fresh fodder for the animals. Gathering of these three basic necessities - wood, water and fodder - usually occupy five to six hours of a woman's day, and in resource-poor areas may occupy eight or nine hours of the day. In addition to this work, women perform most of the subsistence agriculture, care for children, the elderly and domestic animals, as well as doing tasks such as cooking and home maintenance. Typically, women rise at four in the morning to begin their day's work, and do not stop working until ten at night.

3.3 Health Issues

Environmental degradation in the Himalayan region, particularly related to the effects of deforestation, affects women's health significantly. Sometimes women must walk for three or four kilometres to reach a source of fresh water. Fodder for animals in the summer season consists of seasonal grasses growing on common land outside the village; in the winter women climb trees to cut fresh green leaves off high branches of trees. This task is not only difficult but dangerous, and injuries due to falls or cuts from the hand axes that the women use are common throughout the cold season. Regional shortages of safe drinking water raise the prevalence of the water-borne diseases, and iodine deficiency disorders are endemic throughout the region.

There is a high prevalence of respiratory and eye disorders among women, in part related to exposure to smoky cooking fires inside the dwellings. Tuberculosis continues to be a serious problem throughout the Himalayan region. Inadequate case-finding, incomplete treatment and lack of follow-up are important factors contributing to this high rate of disease; cramped living quarters and lack of ventilation in the homes are also factors that promote the spread of TB.

Poor nutrition among women in Garhwal often begins in childhood. Girls tend to be less well nourished and are accorded less medical care than boys. Undernutrition is linked to a high prevalence of iron deficiency anemia, which causes fatigue, lowered resistance to

disease, and a higher risk of complications in childbirth.

Family planning, long a priority of the Government of India, is available to women of Garhwal primarily in the form of laparoscopic tubal ligation. This surgery is performed in primary health centres (PHCs) or during “family planning camps”, in which a gynecologist travels to a remote area of Garhwal and performs many such surgeries in one day, in a PHC subcentre or community building. The surgeries are performed with only local anesthesia and under the most basic of conditions. After the procedure, women have to walk back to their villages, often many kilometres away, and there is little or no arrangement for followup. In Garhwal, some of the gynecologists providing the procedure are not very experienced. Many women report complications of the procedure as well as occasional pregnancies despite having had the surgery.

While women in Garhwal often do desire to limit their families, there is a deep resentment among women about the way family planning is presented. They would prefer more choice in family planning methods, particularly methods of family spacing. While non-permanent methods of family planning are promoted by the Government of India, in practice the availability of non-permanent methods such as IUD, oral contraceptives and condoms is still inconsistent. The sometimes coercive nature of tubal ligation and the conditions under which it is performed engender in Garhwali women a deep distrust of “the operation”.

3.4 Health Resources of a Garhwali Village

Considerable traditional knowledge about health exists in the Himalayan region, and a variety of indigenous health care practitioners work in the villages of Garhwal. The Himalayan forest is a source for many of the herbs that traditionally have been used in healing, although environmental degradation has adversely affected the quantity and quality of these herbs. There is often little interaction between practitioners of traditional medical systems and practitioners of biomedicine, and an adversarial relationship between practitioners of different systems impairs communication.

In a typical village, the traditional birth attendant (*dai*) is a key health resource. She is the first person women consult for problems related to pregnancy and birth, as well as infant and child care. Also, the *dai* is often a ritual practitioner as well and may be consulted for a variety of illnesses thought to be related to spirit possession.

In addition to the *dai*, there may be a *vaidya*, or herbalist. The *vaidya's* treatments are usually based on Ayurvedic principles but include various folk treatments as well. Invariably, dietary advice forms a part of the prescription a *vaidya* will give. The training of *vaidyas* varies. Some have obtained a formal degree at an Ayurvedic training college, a

Bachelor of Ayurvedic Medical Science. Others have trained as Ayurvedic pharmacists, yet diagnose and treat independently.

In each village, there is usually a ritual practitioner, who may be the pundit of the local temple, or another person who has the power of attracting supernatural forces (often called an "*ojha*"). These people mediate between the natural and supernatural worlds, using many forms of prayer, ritual and ceremony.

Also living in or near the villages are the private practitioners. These men often designate themselves as RMPs or Registered Medical Practitioners, although in fact many are not registered. They have little formal training, and have usually learned their trade by working as a compounder or assistant to a doctor practising cosmopolitan medicine in a city. They practise a mixture of folk, Ayurvedic and biomedicine, usually using combinations of treatments which respond to the felt needs of the rural people. Biomedical treatments used include intramuscular cortisone injections for strength, mixtures of antibiotics for diarrhea, and IV glucose for many conditions. Most medicines are given in the form of injections, often using unboiled syringes and needles.

Also living near the villages are government nurses. These women are employed by the government health system to serve the rural villages. In their official capacity, they are supposed to be active in pre and post natal care, family planning and infant immunization. Many of them focus primarily on a search for "cases" for female sterilization. However, unofficially, some of them are very active as health practitioners. In some areas the government nurse is called to administer injections of syntocinon to parturient women, or to participate in difficult deliveries. Sometimes these nurses also perform abortions, either in their own homes or in the client's home. For services such as these, the nurses charge their patients a fee.

In some parts of Garhwal, NGOs provide additional health services which may include small rural outreach clinics staffed by nurses and pharmacists. Some of the research work in this study was done in such an area. The NGO nurses were quite active, going to villages and involving themselves with antenatal and postpartum care. They would occasionally be called for a delivery, although more often the village *dai* would conduct the deliveries.

Government health infrastructure in Garhwal consists of a network of government subcentres, staffed usually by a doctor with either an MBBS (Bachelor of Medicine and Surgery) or a BAMS (Bachelor of Ayurvedic Medical Science), and employing one or two

ANMs (auxiliary nurse midwives) to do outreach work which mainly focus on family planning initiatives and infant immunization. These centres are usually small and poorly equipped. The next level of referral is the Primary Health Centre, staffed by a doctor with an MBBS , ANMs, a pharmacist, and support staff. Although the Primary Health Centre is quite large, it is generally underfunded and both staff and equipment tend to be lacking. Emergency surgery such as a Caesarian section, for example, is not available at this primary health centre. The next level of referral is the Government Hospital in larger towns, where a female obstetrician/gynecologist is posted. These hospitals tend to be poorly equipped and if the doctor is away on leave there may be no replacement for her. The next level of referral is the main government hospital in the city of Dehra Dun. In Dehra Dun both a large government hospital as well as many private medical facilities are available.

3.5 Women's Reproductive Health in Garhwal

Women suffer from a number of complaints related to reproductive health in Garhwal. Foremost among these complaints is leukorrhea (most often called “*safed panni*” in this region), in which women complain of vaginal discharge as well as a variety of somatic complaints including burning hands and feet, backache, and dizziness. No epidemiological studies have been published on the prevalence of this disorder in the Garhwal region;

however, from data from our medical camps I would estimate that approximately 20% of women attending medical camps have leukorrhea as their presenting complaint, and about 40% of women admit to having leukorrhea when asked about it. A recent unpublished study done in Sri Bhuvaneshwari Mahila Ashram, the Garhwali NGO where I did much of my community health work, reported that 46% of women surveyed admitted to suffering from leukorrhea (Srivastava 1998).

Studies that are available about women's reproductive health in the region primarily focus on contraceptive use by eligible couples in the region. A recent USAID study done in connection with a family planning initiative showed that contraceptive methods are used by only 30% of eligible couples in the region, and concluded that there was a high unmet need for contraceptive services in the region. No studies on reproductive tract infection or prevalence of common gynecological disorders have been published for the Garhwal region. Serious gynecological disorders, such as vesico-vaginal fistula resulting from prolonged labour, certainly cause great suffering to women in the region; however, no survey data are available on the prevalence of such disorders.

3.6 Decision-making by Women

Major financial decisions are usually made by the senior male members of the household. However, women often have considerable power over financial matters because they manage the day-to-day expenditures. There is a tradition within Garhwal of women secretly saving small amounts of money from household expense money, which gradually accumulates. Most agricultural decisions are made by the older women of the village (which crop to sow, in which field to sow it, etc) as they are the ones doing the daily agricultural work. Decisions about a child's early education are usually made by either an older woman of the household (i.e. mother-in-law) or by the husband or father-in-law.

With increasing education, women gain more ability to make key decisions in their lives. Having a job which earns cash income is another way in which women gain decision-making power. Decision-making ability in women is closely linked to age - young, unmarried women have the least autonomy, followed by young married women. Once a woman has a married son, she gains considerably in both social status and in decision-making ability. Women with powerful husbands, such as the wife of elected leader (*pradhan*) of the village, often have greater decision-making ability within a group of women (although not necessarily within the home). The woman who can function as a spirit medium during possession rituals

is considered a powerful person and may have considerable decision-making ability.

Decisions to seek medical care at the time of illness are most commonly made by the mother-in-law or the husband, unless the problem is minor. The decision to have a child immunized used to be made by the child's father or grandmother - nowadays, however, as immunization is gaining wider acceptance mothers are also beginning to participate in this decision-making process. In addition, particular women in the village do have considerable decision-making ability around medical care. For example, in the case of an obstetric emergency the midwife is a key decision-maker, whose opinions are sought after and her advice followed.

Although Garhwali women frequently desire fewer children, their actual ability to control their own fertility is less than optimal. The size of the family is most often decided by senior male members of the family, as well as the mother-in-law. Despite the restrictions on their personal autonomy, some women risk social sanctions and even family violence to make independent reproductive decisions. Changes in this restrictive climate around reproductive decision-making are beginning to appear, as a rapid trend of modernization sweeps across Garhwal. Smaller families are increasingly perceived as desirable by both men and women, due to the decreasing availability of land and jobs, rapidly rising cost of living,

and an increasing desire for education for children and consumer goods. These wider societal changes will undoubtedly result in women being supported more often in their decision to limit family size.

The decision to seek help at the time of illness is also affected by "*sharm*", women's modesty or shyness. Women do not like to tell others when they are suffering from a medical problem, and because of this, treatment of many conditions is often delayed. In the research that I conducted during 1994-1995 on childbirth, midwives clearly described major complications of pregnancy which required immediate hospital referral. Sometimes the primary reason why the woman was not sent to hospital was the woman's own refusal to go, due to "*sharm*". It is quite likely that rising literacy levels among women might lessen this problem of "*sharm*", permitting women to speak with greater confidence about their health needs.

3.7 Women's Mental Health

In Garhwal, many women use song to help each other cope with difficult life situations. The "*dua*" is a two line couplet that expresses an emotion, usually a painful or sad emotion. These songs are sung by women when working in the fields or in the jungle. Often,

one woman will sing one line of the couplet, and another woman will reply with the second line. These couplets are hauntingly beautiful, and provide an evocative way for women to express the emotions of their heart.

Spirit possession is prevalent throughout Garhwal and appears to have multiple meanings within the society. Sometimes it appears to be an idiom for the expression of mental distress, as it is often described in association with a deep psychological shock or life-changing event. At other times it has complex meanings related to the preservation of traditional social values and the healing of illness. Certain women have the ability to become possessed by ancestor spirits or by the spirits of healing deities. This type of possession appears to convey social power to the woman, who is often an older woman in the village such as a traditional birth attendant.

Women in Garhwal seldom report mental health concerns directly to health care providers. Instead, they often express their emotional anguish through bodily symptoms that have symbolic or metaphoric meaning. An exploration of these somatic idioms of communication forms the basis for this thesis.

CHAPTER FOUR

LEUKORRHEA: ETHNOGRAPHIC ACCOUNTS

In this chapter, I begin with an “ethnographic reflection” on the way I, as a Canadian with biomedical training, initially perceived leukorrhea, and how an anthropological perspective gradually began to inform my understanding of the condition. I then explore indigenous constructions of leukorrhea from the perspective of the women themselves, as well as from healers such as *dais*, RMPs and *vaidyas*. In the chapter that follows, I explore the process of treatment-seeking for leukorrhea from a variety of perspectives, and I also contrast biomedical constructions of leukorrhea with indigenous constructions, and explore how this affects the type of treatment that women suffering from the condition may receive.

4.1 Ethnographic Reflections: Leukorrhea through the eyes of a Canadian doctor

When I first moved to India, I had the opportunity to work at a small charitable hospital in Rishikesh, on the banks of the Ganges river in the Himalayan foothills. The hospital was part of a large Hindu spiritual community (ashram) called the Divine Life Society, which had been founded by a Hindu saint, Swami Sivananda. My husband Pradeep Kumar was trained as a pediatrician, and for many years he had had a burning desire to work in the Himalayan foothills. He also had a great interest in Hindu spiritual philosophy, and wanted to live in a spiritual community. He had accepted a position as Medical Officer for the Divine Life Society a year before we were married. I came to Rishikesh in 1985, newly married, filled with a rather naive enthusiasm about the adventurous life that lay ahead. I began to sit with my husband in the afternoon clinic that he held at the hospital, trying to make sense out of a bewildering clinical setting. I was struggling to learn Hindi, and I assumed that once I understood Hindi I would be able to understand the clinical encounter. It was not yet clear to me that not only the language, but the illness idiom itself is different in a rural Himalayan hospital and a clinic in rural Ontario!

Many young men who consulted my husband in the hospital where we worked had

complaints related to “semen loss” - either loss of semen through involuntary nocturnal emissions of semen, or of passing semen mixed in with their urine. They also complained of vague physical symptoms such as headache, dizziness and weakness. My husband would reassure them that nocturnal seminal emission is a normal physiological event, and that the “semen” in the urine was merely the deposition of phosphate crystals - a normal phenomenon. Physical examination of these young men seldom revealed any pathological findings. Often, these young men were facing significant social stresses such as an employment crisis or a marriage problem. Ayurvedic physicians treating these young men would diagnose their condition as "*dhatu* loss" ("*dhat* rog") and prescribe herbal and dietary treatments.

In those early years, I also had the privilege of working under the tutelage of a well known Indian gynecologist. Dr Kutty had been the Head of the Department of Obstetrics and Gynecology at KGMC, my husband’s medical school. She had an almost mythical reputation in Uttar Pradesh, a doctor in whom the “power of the hand” was awesome. She particularly had the reputation of being able to treat infertile women, and women came from many parts of India to consult her for infertility. She had been a devotee of Swami Sivananda, and before Swamiji died, she promised to return to the ashram following her retirement to work in the charitable hospital that he had founded. She took

an early retirement from KG Medical College, and provided many years of selfless service in the hospital, taking not a single rupee in payment from any of her patients.

Patients would line up for hours to obtain a ticket to see Dr Kutty, and during the course of the morning she might see as many as fifty patients. The women who consulted her came with a wide variety of concerns, but as always, one of the most common concerns was “*safed panni*”, called leukorrhea by medical personnel. I had had three years of general practice experience in Canada and I assumed I’d have no trouble in assessing and treating women who complained of vaginal discharge. Yet my encounters with these women seemed strangely dissonant. To begin with, there seemed to be such profound differences between the way an Indian woman and a Canadian woman speak about vaginal discharge. Canadian women’s way of speaking about vaginal discharge usually referred to the duration of the symptom and the physical characteristics of the discharge. They tended to speak about it in a matter-of-fact way, a nuisance to which women are prone. They seldom mentioned other symptoms in association with the discharge - the problem seemed to be physically located in the reproductive tract. The experience of vaginal discharge seemed entirely different for the Indian women. They were deeply concerned about the problem, yet spoke about it in an elliptical way, often referring to symptoms that did not seem to relate to the discharge at all - symptoms such

as weakness, backache, dizziness, burning hands and feet. When asked how long they'd been suffering from the discharge, they would often reply that it had been there for months, or even years. When asked what might be causing it, they would speak about many aspects of their lives -their work, their families, their diet. They often mentioned being "overheated", although I didn't quite know what they meant by this. They felt that they were getting weaker and weaker from the discharge, and that they might actually die from it. When we examined these women, often there were few if any physical signs suggestive of reproductive tract disease.

Dr Kutty would treat these women empirically, because bacterial cultures were not generally available. When signs of local infection were present, she used topical antibiotics in the form of vaginal pessaries. Women with cervical erosions were treated with electrocautery. When women had vaginal discharge accompanied by cervical inflammation, adnexal tenderness and/or low grade fever, they were treated for sexually transmitted infections (STIs) along with their partners, although Dr Kutty felt that STIs were quite uncommon in the region. In Dr Kutty's opinion, leukorrhea was most often due to poor hygiene, cervical erosion, mild mixed infection or due to psychological concerns such as sexual anxieties. In women without evidence of erosion or infection, she would prescribe Ayurvedic medicine, tablets such as Lukol and Femiplex. She often

prescribed iron, multivitamins and calcium, gave advice on hygiene and nutrition, and invariably instructed the family members of the woman to take better care of her. In this way, she validated the woman's distress without always providing a specific biomedical diagnosis.

Women complaining of vaginal discharge would frequently say that when "*safed panni*" is lost from the body, progressive weakness will develop. Many women felt that undergoing the tubectomy operation had led to the development of the condition; others felt that diet was at fault. Women suffering from "*safed panni*" were often accompanied by their mothers-in-law or their husbands, who were also very concerned about the health consequences of "*safed panni*". Women usually reported some relief of symptoms with treatment, but regardless of the type of treatment the women received (Ayurvedic, allopathic, or advice only), the condition seemed to frequently recur. Many women had suffered from "*safed panni*" for years without relief.

The condition was puzzling to me. Leukorrhea didn't seem to fit any biomedical disease category that I was accustomed to from my medical practice in Canada, neither the particular constellation of symptoms and signs, nor the natural history of the condition. I wondered if it could be a psychosomatic illness. Garhwali women attending our clinics

never complained directly about “anxiety” or “depression”, as they might in Canada. It would seem logical to assume that Garhwali women might express mental health concerns through bodily symptoms. But why would they complain of vaginal discharge? It seemed like an odd complaint to be psychosomatic.

But it was hard to focus too long on this problem during those early years. I had other ob-gyn matters to be concerned with - I myself was pregnant and under the care of Dr Kutty. I experienced complications during labour, and my daughter was born by emergency Caesarian section during a wild monsoon night in August 1986, a traumatic initiation into motherhood!

By 1988, after three years in the ashram, my husband and I had decided that we would like to work much deeper in the Himalayas. We left Rishikesh and moved to a remote town of Pauri Garhwal. There we lived for nearly four years, working on the design and implementation of a large community health program running in 100 villages of Garhwal, funded mainly by Save the Children (U.K.) Wherever I went, I encountered women suffering from leukorrhea. In health needs assessments that we did, leukorrhea was consistently the health problem that troubled women the most. I struggled to find the most appropriate way to address this concern, which seemed to appear in so many

manifestations.

During those years, Garhwal was going through political upheaval with a rapidly growing movement for a separate state. Members of a fundamentalist political party resented NGOs who received foreign funding, and social turmoil seemed to simmer constantly around the edges of our lives. The problems boiled violently over in 1990, when the founder of the NGO we were working with was shot at point-blank range, by a man who was thought to have political connections. The next year and a half was a time of constant turmoil and crisis. By 1992, my husband and I felt that we needed some time away from Garhwal to recover a sense of balance in our lives, and so we decided to come to Canada for a year. I was interested in studying medical anthropology, as I had a strong sense that my health work would be enhanced by a more in-depth understanding of the social and cultural context in which we worked.

During my studies in medical anthropology, I came across the work of Mark Nichter describing leukorrhea as a “bodily idiom of distress”, a way of expressing deep emotions through the physical body. He framed the condition within anthropological parameters rather than biomedical, describing the way that societal and cultural forces shape specific illnesses. Nichter related the symptom pattern of leukorrhea to an

Ayurvedic view of the body, in which genital secretions have deep metaphorical meaning. Nichter's explanation provided an elegant way to understand leukorrhea that honoured its multilayered meanings within a specific cultural milieu. Leukorrhea as an illness idiom provided an intriguing example of the differences between an anthropological view of the body and a biomedical view. I began to explore the notion that leukorrhea may be an idiom of communication, a way of reflecting about personal and social concerns through the physical body.

In the sections that follow, I use interview material from my work with TBAs, and from my work on health needs assessments and medical camps. I create a thick description of leukorrhea in the words of the women who suffer from the condition, their families and the healers that they seek out for treatment.

4.2 Leukorrhea: Women's Voices from Garhwal

In this section, I present women's voices from Garhwal, speaking about their experience of suffering from leukorrhea, followed by reflections by practitioners on the condition. To begin, I present a segment from an interview with a woman I saw at a

medical camp, whose description of leukorrhea is characteristic of the way women in Garhwal speak about the condition. KD is 37 years old, with four living children and two who died in early childhood. Her husband is unemployed but spends most of his time away from the village. She lives with her aged mother in law and one daughter-in-law. Only the youngest child is still at home. Her husband does not provide financial support for the family, and this family is in considerable financial stress.

KTK- What is the problem you are having?

KD- It is the problem of periods...they are stopping and starting ..(pause) and that problem, too, "safed panni". And with the safed panni, I am having so much backache, and also aching in the hands and feet, it is too much.

KTK - Any other problem?

KD- My head is spinning (sir goom rahi). And burning is everywhere...my hands and feet and also my whole body.

KTK- How long have you had this?

KD- I have had it for many months. Now it is more than before. I took medicine before for this problem, when I had it two years ago.

KTK- So you've had it before?

KD- Oh, yes, I have had it before. And two years ago I took medicine and it became alright after taking the medicine. But then nearly one year ago, it began again, very much, too much. I became more and more weak.. I am feeling a complete lack of energy (susti).

KTK- Are you worried about this problem?

KD- Yes, I am very worried. Because if I am getting weaker who will take care of the family? Even though my children are grownup now, but still there is so much work. I have my work in the house, and in the fields, for women there is nothing but work here in our Garhwal. You have seen that too, Madamji, have you not?

KTK- Yes, I have...What do you think is the cause of safed panni?

KD- How would I know about that? ...Perhaps from overheat in the body. We work all day under the hot sun.

KTK -Did your mother in law give you any treatment for this problem?

KD- What would she know? She is not knowledgeable... but she told me not to eat ghee, and not to eat red chillies, that is all.

KTK- Did you ask your husband if you could come today?

KD- He is a useless person (na ki barabber)! He is always away from our village, he doesn't send us money. I will not ask from him anything.

Here she sketches a picture of a life of unremitting physical work, filled with anxieties about her family, without support of any kind from her husband. Some of the specific issues she brings out in her discussion - the natural history of the condition; the association with “overheat”, inappropriate diet and excess work; and treatment-seeking for the condition, will be further explored. In this focus group discussion, women in a women’s group meeting in Anjanisain, Tehri-Garhwal speak about why leukorrhea happens:

W1: The illness enters them when they work day and night... nowadays there is not sufficient water for the cows and buffalos. Nowadays four hours are spent. One hour in going, two hours in waiting and one hour in coming, only if the water is available. Everyday the day is spent like that and if we don't get the water then we ourselves die, children will die and the animals will also die.

Women in Garhwal are responsible for fetching water, wood for fuel, fodder for their animals, often spending up to eight hours a day just in these basic survival tasks. Agricultural responsibilities occupy them for another 2-3 hours per day, on average (more during planting or harvest seasons) and women spend many more hours in other domestic responsibilities such as cooking, childcare and tending domestic animals.

the drudgery of daily existence. M mentions that women who do domestic work and cook food have less trouble with leukorrhea - these are generally the women who are not as dependent on subsistence farming for their survival, and whose workloads are considerably less. Leukorrhea in Garhwal is most common among women in their active reproductive years (18-45). Unmarried young girls seldom complain of it nor do post-menopausal women. Women face their heaviest work burden when they are between 18-45 years old, with multiple responsibilities as care-givers and farmers. Once they reach menopause, they often have a son who is married, and having a daughter-in-law eases much of the work burden. Their ability to make decisions and to play a role as a respected member of the village community also rises dramatically at the time of menopause. The following segment comes from a focus group discussion of women attending a women's group meeting at an NGO in Dehra Dun, where I often did consultancy work. To begin, an old woman speaks, telling me why so many women in Garhwal suffer from leukorrhea.

Old woman - Because of not getting food on time and too much of work they suffer from the problem of white discharge. They do so much work during the day and don't get the time to rest and so the illness sits inside them. Then they will say that they developed backache or pain in hands and feet. When they are doing so much of work then what else will happen.....?

A nurse - One more thing is there, that after the delivery the woman starts working soon and for the food she gets only Kichri (a rice and dal mixture) and rice water.

Poor nutrition is identified as a contributing factor by the second woman in this discussion. Perhaps reflecting her biomedical training as a nurse, she focuses on the

amount and quality of the food available. Discussions about the linkages between food and leukorrhea among women without a formal education tend to focus more on the humoral qualities of the food - taking too much “hot” food rather than not enough food.

Humoural concepts of hot/cold balance are an integral part of Ayurvedic concepts about the body in health and illness. In classic Ayurvedic practice, the practitioner would base his treatment on his assessment about which of the three humours (wind, bile, phlegm) were deranged. In popular renderings of Ayurvedic practice, illnesses are often simply classified as hot or cold, and therapies and dietary prescriptions are aimed at correcting the hot/cold balance. This humoral view of the body forms an important part of the discussion around the causes and treatment of leukorrhea in the ethnographic material. In this segment, the interviewer converses with another woman in this group:

KTK: How do you think “safed panni” occurs?

W1: When there is heat inside us then we people say that we are suffering from heat and then “safed panni” occurs.

KTK: How does this heat happen? How does it develop?

W1: When we think too much then our mind and body burns. We keep on thinking then the heat ascends to our brains and then that illness comes to us.

“Heat” is not only an intrinsic quality of food, but is also an intrinsic part of bodily composition and function, and affects the woman’s health. Interestingly, this woman has

spoken of “heat” as rising to the brain when women think too much, which then can precipitate the onset of the illness. The Ayurvedic physician would suggest that any disturbance, physical or mental, must manifest in both the somatic and in the psychic spheres. Mental health is also frequently described in humoral terms. Sometimes a disturbance of emotional well-being is spoken of as an imbalance of one of the humours. Too much bile (*pitta*) gives rise to anger and impulsivity; too much wind (*vata*) gives rise to fearfulness; too much phlegm (*kapha*) may result in lethargy or weakness. Similarly, an imbalance in the body’s intrinsic heat may cause emotional disturbance, as this woman reflects as she speaks of heat “rising to the brain”. Humoral concepts of mental illness are commonly held in South Asia, with sufferers describing emotional disturbances in terms of “overheat” or of an imbalance in one of the *tridosas* (Weiss et al 1988).

Another segment from a focus group discussion illustrates the close linkages between overwork and overheat as perceived causes for leukorrhea. The linkages between diet and the formation of white discharge is an important theme in Ayurvedic writings about leukorrhea, and is also a major theme in the women’s discussion of the topic:

KTK: Could this happen with eating hot foods too?

W1: Yes, it can happen from eating hot food, too. And by doing too much of work, too.

Such as...suppose if someone doesn't have anyone to help and she has to do all her work by herself and then she will fall sick. Because one has to take care of the animals, fields and children then she will fall sick, definitely. When the heat occurs in the body the white discharge comes.

Women's ideas about causation of leukorrhea often vary according to the woman's educational level and experience. The following interview is from a woman's meeting discussion in Dehra Dun, organized by an NGO where I often did consultancy work. We were discussing the causes of leukorrhea:

KTK - Please tell us what you are thinking about white discharge - why do so many women have the problem of white discharge in the villages?

W1 - One reason is that in a year two children are born and later many children are born.

W2 (a female NGO worker) - One reason is that on the mouth of uterus a wound may develop and other reason is sexually transmitted diseases.

W3 - (another NGO worker) Also this might happen because of dirt. For example, women deliver in the room where buffalos live. From the same place they take the grass and also deliver the woman and also the use of dirty cloths during their period times is another reason.

This segment presents several ideas about causation of leukorrhea: the first woman (a middle-aged village woman) attributes the condition to having too many children, or bearing children too close together. The second woman was a female NGO worker had undergone some training programs on women's health organized through a local community hospital, in which a biomedical view of leukorrhea had been taught. She

presents the two most common biomedical explanations for leukorrhea: cervical erosion and reproductive tract infection. The third woman, also an NGO worker, suggests that leukorrhea might be due to poor hygiene. Among village women, a view that leukorrhea is due to sexually transmitted diseases is rarely, if ever, offered as a possible cause of the condition. The other women present views about leukorrhea that include issues around food, overwork, and hygiene. These varying views about etiology of leukorrhea are common, and tend to reflect educational level and life experience. Biomedical views on the development of leukorrhea are often voiced by women who have had “women’s health training” offered by an NGO. Among women without such background, the traditional Ayurvedic orientation toward leukorrhea is commonly voiced.

Part of my work in Garhwal involved participating in community health events organized by NGOs. Medical camps for women’s health problems were a popular part of these health events. I usually worked closely with an Indian gynecologist, and between the two of us, we would see about forty or fifty patients a day. The most common complaint among women was leukorrhea (“safed panni”). The following three excerpts are taken from tape-recorded interviews done during one of these camps. This is a segment of an interview with RD, a woman who attended a medical camp with the primary complaint of leukorrhea. RD is forty years old, with four children

KTK Why do you think the problem of “safed panni” happens a lot in women in this area?

RD: Previously when the women used to have eight or ten children then this problem didn't happen but nowadays lot of women go for operation and from that this illness occurs....that is the main reason for it... And also by carrying the load and eating the hot food ...that might produce the discharge.

In the next interview segment, I am speaking with UD, a traditional birth attendant with whom I had worked over several years in Garhwal.

KTK - A lot of village women have the problem of “safed panni”. What do you think is the reason behind this problem in Garhwal?

UD - One is hard work in Garhwal and other thing is that women don't get the proper food. Their diet is insufficient. For the women sometimes the vegetable is not there and sometimes dal (lentil) and at times other foods. So naturally the women will become weak. In that weakness they go to the village and ask for buttermilk and keep on drinking it after making it sour. So naturally they will fall ill. And also because of sourness they develop the problem of white discharge.

KTK - Why is the problem so much?

UD - From sour food and chilies. From carrying heavy weights..... this is the reason behind the white discharge. From heat in the body...

KTK- What kind of heat occurs in the body?

UD - There is no blood in the body and the woman works a lot and so she will suffer from heat if she worked a lot under the hot sun. She will definitely suffer from heat and on the top of that she doesn't have any food in the house. No child takes the water for her when she works in the fields. So naturally she will suffer from heat.

UD's linkages of “overwork” and “overheat” are again apparent here. “Heat” can be caused by “the hot sun” but also has linkages with concepts about body physiology - when blood formation is impaired women may suffer from “overheat”. Later in the

interview she discussed the association between the development of leukorrhea and the tubectomy operation, a theme that frequently emerged. Women in Garhwal fear the tubectomy operation, which is the most common form of family planning available in the area. The surgery is done under primitive conditions, with only local anesthesia and without provision for followup. Women want to limit family size and so they do consent to the surgery. However, many women attribute poor health to having had the procedure, perhaps a reflection of the resentment they feel about the manner in which these surgeries are performed in Garhwal. The following excerpt is typical:

KTK: How long have you had the problem of "safed panni"?

RD: Probably for the last two or three years. I have gone through operation (tubal ligation) and after that the "safed panni" began, and after that I am becoming gradually weaker.

Many of the traditional birth attendants were particularly adamant that the operation is responsible for many cases of leukorrhea. In this conversation I asked GD, a TBA from Jaunpur, about the association between the operation and leukorrhea:

GD - Now as many women go for the operation, they may develop the problem of leukorrhea.

KTK - After operation it happens a lot?

GD - Yes. By the operation, some women become weak and then the problem of the white discharge becomes more.....Some people have it because of the Vata (wind factor of Ayurvedic system) and many have it after the operation which is done to stop the child

birth.

The natural history of “safed panni” is that it comes and goes over a period of years, or sometimes is present on a continuous basis. There is seldom a sudden onset, nor are symptoms such as itching, fever or abdominal pain present. A natural history like that is more suggestive of a culturally shaped illness than biomedical disease. In this segment, I ask RD, a patient at a medical camp, about this aspect of leukorrhea.

KTK: Are you having a continuous discharge?

RD: Sometimes the white discharge becomes less and sometimes more. But now for the last two years it has been continuous.

KTK: Does the “safed panni” ever stop completely?

RD- Stop? (pause) For most women of our place, this problem keeps on coming back and we cannot get it to stop by any treatment.

Many somatic symptoms are associated with “safed panni”, such as giddiness, weakness, burning hands and feet and backache. These symptoms do not make sense in biomedical terms, as they are not linked in any clear etiological fashion. Weakness and giddiness may be related to anemia, but backache and burning hands and feet are not. It is only through considering the symptoms through an Ayurvedic frame of reference the symptom pattern becomes understandable. In this excerpt, RD describes some of these symptoms:

KTK: Is there some other symptom which is also there, with the discharge?

RD: Yes the backache happens because of this discharge and it is very severe. And there is burning of the hands and feet and sometimes in the eyes also, and during the summer time it becomes more. And there is lot of pain in the back.

KTK: And is there anything more?

RD: Giddiness.....whenever the white discharge is more then the giddiness happens. And I am weak..sluggish..

RD's description of "safed panni" is fairly typical of the way Garhwali women speak about the illness: its chronic nature; the perceived connection between the tubectomy operation and "safed panni", and the association with hard work and hot foods; and the association of weakness with the condition. Weakness is thought to be a consequence of having white discharge, and is greatly feared, because many people feel that the weakness can lead to death if untreated. The traditional birth attendant GB discussed the association between white discharge and weakness in this way:

KTK - If the woman has white discharge and she doesn't get any treatment or medicines then what can happen?

GB - She will become weak, and she can even die from this weakness.

KTK - Why does so much weakness happen?

GB - There is no blood formation and that is why the weakness happens.

KTK - What else does the woman suffer from?

GB - Her uterus might get swelling and there is a lot of backache too. Hands and feet have pain and burning too.

KTK- Why do they get burning in the hands and feet?

GB - When the blood is deficient then the burning happens.

As this brief excerpt shows, in GD's discussion of white discharge she frequently

spoke of the links between blood, white discharge and weakness:

KTK- So the white discharge is formed by the blood? And that is the reason behind the weakness?

GD - Yes, from 100 drops of the blood only one drop of the discharge is formed. So of course it will make the person weak to lose the discharge. Then the person has weakness. From that the person feels tired and also the backache. I also had the backache.

Here, the Ayurvedic cultural orientation towards the body in health and illness is clearly identifiable. This phrase: “from 100 drops of blood only one drop of discharge” is the way Ayurvedic sources speak about the formation of “dhatu” from blood, in both men and women. To Ayurvedic doctors, as well as to indigenous midwives in Garhwal, genital secretion in both men and women is precious substance, imbued with life-energy and power. When this bodily substance is lost, “weakness” develops, an all-pervasive debilitating state in which the suffering woman has lost the essence of good health.

In a focus group in Dehra Dun, a woman made these comments:

KTK - If the white discharge is too much then what happens later on?

W1 - In that situation the woman gets weak and her limbs don't function. The white water comes from the bones and when nothing will remain in the bones then there will a possibility of death.

The “weakness” associated with leukorrhea is so dangerous that it may lead on to

death if nothing is done to halt the process. In this segment, the ethnophysiological concept of transformation of bodily substance is also mentioned. According to the Ayurvedic concept of digestion, bone is transformed to marrow, and marrow to genital secretion. Women frequently discussed the back pain associated with leukorrhea as resulting from the bones dissolving and leaving the body as white discharge. I questioned GD about the back pain associated with leukorrhea:

KTK- Is the back pain from carrying heavy loads?

GB- No, it is not that. When blood is not forming properly and bone is not maintained then bone will begin to dissolve. So of course there will be pain in the back...From all bones melting and from the body the white discharge occurs and that is why the backache happens.

This was a commonly mentioned reason for back pain, that clearly links to Ayurvedic concepts about the digestion and transformation of bodily substances. Another common symptom among women suffering from leukorrhea is burning of the hands and feet. I asked GD about the reason for this:

KTK - Sometimes burning in the hands and feet occurs, why does that happen?

GD - That happens because of hot wind (Vata) in the body. It doesn't happen otherwise but occurs due to the hot wind. And then the blood becomes deficient.

According to Ayurvedic concepts about health, the body is in a state of hot/cold

balance, and a balance of the *tridoshas* (wind, bile, phlegm or *vata*, *pitta*, *kapha*). When the *tridoshas* are out of balance, the person will fall ill. The symptoms that he or she experiences will follow from the disorder of the particular bodily humour that is out of balance. In this segment, a woman at a medical camp is asked what will happen if she does not get treatment for her leukorrhea.

JD- I will become weaker and weaker. This safed panni is pouring out of me, then of course I will become very weak. What else can I expect? It is like my life and my blood. And then also my periods are coming in a funny way, starting and stopping, and I think that this might also be because of the safed panni, that it has gone wrong. And I noticed that this safed panni problem keeps coming and going, but it was not there before I had the operation. Only after that operation did the problem start.

The phrase “it is like my life and blood” highlights the deep symbolic connections between blood and genital secretions, and the preciousness of these secretions. Menstrual blood appears to have somewhat different cultural meanings in that it is seen as ritually polluting rather than pure. However, references to the menstrual period often accompany complaints about leukorrhea, as Nichter also noted in his study of leukorrhea as a “bodily idiom of distress”(Nichter 1981). Women often note changes in the pattern of their periods - in the excerpts presented two women complain that the periods are “starting and stopping”. Dizziness is another symptom that is commonly associated with leukorrhea. In many cultures, dizziness has a metaphorical significance of being “out of balance” or “out

of control". In this excerpt, I asked GD for an explanation of this symptom:

KTK - When there is a problem of white discharge, then dizziness also happens. So why does this happen?

GD - It is because the white water is formed by the blood and when that comes out then that causes weakness and that is the reason for the dizziness. Main thing is the weakness because of which the dizziness happens. From 100 drops of blood one drop of that water is formed.

I asked GD what would happen if the white discharge continued to occur:

GD - That is a very bad illness, because that discharge is formed from the blood. The blood after becoming bad becomes yellow discharge and continues to flow. The intestines become thin and the blood continues and then the person dies. In our village this has happened to my sister. She had the problem of white discharge and then she died. When the blood is converted into white water then it continues to flow. And I had one sister and her father in law's place was also in this village. And she continued with the white discharge for a long time and then she died.

Several of the TBAs as well as the Ayurvedic doctors spoke about different colours of discharge, and the significance of these colours. White discharge is usually thought of as the first stage of the illness. If the illness progresses, then the discharge becomes yellow, and then much later it may turn red. This is considered to be a highly dangerous condition.

GD There are different types of white discharge. Some may have thick discharge and some have thin discharge. And there is white discharge and also yellow discharge. And

then there is also red discharge. That is dangerous. It comes later on.

In a focus group discussion in Dehra Dun, one woman discussed the conditions under which a woman might develop leukorrhea (poor diet, overwork were identified).

She then went on to say:

W1 -And from here the illness begins and the name of this illness is "safed panni". Then the problem with this illness is that it is of many types such as white, red and yellow. So the discharge is of many types and when it takes a bad turn then it becomes red. First of all it is white, then yellow and lastly it become red.

KTK - Is the red one very dangerous?

W1 - This is the most fearsome type.

In his "Commentary on the Hindu Systems of Medicine", Wise discusses a condition known as *Prodoroh* (Wise 1860:381). The English translation he gives is Menorrhagia. However, from the description that follows it is clear that this class of diseases includes not only abnormal menstrual flow, but other conditions of abnormal discharge from the vagina. He relates the type of discharge to the particular humour that is deranged in the body. When phlegm is deranged in this disease the discharge is white and mucilageous; when bile is deranged the discharge is yellowish or blackish; when air is deranged the discharge is red and frothy. When all three humours are deranged, the discharge is the colour of honey mixed with ghee, and has a fetid smell. This is considered

to be the most dangerous form. *Prodoroh* is caused by bad food, improper mixture of food, sleeping during the day, drinking spirits, hot food, abortion, venery, by severe exercise, by grief, by carrying heavy weights. The illness produced is accompanied by fever and pain over body. The patient becomes weak, and suffers from giddiness, fainting, burning sensations and drowsiness (Wise 1860:381).

In the ethnographic material, the distinction between the three types of leukorrhea is often made by the women as well as by Ayurvedic practitioners. The different types of discharge - white, yellow and red, are all thought to have different consequences for health.

I asked GD, the TBA from Jaunpur, if she thought that the problem of leukorrhea could be associated with mental tension and worries. She replied, "*Safed panni* is the internal problem of the body...only because of this the problem increases..." She also did not feel that poor hygiene could cause leukorrhea. She did not feel that the problem could spread from a woman to her husband.

A common theme in much of the older women's discourse about leukorrhea is the changes that have occurred in the prevalence of the condition over time. The older

women, the traditional birth attendants, the Ayurvedic practitioners and the doctors all concurred that leukorrhea is much more prevalent now than it is was a generation ago, although each group has different ideas about why this might be so. In this interview segment, I am talking with M, a female NGO worker about this issue:

KTK - Why do you think there so much problem with leukorrhea nowadays?

M - The women of the older generation say that when they used to have children then they ate good food and also ate clarified butter and nowadays the women are not able to have these things. And that is why people's health is not alright and the older women used to eat good food and work hard yet remained healthy.

Environmental deterioration in the Garhwal region has progressed significantly over the past thirty years. Although laws are in place to prevent cutting of the forest, unscrupulous contractors continue to harvest trees from parts of Garhwal where laws are not easily enforceable. Also, local people are permitted to lop leafy branches from trees for firewood and fodder, and with increasing population pressure in Garhwal these lopping activities significantly affect the quality of the forest. Trees in many parts of Garhwal have a peculiar appearance, with a trunk denuded of branches up to nearly the top of the tree, with a leafy crown on the treetop. With the deterioration of the quality of the forest has come a progressive drying of the soil and reduction in available fresh water sources. Animal husbandry becomes difficult when water and fodder are scarce, and milk consumption in many parts of Garhwal appears to be declining. Older women frequently

made reference to the changes in the physical environment, saying that “in their day” food was abundant and they kept healthy despite hard work.

4.3 Leukorrhea: The Ayurvedic Practitioner’s Views

Traditional Ayurvedic concepts form a basis for an understanding of leukorrhea. Within the Ayurvedic worldview, there is a densely differentiated understanding of leukorrhea. In this interview with a traditional Ayurvedic doctor, (Vaidya J), he describes the causes of leukorrhea and how to avoid development of the condition.

KTK- Vaidyaji, in your opinion what is the main reason for the white discharge in women?

VJ - Calcium deficiency and living against nature.

When I probed for what he meant by living against nature, he replied by using a complicated metaphor that relates Ayurvedic concepts of the digestion and transformation of one bodily substance with sexual behaviour in men and women. The deep links between psyche and soma in Ayurvedic concepts of the body are apparent, as the Vaidya describes normal processes of bodily transformation of substance, and what happens when this process is deranged by improper living.

VJ - First of all, milk has to be made into curd and the curd is churned and after churning the ghee comes out. But if the curd is not churned properly then little ghee will come out and most of it will remain mixed in buttermilk. But after churning it comes out as a solid lump. In the same way is the mentality or the thought of the mind. If focused on sex talk, sex literature or films then the mind will be polluted and the person will get excited. From the excited consciousness the body will be churned and...then that will cause the Dhatu which normally pervades the whole body to accumulate instead of remaining mixed in the body like ghee mixed in milk. When churning of the body repeatedly occurs through sex talk or frequent intercourse, then whatever Dhatu essence is formed becomes white and starts to come out of the body. So that is one reason which is found in the girls and boys of the present days that they have too much of sex excitement and that becomes the reason for the white discharge.

This Ayurvedic practitioner links concepts about proper living with health, and links the development of leukorrhea to excesses in thought or behaviour, particularly sexual excesses. In this excerpt the Ayurvedic physiological concepts of transformation of bodily substances, and the deep psyche-soma linkages are articulated. The process whereby one *dhatu* is transformed into another is often described as “churning”. In this passage, the practitioner uses a metaphor of indigenous bodily physiology (the churning of the bodily essence causing loss of *dhatu*) to speak about sexual behaviour in modern times. The psyche-soma linkages in Ayurvedic thought are apparent, as “sex excitement” is seen as a reason for *dhatu* loss.

Vaidya J commented that leukorrhea has become much more common in modern times than it was a generation ago:

VJ - Nowadays this happens to nearly all the women. Only 5 percent women are free from it.

KTK - You mean it happens to 95 percent of women?

VJ - Because in modern times the way of living and eating all has gone wrong. Previously people had more restraint. Old women are not aware about the problem of white discharge - they never suffered from it. But the boys and girls of today run behind the excitement and have no restraint on themselves.

KTK - And in men the reasons for dhatu loss are the same as in women?

VJ - Same. Too much of sex and fickleness of mind.

Vaidya J discusses the concept of restraint in terms of the proper way of lead one's life, with attention to appropriate diet and in carefully controlled sexual behaviour. His discussion of modern times sounds like that of Swami Sivananda, who contrasts an idealized "former time" with modern times in which people do not maintain control over "dhatu" (Sivananda quoted in Alter 1997).

I pursued the issue of the symptoms that are associated with leukorrhea, to clarify the relationship between these symptoms and loss of *dhatu*.

KTK- One symptom of the dhatu imbalance is white discharge, are there other symptoms too?

VJ - Many symptoms arise due to excessive heat. Such as eating Lavang, garlic, egg, meat and too much of spices and also by eating too much of sour things.....In white discharge, burning in hands and feet is natural because Dhatu is weakening. Burning also occurs because of eating of sour and hot things. Gradually the capacity of the body decreases and the deficiency of the blood occurs and one always feel worried.

KTK - And one feels weakness?

VJ - Yes, a lot of weakness happens. The essence of the body comes out. Whatever we eat is converted into flesh, marrow and bones etc. But in the last dhatu is formed. Blood is body's jewel. If there is less blood then the mind functions less and the body becomes weak. Everything has to remain healthy. But now to satisfy the body's desire, boys and girls throw the essence like water and then they suffer from weakness.

KTK - Does loss of dhatu cause back pain too?

VJ - That means that slowly calcium is disappearing and because of that the bones become weak.

In this passage, the ethnophysiology of transformation of bodily substance is again apparent, and the consequence of *dhatu* loss - weakness - is articulated. *Dhatu* is seen as the body's essence, and weakness is seen as resulting from loss of that precious essence. Vaidya J speaks of "deficiency of the blood" as being related to white discharge, a concept echoed in the women's discourse about white discharge, and speaks of blood as "the body's jewel". He notes that "one always feels worried" when the capacity of the body decreases and the deficiency of the blood occurs.

The *vaidya* used the English word "calcium" in this sentence, and blends an allopathic concept of the bones weakening due to calcium loss with the explanation of back pain. Another allopathic concept emerged when I probed about the presence of fever as an associated symptom of leukorrhea:

KTK - When white discharge occurs, then does the patient suffer from fever?

VJ - Not usually. Only in the presence of infection and germs will fever occur.

The emergence of these allopathic concepts in Vaidya J's discussion of leukorrhea is echoed in contemporary writing about the Ayurvedic treatment for leukorrhea. In Bhagwan Dash's book Ayurvedic Treatment of Common Diseases, the author also blends allopathic discourse with more traditional Ayurvedic discourse in his discussion of the etiology and treatment of leukorrhea. (Dash 1974). He states that infection and poor hygiene are two of the common causes of leukorrhea, along with inappropriate (hot) diet and mental tension.

The Vaidya frequently discussed *dhatu* loss in terms of male and female sexuality. In further exploring the Vaidya's notions of the sexual aspect of *dhatu* loss, the Vaidya said:

VJ - And if during the meeting of man and woman if the woman doesn't feel satisfied, then also the problem of leukorrhea can occur. That will also cause dizziness and also hysteria and fainting can occur. Many girls become ill before marriage and suffer from hysteria and fainting but after marriage they become alright because they feel satisfied. And if someone doesn't feel satisfied or feels worried or couldn't get an appropriate husband, then she might suffer from these problems.

The link between sexuality and leukorrhea was frequently mentioned by health care practitioners, both Ayurvedic practitioners as well as by gynecologists. They most often

spoke about dhatu loss as being associated with a sense of sexual frustration. Since sexuality is a difficult topic to address with the women themselves, I do not have any direct references to sexuality in the interview material with Garhwali women. The traditional birth attendants are older women who are often quite frank about matters of sexuality - it would be interesting to explore this issue with them in follow-up research.

Dhatu loss in both men and women is generally perceived by Ayurvedic practitioners to have common roots, although the manifestations of the disorder may be quite different. When I asked Vaidya J about *dhatu* loss in men and women he replied:

KTK - Does that mean that the process of Dhatu formation is the same in men and women? Although in men and women the manifestations are different but fundamentally Dhatu is the same thing?

VJ - Yes, fundamentally they are the same...

In classical Ayurvedic works, the formation of *dhatu* is seen as the same in both men and women. One of the first detailed translations into English of Ayurvedic classical texts is a work entitled "Commentary on the Hindu System of Medicine" which was first published in 1860 by Thomas Wise (Wise 1860). In this text, Wise draws on several of the major Ayurvedic texts to produce a detailed description of physiology, pathology and treatment according to classical Ayurvedic principles. The origin of the "*dhatu*s" and their

evolution through successively purer forms into *sukra* (semen) is described. Loss of this *dhatu* may come about from injuries, anger, grief, fatigue, low spirits or fasting (Wise:1860:201). As this *dhatu* essence is lost the body becomes weaker, gradually losing its vital energy and drying up.

Gananath Obeyesekere, the Sri Lankan psychological anthropologist, writes:

“semen is the essence of human vitality and consequently females may suffer from semen loss. Often vaginal discharges or even natural vaginal moistness or the lubrication of the vagina due to sexual fantasies may be interpreted as semen loss..” (1978:p258)

Later Obeyesekere points out that mistranslations can easily occur when categories of “cultural illness” are mistaken for “epidemiological categories of disease”. Such mistranslations are more common when biomedically trained practitioners attempt to understand a complex culturally shaped illness like “*dhatu* loss”. Cultural illnesses such as “*dhatu* loss” are readily comprehensible to Ayurvedic practitioners, and diagnosis of the condition follows principles of Ayurvedic practice. When I asked Vaidya J how he diagnosed the disease, he replied:

VJ - In Ayurveda all the symptoms are given and also how the pulse runs, and slowly one gets experience and then one can tell about the disease. And many vaidyas can tell the

problem without touching the patient. They want to know about stool and urine. Ayurveda has eight limbs and by that only treatment is done.

Many Ayurvedic practitioners diagnose *dhatu* loss, both in women and in men, by an examination of the urine. According to Ayurvedic ethnoanatomy, the urinary and genital tracts are not physically separated. Therefore, “*dhatu*” or genital secretion can be lost in the urine. There are many words used for *dhatu*. In contemporary Sri Lanka, the word *prameha* is most often used, and this is the term Obeyesekere uses in this discussion of *dhatu* loss. The meaning of *prameha* in Ayurvedic source textbooks is somewhat obscure. In Bhishagratna's translation of the Susruta Samhita, *prameha* is translated as "diseases of the urinary tract" (Bhishagratna 1963) In the original Sanskrit versions, and in the Hindi versions the word for "urine" is used. Twenty different types of urinary abnormalities are described, including such recognizable conditions as blood in the urine, sugar in the urine, etc. The different types of *prameha* are classified both by a description of the appearance of the urine and according to whether they are caused by derangements of phlegm, bile or wind. In the sub-type of *prameha* known as *Sukrameha* (literally "semen urine") the urine resembles semen, or is found to be mixed with semen. *Sukrameha* is caused by a derangement of phlegm. Treatment of this condition includes the administration of Kakubha, red sandalwood and various powdered herbal preparations.

I interviewed a second Ayurvedic doctor, Vaidya M, at his clinic in a mid-size town of Garhwal. His formulation of leukorrhea is somewhat different from that of Vaidya J. He had this to say about the causes of leukorrhea:

KTK - What is the main reason for the white discharge?

VM - This is mainly due to the problem with dietary habits. In 80 percent of women the eating time is irregular, their breakfast, lunch and dinner has no fixed timing and so they suffer from constipation. And then the leukorrhea begins. So the first reason for the leukorrhea is dietary habits and constipation and the second is the animal attitude and improper living and the third thing which enters in it is mental tension which increases leukorrhea.

In Vaidya M's formulation of leukorrhea, improper diet is a major factor underlying the development of leukorrhea. He later explained to me a therapeutic diet for women suffering from leukorrhea, which involved strict adherence to a cooling diet, in order to counterbalance the "heaty" effects of the illness itself. I asked Vaidya M how *dhatu* is formed:

VM - In Ayurveda it is written that whatever we ate today will be converted into juices (rasa) in the stomach and then the nutrition of the body will begin. From the juice blood is formed on 2nd day and then marrow on 3rd day. And then on 4th day Meda is formed which feeds the whole body and then the bone on 5th day and then on 7th day semen is formed. So if we eat something today it is converted into dhatu on 7th day.

The Ayurvedic process of digestion of bodily substance is clearly outlined here,

with the addition of a rather specific time-frame to the process of *dhatu* formation. When I asked Vaidya M if the process of *dhatu* loss in men and women was similar, he replied that there are many differences in the process - however, in his explanation it was not clear what those essential difference were. He did comment:

VM- But in women leukorrhea doesn't make the bone weak only the joints are weakened. In this problem, a lot of flesh is lost and when the flesh is lost then the white discharge comes out and also mental faculties will become weak. And when more white water comes out then other illnesses may also develop which is known as uterus cancer.

I asked him about types of leukorrhea:

KTK - So one type of leukorrhea is white and another type is red and is there some other type too?

VM - One type is water, water only, second is white discharge and the third is red type and that is the most dangerous type. And the last type can destroy one's life and that is why people go for the treatment early.

Here Vaidya M echoes the theme about the different types of discharge about which the women and the traditional birth attendants had spoken. “Red leukorrhea” is considered to be the most dangerous, relating to an indigenous concept about *prodoroh*.

I asked Vaidya M about the association of sexuality and leukorrhea:

KTK - Now you mentioned that sexual desire in men can cause this problem, but what about for the woman...if she has sexual desire?

VM - If her desires are satisfied then there wouldn't be any problem. With unfulfilled desires white watering can happen but not leukorrhea. We Ayurvedic people keep different ash for different problems. And we assume that 80 percent of the white watering is normal and that it starts naturally and stops by itself.

This vaidya made a distinction between “white watering”, which he said was extremely common in women and a normal part of bodily functioning, and leukorrhea, which was a cause for concern.

KTK - And so is “white watering” not really a disease?

VM - It can become a disease if it is converted into white leukorrhea or red leukorrhea.

I asked about whether leukorrhea could be transferred from the woman to her husband at the time of intercourse.

KTK - If some woman has the problem of white leukorrhea and she is meeting her husband then will her husband be affected?

VM - Only if woman has red leukorrhea then husband can be affected.

KTK - How does it affect him?

VM- The heat of red leukorrhea will affect the man. But the effect doesn't happen immediately...it will manifest only after the age of 50 years.

This does not sound like a description of infection, but rather relates to an indigenous concept of hot/cold imbalance. I also asked Vaidya M if leukorrhea can occur

in older women:

VM - White discharge usually stops at the age of 50 years or so. This is nature's rule. But sometimes the white discharge might occur in older women because of the poor dietary habits. And aberration of mind can cause this..in one thousand only 5 women are absorbed in Ram and Rahim (names for God) but 995 have a different attitude....

Here Vaidya M reflects on the differences between days gone by, when people were more absorbed in the worship of God, and nowadays, when people are less likely to worship God. This was a recurrent theme in his conversation, whether discussing patterns of diet, worship, proper sexual behaviour or work. In this segment of our conversation, I pursue this theme:

KTK - Is there any difference in the occurrence of the leukorrhoea in women of the older generation and the present generation?

VM - The diet of modern times is mixed with fertilizers and it is predisposing a lot of patients to gas trouble, and that is causing leukorrhoea too. Other thing is modern science and modern fashion. Someone is shopping, someone is choosing fancy dress and modern science brought many things for external use. So many designs are in our mind... and they are affecting our society.

KTK - What about women's work?

VM - Yes, leukorrhoea can happen if the work is too much and diet is not appropriate and if they are given milk, ghee and fruits then that problem will never happen. But nowadays the diet is fashionable too - spicy and irritating.

The vaidya's description of leukorrhoea in former times and leukorrhoea in modern times is a theme that echoes in many of the interviews, particularly with the traditional

birth attendants. This excerpt is from an interview with AD, a TBA in Tehri-Garhwal.

KTK- Why do you think leukorrhea is so common these days?

AD- When I was a girl we ate a good diet, we ate mandwa (millet) and janghora. And nowadays everyone is eating wheat and rice, because that is the fashionable diet. And nowadays also pure ghee is not taken so much...and so of course without good food this problem will be more. Women also will be weak and not able to work so much.

Women who suffer from leukorrhea are very much concerned about the condition. Usually, the first person they confide in is a close friend or relative of a similar age, often a sister-in-law. Later they may reveal the problem to their mother-in-law or to the traditional birth attendant (*dai*) of the village. The process of receiving help for leukorrhea is a complex one, and will be explored in the next chapter.

CHAPTER FIVE

SEEKING TREATMENT FOR LEUKORRHEA

In this chapter, I present ethnographic material that highlights the process of seeking treatment for leukorrhea, from both the woman's perspective as well as from the practitioner's perspective. I discuss treatment-seeking at a village level, with traditional birth attendants and family members, as well as treatment-seeking within the formal health care system. I contrast the process of diagnosis and methods of treatment between Ayurvedic practitioners and gynecologists. Using Ayurvedic source material, I create a context of indigenous ways of conceptualizing the body to deepen the construction of the treatment-seeking process.

5.1 Seeking Treatment: First Steps

“*Safed panni*”, because it refers to an intimate experience of the body, is not an easy subject for women to discuss openly. Many of our NGO workers made the point that because of women’s “*sharm*” (shyness) many women would not admit initially to having the problem. In this segment of a conversation with a female NGO worker, I pursue this issue:

KTK: Do women speak to you about their problem of safed panni?

LD - Once I was teaching in village N, and at a meeting I asked from the women in that place about this problem. Women of that village were very hesitant and they couldn't speak and nobody would tell me in the meeting. I tried to enquire separately from each one of them and then they told me that yes, such a sickness was happening to many women....

Although “*safed panni*” is indeed an intimate subject, I have found that women do feel comfortable speaking about it directly with other women they are close to, and with the *dai*. With male family members or with health professionals of either sex, women discuss the illness but in a rather elliptical way. They may speak more about the associated symptoms of leukorrhea, such as giddiness, burning hands and feet, or weakness, and wait for the other party to “cue in” to the deeper dimensions of the condition. This “cueing” process was even evident in their discussions with health practitioners, as Nichter also

describes in his study of negotiation of illness meanings (Nichter 1981b).

Women who suffer from leukorrhea seek treatment from a variety of sources.

They seek treatment initially from someone well-known and trusted in the family, perhaps an older sister-in-law or mother-in-law, who often recommend a variety of home remedies. The village traditional birth attendant (*dai*) is frequently consulted for advice on treatment of leukorrhea, as she has considerable authority in women's health matters.

Because leukorrhea is seen as an illness of overheat, dietary change is usually advised both by family members and by the *dai*. Cooling foods are advised, along with avoidance of "heaty" foods such as ghee, meat, eggs and certain types of dal. When medicines are purchased for leukorrhea a popular first choice is glucose powder, readily available in small shops throughout Garhwal. Glucose has acquired a reputation for being a powerful cooling substance. Ayurvedic remedies that are available in local chemist shops are also popular among women in Garhwal. In this segment of a focus group discussion, women speak about home treatments for leukorrhea:

KTK - Is there any home remedy for leukorrhea?

W3: It's due to the heat...When strange (ajeeb) food is eaten then the heat develops in the body. If someone drinks lots of tea or if someone drinks jaggery tea then naturally she will develop heat. Go to the shop and bring glucose and it will give the coolness. The sugar and sweet crystals are cool.

KTK:...and the cool food should also be eaten?

W1: ..yes, cool food.

W2: It is when the work is more. When someone has no help then how her work will be done? She will do all of her work. She has to work out of helplessness. Then, even when suffering from the illness whatever she can do she does.

W1: And if she is no better then I tell her to go to the dispensary and buy a bottle of Ashokarisht.

W3: - Glucose bottle can be infused too, madamji.....

W1 - It can also be treated by medicine. With treatment will go withholding of certain food items.

In this discussion several important themes emerge. The linkages between overheat, overwork and leukorrhea are once again clearly apparent. The theme of health care seeking now emerges, as several women express thoughts on what the woman suffering from leukorrhea should do. Dietary precautions (eating cool food) are advised by other women in the village, particularly by the village *dai*. After that, women may go to the local chemist shop and order proprietary medicines for leukorrhea, of which there are many. Mostly manufactured by Ayurvedic pharmaceutical companies, the remedies for leukorrhea are attractively packaged. Liquid medicines are often red in colour, perhaps symbolizing the linkages between blood formation and leukorrhea. Medicines in tablet form are also commonly purchased. The chemists dispensing these medicines generally remind women that they will need to take these tablets over a long period of time and that they must be cautious about their diet. Local private practitioners (RMPs) will also often advise intravenous infusions of glucose, a treatment that has acquired powerful indigenous meanings as a cooling therapy. Sometimes the RMP will walk many kilometres to the

home of a woman who is extremely weak from the effects of “safed panni”, to perform a glucose infusion.

Leukorrhea is treated in many different ways - by *dais*, by Ayurvedic practitioners, and by biomedical practitioners. Whatever the treatment, the condition most often recurs. In this discussion, I speak about health-care seeking with RD, a woman that I saw in a medical camp:

KTK: Why does “safed panni” happen?

RD: It is a sickness... if after trying home remedies we are not better we go to the doctor and take some medicines and from that sometimes it becomes alright and after a little while it again begins.

KTK: Did you go to some doctor when you developed this problem? And where?

RD: I went to the Mussoorie Ayurvedic doctor and he gave me medicine for 15 days, and that made some difference.....but now it started again. Now more work began and that is why I didn't go back.

5.2 Treatment At the Village Level: Dais and RMPs

The traditional birth attendants (*dais*) perceive that leukorrhea ("*safed panni*") is a loss of a vital bodily fluid essential to health. The *dais* advocate dietary modifications such as avoidance of spicy foods, ghee, meat or eggs. In addition, many *dais* have a knowledge of local herbs, and they gather and prepare herbal remedies for women

suffering from this condition. Usually the first line of treatment is dietary advice.

Avoidance of “heaty” foods is advised, and special remedies are prepared, often by the *dai*, to be given to the woman. Other advice is also given - the woman should avoid too much exertion under the hot sun, and should take extra rest. In this segment of a conversation, UD, the TBA with whom I worked for many years, discusses an indigenous remedy for the condition:

KTK - Is there any special remedy that you prepare for women suffering from “safed panni”?

UD - Behnji, the woman should be asked to soak the rice from her fields and mix it with sugar, sweet crystals, cumin seeds and coriander and keep it in a pot full of water. And whenever she comes back from the fields to her house then she should drink the extract of it. This is good and cool for her and this is our medicine in Garhwal for the woman having “safed panni”

If the woman’s problem is not relieved she may seek treatment from a registered medical practitioner (RMP), who constitute one of the first lines of biomedical care to villagers in Garhwal. They work out of tiny, shop-front clinics and practice a mixture of biomedical, Ayurvedic and folk treatments.

The following is an excerpt from a field diary, that describes my visit to two RMPs near Mussoorie:

Today we visited two private practitioners who work in the village near the NGO headquarters. The first was an RMP who had come from Bengal 4 years ago, where he had worked as a compounder for an MBBS doctor for 5 years..this is the only training he has. Then he had an interview with the state licensing authorities and had been granted his RMP certificate.

Dr B was sitting in his clinic when we went to see him, with 3 patients sitting on a bench on one side of the room. He was drawing an injection up into a glass syringe. He wiped the needle with cotton soaked in Dettol and then disappeared into an adjoining room to give the shot (it was gentamycin for a fever patient). He told us that people generally demand quick relief from symptoms and for this reasons he is obliged to give "strong medicines". Dr B then wrapped up some small packets of tablets for another patient, which he dispensed with instructions and dietary advice (if you have fever then don't eat cold foods). He said that dietary advice is always part of the prescription.

We asked him what are the main health problems of women in the area and he said that leukorrhea ("*safed panni*") is the most commonly occurring complaint. Dr B said that women suffering from "*safed panni*" usually try home remedies first, which he said is usually cooling foods...then if they get no relief they come to him. He says that he usually treats them with Metronidazole (an antibiotic) or Tinidazole (an anti-fungal) tablets for three days. If they do not get better he gives them Ayurvedic remedies such as Femiplex or Lukol. He never examines them internally but treats them on the basis of reported symptoms only. He tells them to take a diet composed of cooling foods and to avoid spices. Sometimes, usually on patient request, he will infuse glucose for women who have leukorrhea. This is considered a powerful cooling therapy and Dr B states that is sometimes very effective in leukorrhea cases.

When asked about causation of leukorrhea he said that most likely it is due to infection ("infection"). The infection would be due to uncleanliness - lack of personal hygiene. It is not, in his opinion, spread venereally. He did not feel there could be other reasons for leukorrhea. He did not think it could be related to mental tension, although he said that many women who suffer from it are definitely tense - but that is because they are ill and worried about their condition. Women are most concerned that they will get increasingly weak if they do not get treatment for leukorrhea. In his experience, women who are treated with Metronidazole do improve. However, he also notes that the condition tends to be recurrent, and if it has been recurring he usually tells her to consult a lady doctor in Mussoorie. He notes that sometimes prolonged treatment of many months is required for leukorrhea treatment.

A woman came into the clinic with a prescription from a gynecologist in Mussoorie. Her complaint was leukorrhea and she had been prescribed Folic acid and B complex injections, alternating with Mecalvit, a calcium and vitamin combination injection. The patient brought a disposable syringe with her.

Dr B endorses a straightforward biomedical etiology for leukorrhea - he uses the English word "infection". Yet his therapeutic practice encompasses a range of treatments for leukorrhea that include other ways of conceptualizing the condition. He advocates a cooling diet, and he sometimes performs glucose infusions, a therapy with powerful cooling meanings, for women suffering from the problem.

Dr J

The second RMP we visited was a man named Dr J who had a similar small medical shop in the bazaar. His medicines were displayed on a bookshelf in his tiny consulting room - they were Ayurvedic, allopathic and homeopathic medicines. Dr J had taken several years of Homeopathic medical training and had also done some allopathic training with a doctor. He practises a mixture of the three types of medicine, according to the disease and patient preference. He says that the most common women's complaint is certainly leukorrhea. Usually he treats leukorrhea with Ayurvedic medicines, and sometimes with homeopathic medicines. He claims that homeopathic medicines are excellent for leukorrhea patients - one can obtain a 100% cure of leukorrhea with this form of medicine. However, one must take the medicines for three months continuously, and few patients are willing to persist that long. Another problem is that homeopathic tablets taste sweet. In this area people believe that if medicine is to be effective then it should taste bitter!

He also felt that the causative factor behind leukorrhea was a lack of personal hygiene. He did not feel leukorrhea is contagious. He also gives dietary advice and suggests avoidance of hot foods for leukorrhea patients. He treats patients on the basis of symptoms only and seldom refers them to any other doctor.

Dr J and Dr B work in the same small market town. Dr J's formulation of leukorrhea is somewhat different from Dr B's, in that Dr J advocates homeopathic treatment for leukorrhea. Both give similar dietary advice. Often, if a woman's condition has not improved under the treatment of one of these RMPs, she will consult the other. These men represent the first line of consultation outside the village for women suffering from leukorrhea in this area.

5.3 Treatment by Ayurvedic Practitioners

If the woman's condition has not been relieved by home remedies or by treatment by the dais and RMPs, she may seek out the services of an Ayurvedic practitioner, or Vaidya. Most small or midsize towns in Garhwal have a practising *vaidya*, who usually operate shop-front clinics in the marketplace - practitioners are almost always men. Within Ayurveda, there is a well-differentiated view of the body that includes a conception about illness due to loss of "*dhatu*", both in men and in women. Ayurvedic practitioners call this condition "*dhat rog*", and say that it is due to excess humoral heat in the body. They are frequently consulted for this problem by men, and have a variety of treatments for it. They note that there are a number of differences between "*dhat rog*" in men and women, but the underlying problem is similar - loss of a precious bodily fluid essential for

health. For women suffering from “*dhat rog*”, Ayurvedic remedies are most often recommended (Femiplex and Lukol were two commonly prescribed tablets). The practitioners also give dietary advice, advocating the avoidance of "heaty" foods such as ghee, eggs or meat. Cooling substances such as yoghurt and yellow or green vegetables are usually recommended. For the *vaidya*, leukorrhea is an illness idiom that is well recognized, and treated seriously.

In the two interviews I conducted with *vaidyas*, various forms of treatment are discussed. Here Vaidya J speaks about various commercially prepared remedies for leukorrhea, available at local chemist shops:

VJ - In Ayurveda there are many remedies for the white discharge. Either you can buy the readymade medicine or it can be prepared too. According to the proper formula medicine can be prepared. In white discharge which medicine is going to work I will tell you... Medicines are - Prayadantak Lukt, Ojasnuk churna(powder), Vadanti bhasm(ash), Ashokarist, Swarn Bhasm and so on.

Vaidya J also said that diet forms a very important part of the prescription:

VJ - I tell the women not to take sour food, chillies, spices, egg, meat etc. These foods are too heating for the body... and also tell them about how to take their medicines.

KTK - Do they have to take the medicines for a long time?

VJ - At least for three months.... In Ayurveda there are thousands of medicines for white discharge. The main ones I have already told you.

In this discussion with the second *vaidya* interviewed, Vaidya M, an approach to treatment is outlined that involves diet as well as behavioural restraint:

KTK- What kind of restraints should be followed.....?

VM - First of all spices should be stopped but green spices such as coriander, garlic with green leaf and ginger are allowed... And if you know that Nutmeg, cucumber, Dal Chini (cinnamon), Cardomom and Lavang (clove) are full of spices and so those things should not be taken... also the sleeping time should be fixed, neither early nor late. And eating time should be fixed too... Also, they should not have the mental tension such as the problem of debt or paying the house rent or the clothes for children. These mental tensions should be avoided during treatment.

Later in the interview, he elaborated on this:

KTK - So in your opinion, as far as treatment is concerned.....

VM - Diet, timing of sleep and food, and the third thing is that the family circumstances should not be a burden on them. Even if they get only salt and bread it should be taken with happy mood. But if with salt and bread some debtor knocks on their door then that thing will affect their mind. A man will not be affected so much as the woman will for things like that.

The relationship between mental tension and the development of leukorrhea is one that is frequently mentioned by women suffering from leukorrhea, by *dais* and by Ayurvedic practitioners. In a contemporary textbook of Ayurvedic remedies, Ayurvedic physician Bhagwan Dash says that leukorrhea and mental worry form a vicious circle, each

aggravating the other. In treatment, woman should keep free from worries, sleep well, avoid sexual intercourse, walk regularly, and use sanitary and hygienic measures (Dash 1974). In a study from rural western India by Patel et al, mental tension was mentioned by over 50% of women interviewed as a cause of leukorrhea (Patel et al 1994). Yet this important link is not a part of the dominant biomedical discourse about leukorrhea, in which leukorrhea is constructed as reproductive tract infection.

I asked Vaidya M for information about some of the specific remedies that are available for leukorrhea:

KTK- Beside that, are their medicines for this problem?

VM - There are many medicines and some of them can be easily made at home and used. And other medicines are in chemical pharmacy which can be prepared by the doctor only and only pharmacy can give such as Swarnabhasm, Makchitbhasam and Pradattak ras. That can't be given without pharmacy and doctor. And if you have give Pushyarog powder then one has to get the root of the plant, cut it, filter it and then give in honey. One is Satawari churna. Satawar is available in the market which can be bought and converted into powder and 5 gm of that can be given morning and evening with the milk. And there are many home remedies which can be prepared at home and then can be used to control various problems. Asudhanda root can be given morning and evening with milk. These medicines are given for a longer period of time in red leukorrhea, for lesser time in white discharge and for a shorter time in watery discharge. 5 gm of Satawari should be given morning and evening with milk but after food. Sudhanda should also be given in the same way but Pushpays powder should be taken morning and evening on empty stomach. And if these medicines are taken along with proper restraint in behaviour, then I guarantee that the disease will be completely controlled.

Ayurvedic prescriptions for leukorrhea usually include dietary restraint and restraint on behaviour. Behavioural restraint includes prohibitions about masturbation, and about excessive sexual intercourse, which are seen as wasteful of semen, “throwing away the essence”. The deep symbolic connections between food, sex, and health are apparent in both Vaidya M and Vaidya J’s discussion of leukorrhea. As James Edwards points out, in both Chinese and Indian tradition, there is a focus on the preservation of vital essence (“*jing*” in the Chinese tradition, “*dhatu*” in the Indian tradition), in order to maintain a good state of health (Edwards 1983).

In a contemporary text on Ayurvedic treatment for common diseases, Ayurvedic physician Dash describes leukorrhea as characterized by a whitish discharge from the female genital tract, which he describes as a common problem, often associated with infection (Dash 1974). It is considered to be caused by aggravation of *kapha dosa* (the phlegm humour). Women with leukorrhea also suffer from irritability, constipation and insomnia. He recommends vaginal douching, avoidance of heating foods, and taking areca nut (*supari*) after food. Avoiding tensions and worry, maintaining good hygiene and practising restraint in sexual behaviour is also part of his prescription. It is interesting that into this contemporary Ayurvedic discourse about leukorrhea two new concepts have emerged: that of infection and of hygiene. The biomedical discourse about leukorrhea

focuses almost exclusively on these concepts, and to some extent these ideas are now echoed in contemporary Ayurvedic texts.

5.4 Construction of Leukorrhea: Gynecologists' Voices

A few women suffering from leukorrhea in Garhwal do seek out allopathic treatment from a gynecologist. This is a much more difficult step for the woman to take, involving considerable expense to the family. However, it will be done if the woman continues to suffer from the condition, because family members feel quite alarmed by leukorrhea. It is considered a serious illness in Garhwal, one that will lead to weakness and possibly to premature death if left untreated. It is rare for a Garhwali woman to have the resources to travel to a city to see a gynecologist for this condition. However, gynecologists note that nearly one-third of their patients present with this complaint. The problem is widespread, not only in Garhwal but throughout South Asia.

Gynecologists tend to differ quite widely in their views on leukorrhea. Some of them take a very biomedical view of the problem, interpreting leukorrhea as either reproductive tract infection or cervical erosion, and treating it accordingly. Others

interpret leukorrhea in broader terms, including social and emotional factors as part of their analysis of the condition. For example, in Dr Kutty's formulation of leukorrhea, infection was only one of many possible causes for leukorrhea:

KTK: In your opinion, what percentage of women have infection as a cause of their vaginal discharge?

Dr K: Perhaps 20%, I would say... but this is local infection, such as yeast or trichomonas, and treatable with simple local applications. Sexually transmitted infection is very low, at least in this part of India. Local infection may be related to poor hygiene...these mountain women do not have good hygiene, especially at the times of their menses.

KTK: What do other women who complain of vaginal discharge suffer from?

Dr K: Well, perhaps 30% may have cervical erosions, and I treat them with electrocautery. As for the rest, there seems to be no specific cause... what I mean is, the women are simply concerned about the discharge that comes with hormonal fluctuations in the cycle, and they need reassurance. And in some women, there are sexual concerns that they have. Either they are feeling sexually frustrated or they are thinking about sexual matters a great deal.

KTK: Do you think that poor nutrition plays a role?

Dr K: Certainly, nutrition plays a role. Women with leukorrhea are prone to osteoporosis (so much childbearing and breastfeeding in these hill women, as you know), and I generally give them a course of calcium.¹

KTK: Do you use Ayurvedic medications in your treatment of leukorrhea?

Dr K: Yes...sometimes if the women have no obvious cause of leukorrhea, I might use them... or if the problem keeps recurring. I use preparations like Lukol or Femiplex - but these tablets must be given for three months or so, it is not a very rapid treatment...

¹Dr Kutty often used to prescribe calcium tablets as a treatment for leukorrhea. There is no specific biomedical connection between leukorrhea and calcium deficiency - yet, interestingly, calcium supplementation fits the folk etiology of "safed panni"...ie..that the bones are dissolving. Dr Kutty would say to the women that the tablets would make her bones stronger. I also began to use calcium as a treatment - it was inexpensive, available, without significant side-effects and a useful way of preventing osteoporosis.

Dr Kutty's formulation of leukorrhea includes biomedical concepts such as leukorrhea as infection; leukorrhea as cervical erosion, as well as more broad sociocultural concepts such as leukorrhea as a misperception of physiological discharge; and leukorrhea as related to sexual concerns. Younger gynecologists tend to be more biomedical in their approach, while gynecologists who have been out in practice for some time tend to see the condition in broader terms. Contrast Dr Kutty's formulation of leukorrhea with that of Dr Y, a much younger gynecologist who is in private practice in a midsize city of UP. Dr Y notes that 1/3 of all her patients have leukorrhea as a primary complaint, and more than half of all patients have leukorrhea as an associated complaint. This interview excerpt illustrates her construction of leukorrhea:

KTK- What is your approach to the patient with leukorrhea?

Dr Y- I give medical treatment usually - antibiotics like Ciprox or doxycycline, metrogl and also antifungal vaginal tablets... Mostly leukorrhea is due to mixed infection. In our situation it is not possible to determine the exact cause. No patient will be willing to pay for the laboratory swabs, so we don't do them. We treat empirically. I find that when I give a combined treatment like this, patients usually respond well. And the metrogl should be given for both partners. Sometimes the husband is not willing to take it, but I explain that the problem will come back if he does not also take the treatment.

KTK- Have you ever done vaginal cultures?

Dr Y- Early in my practice, when I was first practising I used to do them, but it was always a mixed culture report..so that was not too helpful. Now I never do them.

KTK- Do you find that some women, despite treatment, do return complaining of leukorrhea again?

Dr Y-(laughs) Oh, yes! It is an extremely persistent complaint! So we have to change the antibiotic, make sure the husband took his medicines, and then see. Usually while she is taking the medicines she is alright but the moment she stops it all comes back again.

In Dr Y's formulation, infection is seen as the prime cause for leukorrhea, even when vaginal cultures do not support her conclusion. When treatment of the woman does not help she re-treats with different antibiotics or adds treatment for the husband. The antibiotics she uses (metronidazole, doxycycline and ciprofloxacin) are the antibiotics most commonly recommended in the syndromic approach to the treatment of STIs. They are expensive and are each associated with a significant side-effect profile.

I probed for her thoughts about emotional or psychological factors affecting leukorrhea:

*KTK- Do you think mental stress and tension might be a predisposing factor?
Dr Y- I don't think it is just psychological. But it is true that some people complain more about this symptom. Often you find healthy women with just a very slight discharge who come running to complain about it!*

This gynecologist did not think that hygiene, nutritional cause, emotional problems, sexual concerns or overwork could play a role in the development of leukorrhea. She maintained a strictly biomedical interpretation of leukorrhea as RTI, and treated women primarily with antibiotic therapy. However, even she said that she thought that the prevalence of STIs was rare, and that the RTI in question was due to locally

occurring vaginal organisms. When asked about the associated symptoms that occur along with leukorrhea (burning hands and feet, dizziness, backache, etc) she replied:

Dr Y - Those symptoms are unrelated to leukorrhea. Burning hands and feet is related to a deficiency in B vitamins. And low back pain and abdominal pain and giddiness are also frequently reported as symptoms. But they are not usually related symptoms...they are common symptoms anyway.

Dr Y does not use Ayurvedic medicines for leukorrhea, but did say that she would sometimes suggest that a patient consult a homeopathic physician if allopathic treatments failed to relieve the condition.

Dr KS is a gynecologist who runs a thriving private practice in a mid-size city in northern U.P. While her formulation of leukorrhea also highlights an infectious etiology, her discussion of leukorrhea acknowledges the complexity of this condition in a much deeper way, avoiding the purely biomedical formulation of leukorrhea-as-infection offered by Dr Y.

KTK: What is your approach to the problem?

Dr S: I do a speculum examination to see if there is any problem with the cervix, and the endocervix. Some of them may be having a bit of infection, like trichomonas, and they may need treatment for that, and their partner also...And even if there is no sign of

infection or even signs of vaginitis, I will often give them a course of tinidazole...1 gram orally for both the partners.... Most of them are relieved. Then there are some patients whose infection is cleared out and everything seems fine, but still the patient subjectively feels that there is excess discharge. So for these patients, I reassure them and then I give some Ayurvedic herbal preparations, such as Lukol, Femiplex, M2 Tone. These are harmless medicines that the patient can take for a long time. Then I call the patient every six weeks or so, and every time I reassure her, that she is normal, that she is not having cancer or anything like that.

I probed Dr KS as to whether she frequently finds pathological findings on physical examination of the women:

Dr KS: I think 50% of the cases are not associated with any pathology. There is no apparent causes for it. There is no problem with the uterus, there is no cervical erosion, no vaginitis...(pauses) One more thing is there, that there are quite a number of myths associated with this problem..the women who complain of this problem are very tense, very anxious about this problem...Sometimes they have just a little bit of vaginal discharge, but the mother-in-law or the older women in the house will tell her that this is going to lead to sterility or this is going to lead to weakness or to more backache, or something like that.... I do a thorough gyne checkup, and if there is apparently no cause for it, then I give just reassurance. There is some psychological basis for it, you see...

Here she notes that women often report the symptom in the absence of identifiable underlying pathology. She perceives that the symptom has an underpinning of cultural meanings that likely affect reporting behaviour, although she is not clear about the significance of these meanings - she notes that “there are a number of myths associated with this problem”... We returned to the subject of treatment of women with leukorrhoea.

She mentioned that she often uses Ayurvedic drugs in her therapeutic approach:

KTK So if you can't see any organic basis for the problem, then you give Ayurvedic drugs...

Dr KS Yes...After all, how much Tinidazole can you give them? You can give just one course. Then after that I turn to Ayurvedic drugs, plus some vitamins or iron. Sometimes you find that the patient is having some calcium deficiency, or iron deficiency, she is feeding a child..so you treat that..and the moment they start feeling generally better, their weakness clears up a bit, then they start to feel generally better, and they pay less attention to their leukorrhea. And sometimes it is due to cervical erosion, and I treat that with cryo.

KTK: What about venereal diseases, such as gonorrhoea? Are these common?

Dr KS Not very common...

Here she describes an approach that acknowledges broader dimensions of the woman's life, and responds to a woman's life concerns without necessarily pathologizing her leukorrhea as a problem of genital infection. She treats the woman with nutritional supplements and reassurance, and slowly "they start to feel generally better and they pay less attention to their leukorrhea".

None of the gynecologists I interviewed thought that sexually transmitted infection was common. This construction of leukorrhea is a new one, introduced primarily through the international health discourse during the late 1980s and early 1990s.

The relationship between mental tension and leukorrhea is not one that gynecologists frequently endorse. Dr KS, however, had some interesting reflections on this subject:

*KTK Do you find that women under psychological stress suffer more from leukorrhea?
Dr KS Definitely. In fact, I sometimes give some of my patients anti-depressants or anti-anxiety drugs like Alprax, and this has affected the subjective complaint of leukorrhea - they do feel better. There are often patients where I was at a loss.. what more to do for them? Nothing would help their leukorrhea... And in this group I have tried anti-depressants, with some good results.*

In this passage, Dr KS illuminates the issue around “symptom perception” - that in women suffering from leukorrhea, it is not that the discharge necessarily gets worse, but rather that the women’s perceptions of their symptom are altered:

*KTK: Do you think that when women are depressed, their leukorrhea gets worse?
Dr KS: Well, it's not really that the symptom becomes worse.. it is their perception of the symptom. They start paying more heed to that particular symptom. When they are feeling depressed, they attribute all their feelings to this leukorrhea problemAnd of course some amount of leukorrhea is normal, that's what I keep telling them. They need repeated reassurance, and of course a proper checkup to exclude everything else...*

Another gynecologist who discussed the issue of symptom perception was Sister A, an Indian Christian nun who is trained as an obstetrician gynecologist. She has worked for twenty years in a hospital in rural Bihar, and then for three years in a village in Almora district in the hills of Kumaon.

Sister A: What I have noticed is that....when these women complain of leukorrhea, it is often the normal discharge that they are calling as leukorrhea.

KTK: Normal discharge...

Sister A: Yes, just the normal discharge..That may be a bit in excess... I am also really trying to find out - why do they worry about it? The amount of load that they take every day... I think that has an effect on their discharge. Another thing is that they feel the wetness more..they are more aware of it. In the cases that I have examined - I have not done microscopic examination though - I have found very little monilia or trichomonas infections...that I have found very little. No sign of infection really...just there is some clear mucousy discharge...

In the next passage, Sister A contrasts the way the women she treats talk about the symptoms associated with leukorrhea, and her own view of these symptoms:

Sister A: But the women tell me that because of this (leukorrhea) I am losing all my energy, and that they have back pain. And that back pain they relate to this discharge.

KTK: Yes, they do relate it to the discharge..

Sister A: But my conclusion about their back pain is related to their..uh..traditional life pattern that they lead..first of all, they have no rest during their pregnancy time...even til delivery they carry on their normal work that they do. During pregnancy and delivery there are a lot of changes that take place in the pelvis with relaxation of the ligaments, cartilage and all that. And it takes time for the body to recover that normal state..but these women have no rest, eleven days is the maximum time that they get after delivery. But even that time they have to wash her own clothes and the babies. Then she must take the heavy load again. So all her lumbosacral region and joints are put on stress after delivery. Then after one delivery another one comes very quickly. And the weight that they carry may be as much as three times more than their own body weight. All these are factors behind their back pain.

Sister A brings out familiar themes that have been echoed by the women themselves - the heavy burden of daily work, and frequent childbearing with little time to recover. She next describes her approach to treatment of leukorrhea:

KTk: What do you suggest for women complaining of leukorrhea?

Sister A: Well, one reason..uh..one conclusion I have had about leukorrhea, why it happens, is lack of personal hygiene. And the reason for that is that water supply is coming only from the nullah (stream). And there is no toilet, and no bathroom where they can bathe. So I tell them, you must find in your house, a small private place, in one corner of your house, then, you can wash yourself twice a day, morning and evening, using soap. And then I also give them gentian violet to apply. If there is some infection that will help. And there is a psychological value, also...Because according to their complaints yet I am not seeing so many findings...it is not appropriate to give these suppositories or any antibiotics.

Here Sister A describes a simple and inexpensive treatment (gentian violet) that was once a very common biomedical treatment for leukorrhea, and is still occasionally used. It has an anti-fungal effect, and also has rather dramatic purple colour that persists on the skin for a number of days. Sister A reflects on the placebo effect of this medication by mentioning the psychological value of using gentian violet. It is quite likely that many of the various treatments used in leukorrhea have strong placebo effects. Women speaking of leukorrhea describe a great variety of treatments, most of which are reported to be effective for some period of time. Then, almost inevitably, the condition recurs.

Sister A is a practitioner who maintains a balanced perspective on her role as biomedical practitioner. Rather than following Dr Y's approach of giving antibiotics (and more antibiotics) regardless of culture results or physical findings, Sister A notes that "according to their complaints yet I am not seeing so many findings..it is not appropriate

to give suppositories or any antibiotics”.

5.5 Gynecologists Speak about the Syndromic Approach to the Management of STIs

After I had begun to work actively to advocate for evaluation of the syndromic approach to the treatment of STIs, I wondered what Dr Kutty would think of the approach. I phoned her from my medical office in Canada in August 1999. I described the approach in detail, and asked what her opinion would be. She was adamantly opposed:

Dr K: But this is foolishness! Most women who complain of vaginal discharge have no infection whatsoever. Giving antibiotics without a proper examination - no, that must not be done. And many of those women may be having other problems-like cervical erosion, for example. And in so many others there is no specific problem to be found. How can you treat them with antibiotics?

Dr Kutty urged me to carry on with my efforts to get the approach re-evaluated. She said, just before I concluded my conversation, “This must be stopped!”

Another gynecologist with whom I worked for a number of years is Dr S. She retired from the Armed Forces medical services and has been practising as a doctor in the NGO sector for the past three years. The interview took place in March, 2000, by phone, when she was visiting relatives in Canada at the time. Dr S has been employed by several

international aid agencies in the course of her NGO work. Through these agencies she received training about the syndromic approach to the management of STIs. The interview was not taped, so a summary follows. Dr S said that she thought leukorrhea was mostly due to “local infection”. She mentioned that poor hygiene was a probable cause, and also said that in her experience women with retroverted uterus suffer much more from the condition. She usually treats women with a course of antibiotics, and often gives the husband antibiotics as well. When I worked with her, I didn’t remember her using oral antibiotics often, so I asked whether she had changed her approach to the treatment of leukorrhea. She said that she’d recently been on a training program organized by an international aid agency in Delhi, and they had emphasized the prevalence of reproductive tract infection among women in India. She had subsequently started to use antibiotics more frequently.

Dr J S is a well-respected gynecologist who has been practising in Dehra Dun for over 15 years. My husband and I had frequently referred patients to her over the years that we worked in the remote hill districts of Garhwal. I interviewed her by telephone in February, 2000. I briefly outlined the syndromic approach to the management of STIs in South Asian women. We discussed the relevance of the syndromic approach. In her opinion the syndromic approach is inappropriate. She said that in any woman with vaginal

discharge, proper history-taking and a physical examination are essential. She felt that only about 25% of women who present with vaginal discharge have infections and most of these infections are minor. STIs are not common, she said, but are increasing in frequency. Cervical erosions are also a cause of vaginal discharge, she said, and often need to be treated with electrocautery. She notes that often, women seem to be concerned about discharge that is simply physiological, and they are often very anxious about this. She feels that leukorrhea is frequently related to anxiety and stress. Sometimes, she feels that poor nutrition plays a role in the development of leukorrhea. Poor hygiene is another factor. If she is unable to find identifiable pathology, she reassures the woman, telling her not to be concerned about the symptom. Lately, she has been advising the use of lactic acid douches to change the pH of the vagina. She feels that the syndromic approach, if used in the context of South Asia, will lead to over-treatment with antibiotics and significant side-effects.

CHAPTER SIX

LISTENING TO THE LANGUAGE OF THE ORGANS

In this chapter I attempt to construct a thick description of leukorrhea in its social, cultural and political context. In the representation of culturally shaped illness, a key challenge is to bridge the micro/macro dichotomies, creating a link between the social and the physical bodies. How do individual bodies reflect the local moral worlds in which they live? In my rendering of leukorrhea, I attempt to create a representation of a culturally shaped illness that is at once critical, interpretive and existential. A critical analysis of leukorrhea draws the social and political context in which these women suffer; an interpretive analysis unpacks some of the meanings of leukorrhea; and an existential analysis looks at the way the symptoms of leukorrhea reflect metaphorical and archetypal images within the culture. I focus on the link between the subjective and the collective experience of suffering, making a contribution to the theoretical gap between the physical

body and the social world. Using semiotics as an analytical tool, I study the meaning of the symptoms of “*dhatu* loss”. Following this meaning-centred approach, I explore this condition from multiple perspectives. Using the tools of critical medical anthropology, I elucidate some of the underlying social and political meanings of the symptoms, and clarify how such symptoms become medicalized. I attempt to blend political economy perspectives with interpretive understandings, and to integrate historical and global perspectives with rich cultural analysis.

6.1 A Semiotic Analysis of the "Dhatu Loss" Conditions

Charles Pierce called semiotics the doctrine of signs, the latter being anything that "stands to somebody for something in some respect or capacity" (Pierce quoted in Danesi 1993:17). Semioticians study the nature of the sign and how it creates meaning within a particular cultural context. The field of health and illness is an area of particular interest to semioticians, since as Danesi says, "our body is as much symbol as substance" (Danesi 1993:18). Health constitutes a culturally specific code whose meaning is delineated by the particular signs within the code used to represent bodily processes. To understand bodily semiosis requires an analysis of the cultural codes that pattern the use of specific signs relating to bodily health and illness. Semiotic analysis leads us to a deeper understanding

of messages and meanings implied in culturally constructed signs. This form of meaning-centred approach to illness can yield subtle interpretations of densely layered symbolic illness categories. The signs that people use to represent their bodies in health and illness constitute the filter they use to understand the world (Singer 1980). If the meaning of the signs is obscure, the deep sub-text of illness will be mis-communicated.

A semiotic analysis of the "*dhatu* loss" disorders can yield clues to the deep metaphoric meanings of the illness. Semen, in Indian ethnophysiology, has three layers of meaning. It connotes the biomedical (seminal fluid); the corporeal (sexual secretion of both genders) and metaphysical components (vital energy). Ancient Ayurvedic texts describe semen as the most refined "*dhatu*" of the body, present in both males and females, the source of one's essential strength. A central concept in Indian ethnophysiology involves the making, storing and expenditure of semen. It takes forty days and forty drops of blood to make a drop of semen (some sources say sixty drops of blood, or even one hundred drops). Semen generates the "heat" necessary for body functions. The male has a centre of heat in the head, whereas the female's centre of heat is in the vagina. Sexual health depends both on proper ingestion of appropriate food and on appropriate utilization of semen. Semen "permeates body like oil in an almond, butter in milk, juice in raisins, scent in flowers, fire in an ember" (Sivananda quoted in Alter 1997). Wastage of semen,

through excess sexual activity or nocturnal emission is considered dangerous to health. Semen may be lost through eating what is wrong (prohibited foods and excess hot foods) and by doing what is wrong (inappropriate sexual activity; expressing anger; disrespect of elders).

Obeyesekere, the Sri Lankan psychological anthropologist, notes that the South Asian cultural preoccupation with *dhatu* loss has shaped symptoms of this group of illnesses which symbolically speak to deep cultural anxieties about loss of vital essence or energy in the body (Obeyesekere 1976). The bodily sign is the semen or vaginal discharge which is lost involuntarily from the body. This sign, in the Indian cultural context, has a deep metaphorical significance as the essence of life and health. The text of the message speaks of a loss of energy, vitality, strength. *Sukra* or "semen" in women leaves the vagina in the form of a whitish, odorless discharge. The illness (called *prameha* in Sri Lanka) is classified as a disease of "overheat" and is treated by Ayurvedic physicians with cooling medicines and diet. The discharge is often associated with "heaty" symptoms such as burning hands and feet, dizziness and joint pain. Patients usually complain that they are weak, their bodies are thin, and that when they work they become fatigued. Later, they admit that they are having white discharge. When they consult a Western doctor, they are often told that this is no disease. However, the Ayurvedic physicians point out that

according to Ayurveda it is a disease, and that the women suffering from it certainly feel that it is. If neglected, the Ayurvedic physicians said that all types of *prameha* may lead to general weakness and wasting of body. In popular Sinhalese newspapers, the largest number of advertisements for Ayurvedic medicines deal with the treatment of *prameha*.

Obeyesekere's description of the *prameha* diseases among Sri Lankan women sounds very similar to the way women in Garhwal speak about "*safed panni*". In Garhwal, as in Sri Lanka, popular treatments for *safed panni* in women and *dhat rog* in men are widely advertised on billboards and at chemist's shops. Healers of all backgrounds offer some form of treatment for these conditions. Women consult biomedical doctors, *vaidyas*, homeopaths, *ojhas*, RMPs, and *dais*, getting a different formulation of their condition and different treatment from each group. They seek out help pragmatically, trying a different type of practitioner if relief has not been obtained.

Many authors have noted that the "*dhatu* loss" disorders are closely associated with mental and emotional stress. Edwards, in his review article about the *dhatu* loss disorders proposed that they be termed "semen anxiety", suggesting that either the condition itself was causing anxiety, or that underlying emotional conflicts were being expressed through the body in the form of these disorders. Obeyesekere also noted the

association between mental tension and the appearance of this condition, and commented on the high frequency of associated stress-related symptoms that people suffering from "*dhatu* loss" disorders have. Mark Nichter, working in South India, described leukorrhea as a "bodily idiom of distress", a way of expressing deep anxieties through the physical body. Nichter notes that leukorrhea was one of the most common presenting complaints at an outpatient clinic in South Kanara District, Karnataka (Nichter 1981), an observation that Obeyesekere also affirms. Women suffering from leukorrhea often choose an Ayurvedic rather than allopathic practitioner to consult, as Ayurvedic practitioners validate the illness and recognize some of the psychosocial dimensions of the illness. Popular writers on Ayurvedic treatment comment that the patient is often in a state of psychological crisis or mental worry when she develops the disorder.

Symptoms of the "*dhatu* loss" disorders in both men and women appear to be shaped by an alteration in the individual's perception of what may be a normal physiological experience. For men who have social or emotional concerns, the normal experience of nocturnal seminal emission takes on a deeper dimension of meaning. The appearance of the urine is studied, and if appearance of the urine is slightly cloudy (which may be simply due to the presence of phosphate crystals), the man may conclude that he is losing semen through the urine.

Similarly, a woman may attribute deeper meaning to what may be simply physiological discharge or the mildly increased discharge due to colonization of the vaginal tract by non-pathogenic bacteria. There is a focus upon this symptom because of its deep cultural meanings. A woman in a cultural setting where views of the body are shaped by biomedicine would experience this symptom and ignore it, attributing no special meaning to it, unless it was accompanied by other "cue" symptoms (symptoms that trigger a chain of meaning) such as itching, abdominal pain, foul odour, etc. Yet in India the experience of vaginal discharge is in itself a "cue" symptom. The cultural meaning of leukorrhea is that this symptom (even of clear, non-irritating vaginal discharge) is significant and may have serious health consequences (*dhatu* loss leading to weakness and debility). When a woman is in a state of distress, be it due to emotional or physical stressors, there is a focussing of the psyche upon this symptom, and with this focus the perception of the symptom is further enhanced. The bodily symptom becomes a way of eloquently expressing her deep distress, the "language of the organs". It is a metonym that speaks of the ebbing away of life force, a gradual loss of power. Other bodily sensations also often appear in conjunction with leukorrhea - dizziness, burning hands and feet, backache, weakness. Each of these symptoms has a culturally shaped meaning also. Dizziness, in many parts of the world, is a symptom which has a metaphorical meaning of being out of control, out of balance. Burning hands and feet speaks metaphorically to a

sense of overheat in the body, linked to indigenous concepts of health as being a balance between hot and cold. The symptom of backache relates to Ayurvedic concepts of transformation of bodily substances from bone being to marrow, and marrow to genital secretions. In the ethnographic material, women often report that their backs have become weak because the bone is being dissolved and is flowing out of their bodies as genital secretions.

6.2 The Construction of Leukorrhea as a Bodily Idiom of Communication

How then may we construct leukorrhea in a way that does justice to the depth and complexity of this illness idiom? Margaret Lock writes that sickness is a form of communication - the language of the organs through which nature, society and culture speak simultaneously. We must study the way the body acts as an active communicative agent of the self, imbued with its own wisdom, intentionality and language. Therefore, we need to listen to the “language of the organs” in our construction of leukorrhea, creating a thick description of a finely nuanced illness idiom that allows many people to express many different ideas. We must construct leukorrhea as a bodily idiom of communication, in which many different messages may be conveyed through the symbolic language of the

body. In the following sections, I propose various forms of discourse about leukorrhea, and show how each of them can be true for some women, at some times. The illness idiom is revealed as richly layered metaphorical way of speaking about many dimensions of life.

To begin with, some deconstruction is necessary.

Is leukorrhea reproductive tract infection?

To this I would answer no. Women with leukorrhea may have reproductive tract infection, and also a woman who is experiencing a pathological discharge due to reproductive tract infection might interpret it as leukorrhea. But to make a straight translation that leukorrhea is reproductive tract infection is untenable. We fall into the fallacy of trying to make a simple category-to-category translation across an epistemological boundary. This does not work.

Is leukorrhea a psychosomatic illness?

To this I would also answer no. Illnesses that have no direct pathological correlates have been termed psychosomatic by biomedicine, and the process by which that illness manifests itself is termed somatization. Psychiatrists note that in somatization, the mind plays a dominant role in the shaping of bodily symptoms. Yet much of the work on somatization tends to reproduce Cartesian dualities through the creation of "psychosomatic" illness categories (as opposed to "real" or "organic" illness categories). A tendency to pathologize the body's expression of illness has also been evident throughout the literature on somatization, in which somatic disorders are thought of as a psychiatric disorder marked by failure of an individual to cope with the problems of daily living. If we apply this construction to leukorrhea we would call these women neurotic. Such a construction delegitimizes the illness and is thus demeaning to women. It thins out the depth of these women's experiences, and encourages us to look for psychiatric pigeonholes into which to place these women. This type of categorization of their illness is as misleading and wrong as leukorrhea as reproductive tract infection.

Is leukorrhea a somatic manifestation of depression?

The construction of leukorrhea as depression is also too flat... do we then replace antibiotics with antidepressants in our treatment approach? When leukorrhea is interpreted as depression, it is systematically transformed into the decontextualized signs and symptoms of biomedicine - depression as a clinical entity, a disease like any other that relates to lowered levels of a chemical (serotonin) in the brain. Once again, the rich interior dimensions of this illness idiom are not adequately represented.

A central theoretical debate in cross-cultural psychiatry, as in medical anthropology, lies in the conflict between the empiricist vs interpretivist paradigm, where interpretive approaches challenge the individual-centred and universalist models used within the empiricist framework of psychiatry (Yamamoto 1987; Bracken 1993; Hopper 1991). The clinical category of “depression” constructed in the disease model clearly lies within the empiricist paradigm. This is quite far from a more subtly layered interpretation of depressive states in broader social and cultural context coming from interpretivist paradigm, and certainly far from the anthropological construction of leukorrhea that I am attempting to create here.

The anthropological approach would be to describe leukorrhea as a culturally shaped illness, and to explore ways in which the condition is linked to broader cultural, social and emotional concerns. Leukorrhea has similarities to “bodily idioms of distress” in other cultural contexts, such as culturally shaped illness called *nervios* (nerves, nevra). *Nervios* is characterized by a variety of symptoms including dizziness, shortness of breath, and anxiety. It has been described in Latin America (Low 1985), among Greek women in Montreal (Dunk 1988), in eastern Kentucky (van Schaik 1989) among Latino populations in inner city US (Guarnaccia et al 1989), and in rural Newfoundland (Davis 1989). Clinically, *nervios* is thought of as a psychosomatic illness. Anthropologists reframe this analysis by describing the specific cultural meanings associated with *nervios*, and showing the links between the incidence of *nervios* and structural inequalities in society (van Schaik 1989). *Nervios* provides a socially sanctioned way of expressing distress, and the illness engages family, friends and practitioners in a quest for relief of suffering. *Nervios*, expressed in the polysemic language of natural symbols, becomes a bridging concept between mind and body (Low 1985). *Nervios* can be empowering, a form of resistance, along with spirit possession and related genres of cultural performance (Guarnaccia 1989: Low 1985). Similarly, when women suffer from leukorrhea, they may also be participating in an active form of dissent and of communication, their bodies “lively participants in the social order” (Lock 1993:142).

Good's construction of "heart distress" in Iran has been influential in shaping the field of bodily idioms of distress (Good 1977). Popular medicine constructs illness configurations that articulate conflicts and stresses peculiar to that community. Popular illness categories are linked with words, images and metaphors that condense around specific events, and can be described using "semantic illness networks" to describe the illness in its particular cultural context. In my construction of leukorrhea, I draw on Good's meaning-centred interpretive approach to elucidate some of the layered meanings leukorrhea has for women in Garhwal.

Does leukorrhea represent a discourse of distress... a protest about a life of hardship, physical ill health and poor nutrition?

The ethnographic work brings this forth in a clear way. Women in Garhwal perform incredibly hard physical work, rising at four in the morning to start their day, and working until late at night. One woman, in speaking about women's experiences of suffering from leukorrhea, said: "*Suppose if someone doesn't have anyone to help and she has to do all the work by herself...because she has to take care of the animals, fields and children, then she will fall sick, definitely...*" Another woman: "*They do so much*

work during the day and don't get time to rest and so the illness sits inside them..."

Many women mentioned poor diet as a factor in the development of the illness: *"After the delivery she starts working soon and for food she gets only kichri (rice and dal) and rice water.."*

Leukorrhea is considered a serious illness in Garhwal, and mothers-in-law and husbands of women who suffer from the condition become alarmed when a woman develops the condition. This often becomes a time when the woman's nearest relatives do stop to consider the woman's health and well-being. The woman is usually taken for consultation to some form of healer, and often, the woman is given better food and more rest. The gynecologist with whom I worked in my early years in Garhwal always insisted on seeing the husband and mother-in-law of the suffering woman. She would berate them quite ferociously, telling them that they had not been looking after the woman properly, and then would give detailed advice on how to improve her nutrition and general physical health.

Frankenburg speaks of "sickness as cultural performance", in which illness episodes are acted out in ways which draw attention to the sufferer and help to mobilize an acknowledgment of the suffering (Frankenburg 1986). Calling the illness "cultural

performance" is not to suggest that the sufferer acts in a deliberate, conscious way. On the contrary, "bodily idioms of distress" seem to arise from deep levels of the unconscious mind, where inchoate but powerful feelings of anger, frustration and helplessness are shaped symbolically into concrete and often dramatic manifestations of illness. Traditional healing rituals often involve the "cultural framing" of these inchoate feelings of distress, acknowledging their social and symbolic meaning (Devisch 1985; Herzfeld 1986).

Bodily idioms of distress may take the form of spirit possession, another form of cultural performance. In Malaysia, Ong analyzes episodes of young women becoming possessed by spirits while at work in multinational factories. He suggests that these women are responding to violations of their sense of self, difficult work conditions and the stresses of modernization (Ong 1988).

Does leukorrhea represent a discourse of resistance, a protest against unjust social and political realities?

Elements of the ethnography highlight areas of injustice in the lives of the women who suffer from leukorrhea. India's national family planning program has been a source of fear and resentment for socially disadvantaged people since its inception. Although the

most coercive elements of the family planning program have been eliminated, women still regard government family planning programs with deep distrust. In Garhwal, family planning programs still maintain a strong focus on female tubal ligation. Reversible methods of contraception, which many women would prefer, are not easily available. Male methods of contraception such as vasectomy are almost never chosen. Female tubal ligation is most often performed under primitive conditions in government health subcentres. Women receive only local anesthetic for the surgery, have little or no follow-up care, and often have to walk back many kilometers to their villages following the surgery. It is perhaps not surprising that for many women, the “operation” is regarded as a significant cause of leukorrhea: *“And I noticed that this safed panni problem keeps coming and going, but it was not there before I had the operation. Only after that operation did the problem start....”* Another woman said: *“By the operation, some women become weak and then the problem of white discharge becomes more..”*

Other women, when speaking about leukorrhea, describe conditions of social oppression, sometimes by uncaring or alcoholic husbands and sometimes by domineering mothers-in-law. For others, the sheer workload of daily living represents an oppressive burden. The stresses of exhausting work and multiple family responsibilities, often combined with poor physical health, can lead to tremendous emotional stress.

Many authors have noted a link between mental stress and the *dhatu* loss disorders. Edwards noted the high level of anxiety that sufferers from semen loss have, and suggested that the condition may be a somatic manifestation of underlying emotional conflicts (Edwards 1983). Obeyesekere also noted the association between mental tension and the appearance of the illness, and commented on the high frequency of associated stress-related symptoms that both men and women suffering from "*dhatu* loss" disorders have. Mark Nichter noted that leukorrhea was one of the most common presenting complaints at an outpatient clinic in South India (Nichter 1981). He described leukorrhea as a "bodily idiom of distress", a way of expressing deep anxieties through the physical body. For those in structurally powerless situations, the body may be the only available way of expressing dissent.

Ethnographic work by Kuo and Kleinman on neurasthenia in China draws a detailed portrait of women and men traumatized by years of revolution, uncertainty and oppression (Kuo and Kleinman 1989). Symptoms of neurasthenia such as weakness, exhaustion and dizziness are metaphors which speak of oppression and loss of control.

Does leukorrhea represent a communication about women's sexuality?

In the ethnographic accounts, women did not speak of a link between sexuality and leukorrhea, but this is hardly surprising since sexuality is not a topic that can be openly discussed by women. Much of the ethnographic material that I have presented on leukorrhea was drawn from clinical interviews or health needs assessment interviews, where a discussion of sexuality would have been inappropriate. Further research involving in-depth interviews would help to clarify this association. In Nichter's study, female interviewers found that 14 out of 29 women complaining of leukorrhea did have sexual concerns (Nichter 1981).

Certainly, in the accounts by the Ayurvedic practitioners, sexual concerns were perceived to be a key factor in the etiology of leukorrhea: *"And if during the meeting of man and woman, if the woman doesn't feel satisfied, then also the problem of leukorrhea can occur. That will also cause dizziness and also hysteria and fainting can occur."*

Vaidya J commented that improper sexual behaviour was a cause of leukorrhea:

"Previously people had more restraint. But now the boys and girls of today run behind the excitement and have no restraint on themselves." This practitioner also commented that when precious genital secretions is unwisely used, illness will follow: *"But now to*

satisfy the body's desire, boys and girls throw the essence like water and then they suffer from weakness."

In South Asia, sexuality is deeply connected with ancient understandings about the healthy body. According to the Susruta Samhita, one of the most comprehensive of the ancient Ayurvedic texts, semen or vital essence is the life energy and exists in both sexes (Edwards 1983). Semen generates the "heat" necessary for body functions. The male has a centre of heat in the head and the female has this centre in the vagina. Sexual health depends both on proper ingestion of appropriate food as well as on appropriate utilization of genital secretions. "*Dhatu* loss" is also a discourse about sexuality. Genital secretions, both in males and females, are imbued with highly charged sexual meanings. EV Daniel, the Sri Lankan anthropologist, notes that the sexual fluid of both males and females is called *intiriam* (Daniel 1984:78). During sexual intercourse a controlled mixing of these secretions takes place, and this mixture forms a fetus. To achieve sexual well being, there are many indigenous concerns regarding optimal blending of the sexual fluids in order to achieve a state of equilibrium. Many things may influence this blending - compatible horoscopes, and choice of right time and place for sexual union.

Sudhir Kakar, the influential Indian psychiatrist, has written extensively on "*dhatu* loss" and how this is linked to concepts of sexuality (Kakar 1990). Males are robbed of sexual energy during intercourse because they lose semen; women absorb the male's sexual energy during intercourse and gain energy and vitality. Women are often portrayed as seductive and having a greater appetite for sex than men, since their health is enhanced by absorbing male sexual fluid. In a detailed anthropological study of the sexual life of Himalayan villagers, Kapur also notes this focus on the sexual power of women (Kapur 1987). In sharp contrast to this image of female sexuality, Kakar notes that women in South Asia are also often portrayed as passive providers of male sexual satisfaction, a role that may lead to considerable frustration among women (Kakar 1990).

Is leukorrhea an idiom of communication about personal and social identity?

Among men, concerns about "*dhatu* loss" often are associated with anxiety-provoking events such as changes in status, job loss, or upcoming marriage. Women who suffer from leukorrhea also often connect its onset temporally with a stressful life-changing event, such as the death of a husband, surgery, loss of social status or the onset of a serious health crisis.

The symptom of loss of genital secretions seems to be a particularly appropriate metaphor for concerns around identity. The Hindu concept of the body in ceaseless flux with its environment is a body which may face a crisis of boundedness. A body losing "*dhatu*" is a body which is in dangerous flux (Cohen quoted in Alter 1997). When essential boundaries dissolve and essential energy leaks away, dissolution of individual identity becomes a threat.

Is leukorrhea a moral commentary, a way of speaking about the proper way to live one's life, an idiom to speak about fears of a life not being well lived?

There are many moral messages associated with "*dhatu* loss". Preservation of one's *dhatu* is linked with proper behaviour and the idea of a good life. Loss of *dhatu* may imply that one is transgressing moral codes of behaviour; and indeed, those who suffer from the *dhatu* loss disorders often experience feelings of intense guilt. Those who aspire to lead an ideal life must adhere to a proper type of diet, must control their sexual behaviour, and must follow religious codes and customs. One practitioner, Vaidya J, when asked what causes leukorrhea, replied: "*Too much of sex and fickleness of mind.*" Vaidya M commented: "*And aberration of mind can cause this (leukorrhea)... in one*

thousand only 5 women are absorbed in Ram and Rahim (names for God) but 995 have a different attitude....”

“*Dhatu* loss” may occur through eating what is wrong (prohibited foods, or excessively hot foods) and also by doing what is wrong. For example, inappropriate sexual activity such as masturbation, extramarital sex, or intercaste marriage can all lead to depletion of *dhatu*. Inappropriate social behaviour such as expressing anger or disrespect of elders can result in debility and weakness. Thus, genital secretion in men and women has deep metonymic meanings that link to both sexual and social mores in the society.

Joseph Alter, writing about the contemporary discourse on semen loss in India, notes that the celibate male (the Brahmacharya) is seen as a cultural ideal in Hindu life (Alter 1997). The Brahmacharya retains perfect control over his semen, epitomizing an inclusive way of life based on self-discipline and control. Alter suggests that in contemporary India, concepts of semen loss have become transformed into a counterhegemonic discourse within a 20th century yoga renaissance movement. The male body is experienced as threatened by a pathogenic modernity. Modern day yogis, such as Swami Sivananda, seek to reclaim the body through a public and pervasive discourse on seminal retention (Sivananda in Alter 1997).

Is leukorrhea a discourse about modernity, and the rapid changes which are transforming the lives of Indian people at all levels of society?

In the ethnographic accounts, women often made comparisons about “their times” and former times, recalling an idealized period when women had good food to eat, who worked hard but did not fall ill. This traditional birth attendant in Garhwal, when asked why leukorrhea is so common nowadays, said: *“When I was a girl we ate a good diet, we ate mandwa (millet) and janghora (barley). And nowadays everyone is eating wheat and rice, because that is the fashionable diet. And nowadays also pure ghee is not taken so much...and so of course without good food this problem will be more.”* A young woman said: *“The woman of the older generation say that when they used to have children then they ate good food....and that is why the health of (the women of today) is not alright... and the older women used to eat good food and work hard yet remained healthy.”* *more.”* Vaidya M was asked whether leukorrhea occurred more frequently nowadays than in former times. He replied: *“The diet of modern times is mixed with fertilizers and it is predisposing a lot of patients to gas trouble, and that is causing leukorrhea too. Other thing is modern science and modern fashion. Someone is shopping, someone is*

choosing fancy dress and modern science brought many things. ..So many designs are in the mind... and they are affecting our society..."

In these ethnographic accounts, the *vaidyas* speak about cultural ideals and the proper way to lead one's life. As the guardians of traditional culture, the *vaidyas* reflect on the way that moral attitudes are changing and the dangers that these changes pose to society. Like Swami Sivananda, Vaidya M and Vaidya J are concerned that a pathogenic modernity is eroding traditional cultural values. For Vaidya M and Vaidya J, leukorrhea becomes a moral commentary, a way of describing what may happen when traditional codes of conduct are not properly followed.

How does leukorrhea speak to us about human suffering and its representation?

Illness always has multilayered meanings. When people face inexplicable hardships in life, or are faced by moral dilemmas they need to work through, illness becomes a medium for communication, a way of expressing deep feelings about their lives through the physical body. The messages conveyed through illness are encoded in complex ways, linked to the larger social, political and cosmic order, and often only others who share the life-world of the sufferer in some way will be able to glimpse the depths of these meanings.

Leukorrhea as a culturally shaped illness, is an expression of suffering, whether it be due to the suffering of physical unwellness or the suffering due to psychic or emotional distress.

According to the naturalizing discourse of biomedicine, the woman's suffering is located in the physical body, specifically in the reproductive tract, and she is treated with allopathic medicine, often antibiotics. How well does this answer her suffering? The sick person disappears into the part of the body that is taken to be diseased. Suffering as human experience thus becomes pathologized, as the wider dimensions of suffering are thinned out.

Young has written detailed accounts of the way in which the victim of political violence is transformed into a patient suffering from post-traumatic stress disorder (Young 1989). This transformation of suffering from the moral domain to the physical, through the biomedical diagnostic process, ends up by delegitimizing the patient's suffering as moral commentary (Kleinman 1991). Similarly, Ware's work on chronic fatigue syndrome shows how those who suffer from this condition are systematically delegitimized, their suffering unacknowledged because their illness is not "real" (Ware 1992). Suffering transformed into media images, pathologized as illness, or delegitimized as

"psychosomatic" loses something of the irreducible existential quality of illness (Kleinman 1995). In traditional Chinese and Western cultures, the idea of suffering was imbued with teleological significance, linked with the idea of transcendence. Ethnographic work done in rural Greece shows how suffering is valued as moral experience (Seremetakis 1991). These deep moral and spiritual meanings disappear when suffering is reshaped as a disease or as "stress".

The problem of suffering has not been well answered by critical medical anthropology either. DiGiacomo argues that critical medical anthropology too often yields a moral economy of illness that silences the voices of the afflicted. The sick person disappears into class analysis, in the same way that in biomedicine the sick person disappears into the diseased body part (DiGiacomo 1992). It is important to resist simplistic formulations of culturally shaped illness, either through the naturalizing discourse of biomedicine or the sociopolitical discourse of critical anthropology, in order to emerge with a multi-layered perspective on the condition that more fully represents the depth of the woman's experience.

6.7 Leukorrhea from Multiple Interpretive Stances

Emerging from the ethnographic work is a view of the multiple interpretive stances and points of view that different groups of people hold regarding leukorrhea. For the women themselves, leukorrhea may be a discourse of distress or resistance, or a way of communicating about sexual or social concerns. For the *vaidya*, leukorrhea is a moral commentary on society, a way of speaking about improper living and inappropriate behaviour, as well as a way of speaking about the pitfalls and dangers of modernity. For international health experts, leukorrhea represents reproductive tract infection and thus a situation of clinical risk.

For some groups, negotiating the meaning of leukorrhea has been a difficult journey. Indian health activists have found themselves in a complex position with respect to leukorrhea. In biomedical discourse about women's bodies, women's unexplained gynecological symptoms have often been discounted as "neurosis". Within the women's health movement there has been a strong movement to counter this construction of women's bodies by legitimizing gynecological symptoms as "real" disease as opposed to psychosomatic illness. In India, health activists have worked hard to listen to women across India speaking about their health. They have heard women say that they are

unwell, they are suffering, and that the illness they suffer from is leukorrhea. When Bang's study came out suggesting that women have a high prevalence of RTI, many health activists I worked with were initially sceptical. Could it really be that women have so many diseases, so many infections that could be sexually transmitted? Yet women clearly were saying that leukorrhea was a debilitating problem for them, and now a research paper had been published by an Indian gynecologist, in *The Lancet*, saying that leukorrhea is reproductive tract infection. So, somewhat reluctantly in many cases, the health activists began to advocate for more comprehensive care for reproductive tract infection at the village level. As the critique against the biomedical construction of women's bodies begins to mount, one hopes that health activists will be some of the first to advocate an approach that acknowledges leukorrhea as an idiom of communication rather than a manifestation of a diseased and defective body.

Leukorrhea thus becomes a deeply layered and nuanced mode of communication through the body, an illness with extraordinary dimensions. This illness allows women to speak in situations where they cannot always be clearly heard, when women are experiencing physical or social oppression, or when they wish to communicate something that cannot be expressed in words. Leukorrhea is also an idiom of communication for practitioners, although in a different way. For the Ayurvedic practitioners, leukorrhea

represents a powerful way to speak about social change, a way of reflecting on a rapidly changing society.. Their interpretations of leukorrhea may also represent an expression of social power over women, as they link the condition with behaviour of which they disapprove. The metaphorical and archetypal meanings of the illness, embedded within the cosmology of the culture, lend a depth and richness to the illness idiom that allows the transmission of a spectrum of different cultural messages.

Among women suffering from leukorrhea in India, the woman's body becomes both a form of expression and an arena for resistance, a way of protesting against an unjust social or moral order. Symbolically reflecting disharmony in her social world, the woman suffering from leukorrhea enacts a complex cultural performance of resistance. The symptoms she suffers from have metaphorical meanings within her life-world - the burning hands and feet speaks of "overheat"; the dizziness speaks of "imbalance". Finally the cardinal symptom of leukorrhea is itself a multivocal symbol, which may speak of a loss of vital energy, of powerlessness; or of a sexuality repressed or denied.

CHAPTER SEVEN

THE MEDICALIZATION OF LEUKORRHEA

Fundamental to biomedical thinking is the assumption that diseases are universal biological or psychophysiological entities that correspond to underlying somatic disturbances in the body. Clinical medicine is grounded in a natural science view of the relationship between language, biology and experience (Good and Good 1981), a distinctive medical hermeneutic that assumes an ordered relationship between symptoms (what patients say) and signs (what can be measured by clinical or laboratory tests). This process of diagnosis can produce significant distortions when symptoms do not have clear underlying somatic referents. Culturally shaped illnesses, marked by vague and diffuse symptoms, are often shaped by the power of biomedical discourse into categories of disease. In this chapter, I present a grounded discussion of the way in which leukorrhea has been medicalized in the South Asian context, exploring this process of distortion across epistemological categories

and focussing particularly on ways that the clinical language of biomedicine powerfully shapes a culturally constructed view of the body. The implications of this process of medicalization are discussed with reference to public health programs in South Asia. The syndromic approach to the treatment of STIs is critiqued, with an analysis of the weaknesses of the scientific basis of the approach. I conclude with a historical analysis of public health programs in South Asia, drawing parallels between the syndromic approach to the management of STIs and to other public health programs of surveillance and control in colonial India.

7.1. “Dhatu Loss” through the Eyes of the Physician

Morris Carstairs was the first to write a sustained description of the “dhatu loss” disorders among men. In his narrative account of his encounters with men suffering from dhatu loss, he had no medical framework within which to understand these complaints, and for many years, as he writes, he “sought and fancied” that he had found explanatory physical conditions to account for the men’s complaints (Carstairs 1958). He treated these men for vitamin deficiency, malnutrition, anemia, malaria, dysentery, intestinal parasites, and TB. Two thirds of the patients that he encountered either suffered from “semen loss” or took measures to prevent it. Only years later did he conclude that the men’s complaints were better understood through an anthropological rather than biomedical lens, and began to write

about the many meanings that “semen loss” has for men in rural Rajasthan. My own experience in Garhwal with women suffering from leukorrhea has striking similarities to Carstairs’ experience. For years, working in a biomedical paradigm, I tried to fit these women into a variety of disease categories. Treatments of many types would help for a time - but then the condition would recur. It was only some years later, when I began my study of anthropology, that I became aware that culture shapes the manifestation of illness in diverse ways. I began to understand that I had been medicalizing an illness that had social and cultural, rather than biomedical, dimensions.

This process of medicalization often results in the reinterpretation of what may actually be socially significant signs into pathological signs. Taussig suggests that the process of medicalization reifies what is essentially an active form of protest into a passive act of breakdown (Taussig 1980). An ethnographic study of *nervos* in a poor shantytown in Brazil shows that *nervos* is a polysemic phenomenon which can become an explanation for tiredness, headaches, resentment - and hunger (Scheper-Hughes 1988). Scheper-Hughes notes that when people suffering from this illness seek medical help, the process of diagnosis both transforms and mystifies the source of their suffering. Many of the symptoms they suffer from have hunger as an underlying cause. When hunger is represented as illness, the treatment offered by biomedical practitioners is an expensive tonic. Scheper-Hughes argues that this

process of medicalization mystifies and isolates the experience of misery. Kleinman and Good's work on culture and depression raises the concern that psychiatric treatment of social and cultural distress serves to medicate the patient rather than address the social basis of the illness (Kleinman and Good 1985). Among Greek women in Montreal suffering "nerves", Dunk shows that physicians most commonly treat these women by using drugs, without seeing the problem in broader perspective (Dunk 1989). A "critical" analysis of bodily idioms of distress attempts to render explicit the underlying social and political meanings of the symptoms, and to clarify how such symptoms become medicalized. Such an analysis must begin with an examination of the epistemology underlying the construction of leukorrhoea in biomedical terms.

7.2 Anthropology and the Empiricist Paradigm

Anthropologists working in the international health field have traditionally worked within the empiricist paradigm. Within this paradigm, culture is seen as adaptation and the rational individual is taken as the primary unit of analysis. Ethnomedical categories of "health beliefs" are superimposed upon "natural realities", reproducing the epistemology of biomedicine (Good 1994). In the empiricist approach, a uniform, natural world of health and disease is assumed within which cultures respond and adapt in different ways. From a

theoretical point of view, the anthropologist working in the empiricist tradition faces a strong challenge from the anthropologist working in the interpretive and critical traditions. In these traditions, disease is seen as a "cultural system". Complex human phenomena which are framed as "disease" have their ontological grounding in the way humans perceive and understand their world (Good 1994). Interpretations of the nature of the illness are contested within specific locations, historical sequences and sets of power relationships. Cultures organize illness experience and behaviour quite differently, as the vast literature on culture-bound syndromes and bodily idioms of distress shows (Prince 1987; Simons and Hughes 1985; Low 1985; Nichter 1981).

7.3 Translation Between Categories

The critique of the empiricist approach in anthropology begins with an examination of the problems of translation across epistemological boundaries. There is a tendency when moving across epistemological boundaries to try to see direct equivalencies - for example, that a word signifying a disease in an allopathic category equals a word signifying a similar disease in Ayurvedic. But unless one unpacks the meaning of the word, the true meaning of the illness can be missed entirely. The translation has to be grounded within the indigenous system that is being described. That seldom can result in a one word translation.

Several examples of this problem of translation will serve to illustrate this point. In Wise's "Commentary on the Hindu System of Medicine", the word *prodoroh* is translated as menorrhagia (Wise 1860:381). Yet in his detailed description of *prodoroh* it is clear that he is describing an illness that has little if any resemblance to what an allopathic doctor would call menorrhagia. Word for word translations of disease categories also have trouble when they fail to recognize a different underlying concept of bodily anatomy. In the Ayurvedic view of the body the genital and urinary tracts are not completely separate as they are in an allopathic view of the body. Semen can be lost through the urine. The urine changes in character as semen becomes progressively deranged.

This problem of translation is again evident in Wise's book when he describes what happens when *dhatu* is deranged. He describes the process of changing types of *dhatu* loss, from white to yellow - when the condition is advanced the discharge is honey-coloured and fetid. This disease is called "honey urine" or "sugar urine". "Sugar urine" therefore, within the Ayurvedic concept, relates to derangements of semen, an indigenous disease category that has no correlation to an allopathic disease category. However, Wise attempts to make a translation into an allopathic category by saying that derangements of *dhatu* may lead to diabetes (ibid:363). Translating "sugar urine" as diabetes represents an astounding leap of

translation that makes no sense whatsoever.

A similar problem with translation across epistemological categories can be found in one of the NGO studies on women's health funded by the Ford Foundation. Patel and colleagues asked women in Gujarat to list their most significant illness concerns, and to describe their symptoms, causes, and treatment (Patel et al 1994). A chart of indigenous illness categories and their "approximate English equivalent" includes the illness category "*amboi*", which the authors translate as "rectal prolapse". On my reading of the women's description of complaints, I would postulate that they are speaking about the culturally shaped illness of "displaced navel", called "*nal kisuk gaya*" in northern India. People suffering from this folk illness feel that their navel has become displaced, and they undergo a wide variety of indigenous treatments including forms of therapeutic massage to replace the navel in its proper place. The symptoms of this condition include abdominal pain, vomiting, diarrhea, a vague sense of unwellness, and fullness in the abdomen. This condition could represent a number of biomedical categories. Rectal prolapse as a biomedical diagnosis in adults is very rare...it is hard to imagine that nearly a quarter of Gujarati women are suffering from it!

Let us apply these same principles when looking at the case of leukorrhea, where all too often leukorrhea is translated word-for-word as reproductive tract infection. In Bang's

work on women's perceptions of white discharge, she notes that when women speak about leukorrhea they invariably tell her that the loss of "*dhatu*" will lead to "weakness." Bang then astutely comments that the symptoms of weakness seems to encompass physical, mental, sexual and emotional dimensions of women's lives. The symptoms associated with leukorrhea span a broad range including burning hands and feet, headache, backache, "shrinking" of the genitalia, weakness, genital itching, dizziness, and many more. The women described in Bang's article are indeed speaking about their bodily experience in richly layered ways, and it seems clear that the illness means many things to these women. Yet at the end of Bang's article, she concludes that her data show that women clearly feel that reproductive tract infection is a serious problem for them. The sudden insertion of a delineated biomedical category - reproductive tract infection - jars oddly with the earlier sections of the article, which depict a multidimensional illness experience that seems to have little to do with a physical disorder of the reproductive organs.

7.4 Translation into Biomedical Discourse

The process by which the discourse about leukorrhea has become medicalized provides a fascinating example of the distortions that occur when attempting to cross epistemological categories. The language of clinical medicine is grounded in a natural science

view of the body and a direct relationship is assumed between the language of symptoms and bodily experience. This profoundly shapes the process of medical diagnosis. As Byron Good points out:

While patients' symptoms may be coded in cultural language, the primary interpretive task of the clinician is to decode patients' symbolic expressions in terms of their underlying somatic referents. Disordered experience communicates in the language of culture is interpreted in light of disordered physiology and yields medical diagnoses. (Good 1994:8)

In western biomedical terms, the symptom of vaginal discharge is generally considered to be a marker of organic disease (although vaginal discharge certainly has metaphorical significance in the West too). Doctors in the West are not unfamiliar with symptoms that have deep symbolic meaning and may represent states of emotional distress. For example, headache is a symptom that is recognized among biomedical doctors to frequently have an emotional overlay. Functional bowel symptoms are extremely common in the West, characterized by abdominal cramping, intermittent diarrhea, etc. But vaginal discharge is usually interpreted in a biomedical way as infection. When the syndromic approach was being suggested by the World Health Organization for South Asia, many Indian gynecologists were opposed. Perhaps they argued that vaginal discharge represents other problems, such as cervical erosion or problems with poor hygiene. These reasons for vaginal discharge would have been discounted by WHO medical experts. Cervical erosion, until about fifteen years

ago, was considered to be an important cause of vaginal discharge and electrocautery was recommended. However, within a few years this theory had all but disappeared from medical discourse in the West. Cervical erosions appear like red, inflamed areas around the cervical os. Microscopic studies of this area reveal, however, that the “erosion” is simply part of the endocervix which is more visible in some women than others. It is now considered to be a normal variant of female anatomy (Kistner 1995:515). After performing a PAP test to rule out cervical dysplasia, doctors in the West do not treat women with this condition and the term “cervical erosion” is gradually disappearing from medical discourse in the West. WHO doctors would have discounted the idea of cervical erosion being a cause for vaginal discharge, saying that cervical erosions are simply a normal variant and are not associated with vaginal discharge. Similarly, the idea of poor hygiene being a cause for discharge would be discounted. The vagina is a self-cleaning organ, and vaginal discharge has little relationship with personal hygiene. So the powerful biomedical discourse then moved inexorably to its conclusion: vaginal discharge signifies reproductive tract infection.

In Patel’s study on women’s perceptions of illness, over 23% of women complained of an illness called “ratwa”, which the authors translate as “syphilis”. The symptoms of ratwa are vague, including burning of the hands and feet, boils on the body, a child turning black or blue after death, white or red boils on the genitals or body. It seems extremely unlikely that

this actually represents clinical syphilis. Positive VDRL tests have been low in most studies of RTIs in South Asia - in Hawkes' study, positive VDRL tests were less than 0.2%. Most likely, "ratwa" again is an indigenous illness classification which may correspond to a number of different illness classifications in allopathic medicine, and is very unlikely to have a one-to-one correspondence with the specific disease category of syphilis. Once again, however, the powerful naming of "syphilis", one of the most feared of STIs, shapes a discourse that suggests STI is rampant in rural India.

In the same study, white discharge is the most commonly mentioned complaint among women (56% of the women surveyed), and this symptom was associated with both physical and psychological stresses. Interestingly, more than half the women mentioned "mental tension" as a cause for white discharge. Although very few informants mentioned extramarital sex as a possible cause of white discharge, the authors specifically quote the woman who did mention this as a possible cause, and on this note, the section on white discharge ends. Once again the construction of white discharge as STI is privileged. The article concludes with a listing of 5 "key" women's illnesses, of which "white discharge" and "syphilis" are the top two.

In 1989 a small study was published in *The Lancet*, by Rani Bang and colleagues. Dr

Bang is a well-respected Indian gynecologist who heads an NGO in Maharashtra. In collaboration with Johns Hopkins University, Bang and colleagues undertook a community-based study of women's reproductive health (Bang et al 1989). Bang reported that the 650 women studied had an average of 3.6 gynecological disorders per woman, of which more than 50% were infections of the reproductive tract. Of the women examined in the study, 62% were reported as having "bacterial vaginitis"; another 34% were identified as having "candidiasis"; and 14% as having "trichomonas". The clinical significance of these data is doubtful. Standard vaginal cultures performed on asymptomatic women will yield approximately 4-7 types of organism, which include gram negative and gram positive bacteria, both aerobic and anaerobic, as well as fungal organisms such as candida (Kistner et al 1995:515) Some of these bacteria may be pathogenic in the upper reproductive tract, but are considered to be harmless organisms which are merely colonizing the vaginal tract. Rates of true sexually transmitted diseases in Bang's study were much lower. Gonorrhoea, a true STD, was reported in only 0.3% of the women examined. Syphilis (measured by VDRL test) was reported as present in 10% of women. Chlamydia rates were not reported. In Wasserheit's study in Bangladesh, the prevalence of significant sexually transmitted infections such as gonorrhoea and chlamydia was generally low (between 1-2%) although somewhat higher for women who were IUD users (10%) (Wasserheit 1989).

In a synopsis of 7 community-based studies of women's gynecological morbidity in India, Koenig et al note that the prevalence of reproductive tract infection, both based on symptom reports as well as clinical diagnosis, varied widely (Koenig et al 1998). For example, the prevalence of vaginitis ranged from 4 percent to 62 percent, cervicitis from 8 percent to 48 percent and pelvic inflammatory disease from 1 percent to 24 percent. Clearly, the clinical definitions employed for the term "reproductive tract infection" vary greatly, casting doubt on the scientific validity of such studies.

Despite the problems associated with methodology employed and criteria used in defining clinically significant reproductive tract infection, these early studies proved to be extraordinarily powerful in shaping the dominant discourse about women's reproductive health in South Asia over the next decade. Women's bodies were constructed as diseased and defective, and the disease was shaped by biomedical discourse as "sexually transmitted disease", even though there was little evidence to support this construction.

7.5 Reproductive tract infections: WHO discourse

World Health Organization publications about women's health during the 1970s and 1980s had an explicit focus on the reproductive capacity of women's bodies. Other aspects

of women's health were seldom addressed, and the health concerns of women no longer in the reproductive age group were scarcely considered. Health activists had criticized this approach, saying that the agenda of the WHO remains focused on population control, and this is why women's health is constructed only in terms of reproductive health. By the mid-1990s, WHO representatives had acknowledged that in the past there was over-representation of women's reproductive health. Now the WHO has moved to a "lifespan" approach, which is intended to consider the health problems of women throughout the life cycle. Yet the WHO maintains a strong focus on women's reproductive health, and on the ever-present threat of STIs, as the following excerpt from a current WHO document on women's health in the South Asia region illustrates. The female adolescent is seen to be particularly at risk throughout the region:

With the onset of puberty and with learning new ways of behaving that may lead to experimentation with sex, drugs and alcohol adolescents find themselves exposed to a host of factors which can adversely affect their health.. The female adolescent in the South East Asia region is especially vulnerable... (WHO Regional Health Report: Focus on Women, 1998: p 15)

This statement cuts a sweeping swath across the countries and cultures of South-East Asia, generalizing a situation of "risk" into the lives of millions of young women. The passage illustrates a growing preoccupation within international health discourse about "risky" sexual behaviour in South Asia. In Bang's study, the authors reported that over

50 % of unmarried girls did not have intact hymena (Bang et al 1989). She concluded that the rate of premarital intercourse was far higher than had previously been suspected. This finding, like the supposedly high rates of reproductive tract infection, has been extensively quoted in the international health literature. Yet a physical examination of the hymen is notoriously unreliable as a diagnostic test for virginity. The hymen has marked variation in natural appearance, and also frequently tears before first sexual intercourse anyway, from physical activity (Kistner 1995:236)

Elsewhere in the WHO report, the authors note the prevalence of white discharge in South Asia, and uncritically link the symptom with sexually transmitted disease. They quote three studies on the prevalence of STIs, elaborating a case for a continent of women at clinical risk.

A growing preoccupation in the public health discourse around sexually transmitted infection among women led to a rising concern about the potential for rapid spread of human immunodeficiency virus (HIV). Various public health programs aimed at preventing the spread of HIV were debated. One of the major programs chosen by the World Health Organization was “the syndromic approach to the management of sexually transmitted infections”.

7.6 The Syndromic Approach to the Treatment of STIs in South Asia

There is evidence to show that treatment of sexually transmitted infections (STIs) can reduce transmission of human immunodeficiency virus (Grosskurth et al 1995). Considerable research effort has focussed 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 a set of four different treatment algorithms for men and women complaining of sets of symptoms (syndromes) that suggest sexually transmitted disease. The syndromes are: men with urethral discharge (presumed to have gonorrhoea or chlamydia); women with lower abdominal pain (presumed to have pelvic inflammatory disease due to STI); women complaining of vaginal discharge (presumed to have either cervicitis due to chlamydia or gonorrhoea, or vaginitis due to trichomonas or candida); and men with genital ulcers (presumed to have syphilis, chancroid or genital herpes) (WHO 1999). The patients are also asked a set of questions to assess their risk for STI, and based on this as well as the syndrome they present are then prescribed treatment with antibiotics, designed to cover all possible infectious causes for their symptoms.

WHO and other agencies have been promoting the syndromic STI management

since 1988. The syndromic approach was pilot-tested in Africa and is most widely used in countries of sub-Saharan Africa. Elsewhere in the world, the syndromic approach has been tried in many countries including in the Caribbean, Central America, Thailand and the Philippines. In countries of South Asia the approach is still not in widespread use but dissemination of the approach is being promoted by multilateral agencies and by the National AIDS Control Organization. (NACO). As Mertens points out, the syndromic approach to treatment of STIs was originally developed in an African context, and was not validated in the South Asian cultural contexts prior to implementation (Mertens et al 1998).

7.7 The syndromic approach to the management of STIs: a critique

Is South Asia really a continent of high risk sexual practices, with a high prevalence of sexually transmitted infections? The research work around reproductive tract infection needs to be more carefully examined. Included under the term “reproductive tract infection” is both local infection due to 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. The presence of

sexually transmitted infections (primarily the infections that cause ulcerations of the genital area) have been shown to enhance the transmission of the human immunodeficiency virus. Other RTIs do not raise the likelihood of HIV transmission - therefore, the essential piece of information needed to validate the syndromic approach is the prevalence of STIs, rather than RTI in general. The term “reproductive tract infection” is in itself rather misleading. The vagina is host to a wide variety of bacterial and fungal organisms, which are termed commensal organisms, living as colonizers of the vaginal tract rather than as pathogenic agents. Bang’s study reported a very high prevalence of positive vaginal cultures, as did Wasserheit’s study in Bangladesh. Yet most of the identified organisms usually live as commensal organisms of the vaginal tract. Others, like Gardnerella and streptococcus, are bacteria that are found naturally in the vagina and only occasionally become pathogenic. True pathogens with serious consequences for the host, such as chlamydia or gonorrhea, were only rarely identified even in Bang’s and Wasserheit’s studies. Treatment of commensal organisms of the vagina is rarely necessary - in fact, antibiotic treatment will often lead to overgrowth of yeast. Current appropriate medical practice is not to treat positive cultures, unless the organism is clearly pathogenic (such as chlamydia or gonorrhea), or unless the woman is troubled by symptoms (heavy discharge or itching with yeast, for example).

More recent community-based studies in South Asia provide evidence that prevalence of STIs is substantially lower than was originally thought. Brabin and colleagues studied the prevalence of sexually transmitted diseases in a study sample of 3588 low-income urban women in Bombay (Brabin et al 1995). “Gold-standard” diagnostic criteria for STIs were used, in contrast to earlier studies, and the prevalence of sexually transmitted diseases among these women was found to be low: chlamydia was cultured in only 0.2% of the sample and gonorrhoea in only four cases out of the total of 3588. The authors concluded that STI did not make a major contribution to reproductive morbidity in this population, and note that unless criteria for diagnosis are stringent, the potential for over-diagnosis of presumed STIs is significant. They also note that the low prevalence of STIs suggests that in South Asia, strict controls on sexual practices due to family values and religious norms protect women against sexually transmitted disease, a concept that simply does not appear in the WHO discourse on sexually transmitted diseases in the region.

In a recent evaluation study of the syndromic approach in Bangladesh, researchers used techniques to diagnose STIs that were both sensitive and specific (Hawkes et al 1999). The prevalence of STIs among rural women in Bangladesh was only 1.1%, and the prevalence of positive cultures due to endogenous vaginal organisms was about 30%, a

moderate rate. The authors noted that the syndromic approach was failing to detect and treat STIs appropriately, and that the poor specificity of the approach was resulting in significant over-treatment of women with antibiotics for presumed STIs. They also warned that inappropriate diagnosis of an STI could put a woman at risk for conflict with her husband, potentially leading to domestic violence. The failure of the syndromic approach as a method of detection and treatment of clinically significant sexually transmitted infections has also been recently reported in studies from Bangladesh (Bogaerts et al 1999) and India (Vishwanath et al 2000).

In the study by Hawkes et al, nearly 70% of the women who complained of the symptom of vaginal discharge did not have evidence of reproductive tract infection. Hawkes commented that it was peculiar that women without reproductive tract infection report vaginal discharge, and speculated that South Asian women may have a misunderstanding about the significance of normal physiological discharge. In my Commentary piece that accompanied the Hawkes article, I explored the cultural meanings of leukorrhea as a way of explaining Hawkes' findings (Trollope-Kumar 1999). The deep cultural significance of genital secretions as "vital essence" will likely affect the rate at which the symptom is reported in two ways. First, women who do indeed have vaginal discharge due to reproductive tract infection will tend to report it early because of the

cultural significance of the symptom. Even when the discharge is relatively minor, perhaps associated with a mild overgrowth of local vaginal flora or due to hormonal fluctuations, women will become anxious about this symptom and report it early to a practitioner. This hyper-vigilance to a particular symptom would lead to over-reporting, a situation in which many women who have clinically insignificant disease present for health care. Secondly, because leukorrhea is the cardinal symptom of a culturally shaped “bodily idiom of distress”, the symptom itself becomes a way of communicating complex cultural messages through the body. For women under various forms of stress, the experience of even normal physiological discharge may take on a deeper meaning, thus becoming shaped into a symptom.

The particular syndrome for women complaining of vaginal discharge has been problematic from the beginning. The presence of vaginal discharge is not a good predictor for the presence of STIs to begin with, since women suffering from STIs are often asymptomatic. Minor vaginal infections, particularly candidiasis, are much more likely to cause vaginal discharge. Risk assessment questions are often skipped by providers, as they involve asking sensitive questions that may not be culturally appropriate (WHO 1999). Among men, the syndromic approach seems to work somewhat better. A recent study from Indonesia reported that the syndromic approach was appropriate for

men with a clinically confirmed genital discharge (Djajakusumah T et al 1998). I have not been able to find any data on evaluation of the syndromic approach in men in South Asia. The key issue in the usefulness of this syndrome would be whether the health workers confirm by examination the presence of an actual urethral discharge. If there is indeed a discharge, then the syndrome probably works as well in South Asia as it does in Indonesia. However, if men complain of urethral discharge without clinical evidence of such a discharge, they may be suffering from “*dhatu* loss” rather than STI, and the same problem with mistranslation of a culturally shaped illness with organic disease will occur.

Antibiotic over-use is expensive, puts women at risk for side-effects, and promotes antibiotic resistance. The drugs recommended for treating a presumed case of STI among women vary somewhat according to geographical location and the particular variant of the syndromic approach used. Most often, combinations of antibiotics are used to cover all possible pathogens. Ciprofloxacin 500 mg as a single dose along with Doxycycline 100 mg twice daily for a week, with Metronidazole 500 mg twice daily for a week is a commonly used regimen. This combination is expensive, and has a number of side-effects. Doxycycline can be teratogenic in pregnancy (and often women are not aware that they may be pregnant), and can also cause photosensitivity. Metronidazole often causes headache and stomach upset and is also not safe in pregnancy. Any of the

antibiotics can produce serious allergic reactions. Some countries using the syndromic approach attempt to provide the drugs free of cost through public funding, such as in Botswana. However this has proved difficult to sustain and represents a significant drain on national health budgets. In the Nakuru program in Kenya funded by the Population Council, drugs were provided free of cost to patients presumed to have STI. However, health workers expressed frustration that drugs effective in the treatment of infections other than STI were reserved for STI despite severe drug shortages in the country (Askew and Maggwa 1998).

In a recent review of the syndromic approach, Hudson notes that when patient compliance is poor and treatment is not completed, the problem of bacterial resistance is particularly likely to develop. Hudson comments that the inappropriate use of the antibiotic Doxycycline for presumed chlamydia cases is likely to lead rapidly to the development of bacterial resistance not only in chlamydia but also in bacteria such as *Staphylococcus aureus*, which is responsible for many common infections. He writes:

Widespread resistance of Staphylococcus aureus to erythromycin and doxycycline would be of great concern, and is to be expected if widespread use of these antibiotics is accompanied by non-compliance. This nightmare appears to be coming true. ... Is widespread resistance of multiple microorganisms a price worth paying for partial treatment of chlamydia?" (Hudson 1999:425)

Hudson notes that a study done in Mwanza, Tanzania had shown a 40% reduction in community HIV incidence when syndromic management was used in local primary health care clinics (Hayes et al 1997). However, a recent trial done in Rakai, Uganda failed to show such an effect (Wawer et al 1999). In a further discussion of the scientific validity of claims that STI treatment reduces HIV transmission, Hudson notes that there is conflicting evidence about whether the presence of chlamydia enhances HIV transmission; that trichomonas does not appear to enhance female-to-male transmission, and the evidence for the role of bacterial vaginosis in HIV transmission is also unclear. Thus, the science underlying the basic premises of the syndromic approach is questionable. Shelton comments that there is no convincing evidence that the syndromic approach to the treatment of STIs is cost-effective as an HIV prevention strategy (Shelton 1999). He advocates primary prevention approaches as being more appropriate. Askew and Maggwa note that in Africa, there has been a great deal of emphasis on STI case finding and management, but much less on preventive strategies, either through mass communication or direct counselling (Askew and Maggwa 1998).

The syndromic approach to the management of STIs involves the use of massive amounts of antibiotics. As resistance to antibiotics inevitably develops, the countries of South Asia will be forced to import ever more expensive antibiotics to meet the challenge

of serious infectious disease. Clearly, pharmaceutical companies stand to benefit in a big way from this management approach, and will likely resist efforts to change the direction of HIV prevention strategies.

Many Indian public health experts were initially opposed to the syndromic approach to the management of STIs. However, their objections have been over-ruled or transformed into consent. This process of extending hegemonic discourse has been a subtle one, involving the use of many Indian experts themselves in the formulation and propagation of a view of South Asia at clinical risk for HIV. In his writings about hegemony, Gramsci suggested that political leadership could be based on consent rather than on coercion. Consent might be secured through diffusion of the views of the ruling class, perhaps through active strategies to gain the consent of the masses, or perhaps through a more gradual process whereby the dominant view becomes internalized by the elites of the non-dominant society. Bang's study on the prevalence of RTI in rural Maharashtra provides a classic case in point. She is a well-respected NGO leader, with both the moral power of the NGO and her status as a caste Hindu behind her. Her study was published in *The Lancet*, perhaps the most prestigious medical journal in the world. The stage was now set for an appropriation of this construction of South Asian women, generalization to the whole subcontinent and the development of public health measures to

address it. Despite the critiques, and the rigorous evaluation study done by Hawkes et al, the syndromic approach continues, and has recently been approved by the World Bank for more widespread implementation in South Asia (Hawkes, personal communication).

7.8 The Body as a Site of Colonizing Power

The syndromic approach to the management of sexually transmitted infections is a massive public health program that transforms bodies into objects to be modified and controlled, a program that uses the language of rationality and risk in order to justify spending large amounts of public money, even though this program has never clearly been shown to work. In anthropology, the work of Michael Foucault has illuminated many critiques of such programs (Foucault 1973). Modernity, according to Foucault, is marked by its use of knowledge-power instruments to exercise social control. Foucault called these knowledge-power instruments "bio-power" because the disciplinary strategies used in this form of social control were elaborated through health dimensions of individuals and populations. Bodies were discursively objectified as a part of the process of control. In the clinic and through health and welfare agencies, the body's health, hygiene and sexuality became targets of disciplinary strategies. The construction of biomedical truth replaced truth constructed through the moral mandates of Christianity. The language of

biomedicine is meant to evoke images of health, safety and sanity, creating its truth on a rational rather than a moral basis. Foucault's analysis of the global influence of the Western cultural program of rationalization has had a deep influence on trends in medical anthropology today.

A recent work which draws on Foucauldian analysis is Comaroff's study of a South African people. She discusses the interplay between medicine in 19th century and the colonizers, when the "savage native" becomes the target of public health practices which include regimens of hygiene, healing and bodily restraint (Comaroff 1985).

Biomedicine, with its self-authorizing language of "clinical risk", often becomes a tool for domination. Arnold, writing about the history of Western medicine in colonial India, notes that biomedicine was one of the most powerful tools of the colonizers, and the Indian body became an important site of colonizing power (Arnold 1993). India was constructed as a place where "filth diseases" abounded, where "barbaric" practices in childbirth were common, and where superstition ruled over reason. The powerful discourse of medicine shaped a notion of an alien space sorely in need of the civilizing and sanitizing influence of Western medical practice. Spaces within India were differentiated as loci for disease (the zenana, the urban slums), or as spaces of relative freedom from

disease, where Europeans could escape (the hill stations). In the project to control and contain epidemic disease, bodies were counted and categorized, and thus the body became a site for the construction of the authority and legitimacy of Western medicine.

During nineteenth century colonial India, the focus of Western medicine was on epidemic disease and its control, as well as diseases that could affect the vital functioning of the British army. One of the projects of Western medicine was to respond to the threat of these epidemics by mass public health measures, whether or not it was clear that they were truly effective at preventing the spread of the disease. Many of these measures were ill-conceived, ignoring cultural taboos and sensitivities. Forced physical examinations of Indian females by white male doctors, compulsory hospitalization in cases of suspected plague, and postmortem examination of corpses thought to have died from plague - these were all measures that were anathema to the Indian people, provoking mass protest.

Sexually transmitted infections among British soldiers in India during the colonial era were common and of the STIs, syphilis evoked the most fear. Although Europeans had introduced the disease to India during the 16th century, and though soldiers remained the major source of infection, it was constructed as a disease of low-caste Indian prostitutes, threatening to the British army. Sexually transmitted disease was the largest

single cause of admission to army hospitals in nineteenth century India. Coercive techniques for VD control, such as lock hospitals for prostitutes were widely used, and toxic mercurials were recommended treatments.

In some ways, Western medicine made little impact on the masses of Indian people, remaining mainly confined to the enclaves of the army and the European community until well into the twentieth century. Yet Western medicine is seen by many commentators as one of the most powerful and penetrative parts of the entire colonizing process. By 1914 in India, Western medicine had begun to infiltrate the lives of an influential section of India's population, and had become part of the new cultural hegemony and incipient political order. As Arnold writes:

“ The search for authority and control was not the stark European /Indian dichotomy... also an essay on the internal differentiation within Indian society, of subaltern politics, and middle class hegemony.. Medicine was too powerful, too authoritative a species of discourse and praxis to be left to the colonizers alone.”
(Arnold 1993:43)

Perhaps some parallels can be drawn between the public health programs of India in colonial times that Arnold describes, and contemporary India. The syndromic approach to the treatment of sexually transmitted diseases is a massive public health program that has been implemented in South Asia by international agencies controlled

primarily by Western powers. In this particular program, the World Health Organization examines the health, hygiene and sexuality of South Asian bodies, discursively objectifying them as part of the process of control. The WHO uses the image of a subcontinent of people hovering on the brink of an HIV epidemic, in order to launch its massive program of surveillance for sexually transmitted disease. The language of biomedicine used by the WHO in justifying this program evokes images of health, safety and sanity. In managing clinical risk, the gaze of western medicine returns to old preoccupations: sexually transmitted disease as the danger, and the need for interventionistic medical approaches as the solution. "Clinical risk" as a form of logic outweighs other forms of logic including cultural, personal, and even scientific logic, for there is no science to show that the syndromic approach to the management of STIs actually works in South Asia. The juggernaut is launched, at great public expense.

CHAPTER EIGHT

THE INTERFACE BETWEEN “WAYS OF KNOWING”

A culturally shaped illness is founded upon an epistemology that is based on an indigenous understanding of the body in health and illness. Because of these different epistemological underpinnings, it must be studied within its own frame of reference, a theme I have explored in previous chapters. In this chapter, I study the interface between the dominant scientific view of the body and the indigenous view of the body, relating the discussion to the anthropological literature on systems of indigenous knowledge. I also explore some of the difficulties involved at working at the interface between knowledge systems - a space that is invariably fraught with political and ideological tensions. Anthropologists working in the field of international development often face critiques from within the discipline, both from the standpoint of ideology as well as methodology. In this chapter, I focus particularly on a critique of rapid anthropological assessment techniques, in which large quantities of “thin” qualitative data are collected over a brief period of time. The danger of such methods is that the critical relationship of language to action, an essential

anthropological insight, may be lost. I conclude the chapter with some philosophical reflections on directions in anthropology.

8.1 At the Interface of Epistemologies

Systems of knowledge evolve within particular historic, cultural and symbolic contexts. While systems of knowledge sometimes exist in parallel, more often one system of knowledge gains ascendancy over others, and becomes "authoritative knowledge" (Jordan 1997). In contemporary society, scientific discourse has become the authoritative knowledge, and other systems of knowledge are evaluated according to scientific criteria for validity. A scientific explanation must be demonstrable outside of any unique symbolic structure; it must have universality under specified empirical methodology. This type of knowing excludes knowledge that may be considered true only in specific cultural worlds. Ken Wilber, in his recent philosophical work on science and religion, notes that all forms of epistemological pluralism fail the test of modernity when science is taken as the only form of authoritative knowledge. All "interior dimensions" of human experience lose legitimacy, and the world is reduced to the "flatland holism" of the scientific view (Wilber 1998). As scientific knowledge continues to gain dominance in ordering all aspects of social life, other "ways of knowing" become increasingly threatened. As Apffel-Marglin warns, when one epistemology dominates a "colonization of the mind" takes place (Apffel-Marglin 1996:2). A fine-grained analysis of the epistemology of indigenous knowledge is clearly needed if applied anthropologists are to work in a way that truly honours these "ways of knowing".

Trevor Purcell notes that central to the definition of indigenous knowledge is its political status, its location as "subjugated knowledge" in relation to the dominant discourse (Purcell 1998). If indigenous knowledge is to be placed on an equitable epistemological plane with scientific knowledge, its definition must reflect its dynamic nature in human evolution. Purcell's definition of indigenous knowledge is "that body of historically constituted (emic) knowledge instrumental in the long term adaptation of human groups to the biophysical environment" (Purcell 199:260). This definition places indigenous knowledge on a comparative epistemological plane (but in analytical contrast) to scientific knowledge. Sillitoe uses a similar framework when he urges researchers to consider indigenous knowledge as a conceptual way of skilfully managing essential resources (Sillitoe 1998).

Another way of comparing indigenous knowledge to scientific knowledge is in its use of theories and models to explain the world. A model can be defined as an actual or imaginary system that mimics the operation of theories (Barsh 1997:35). Since the use of models is a way of talking about theories, a body of empirical knowledge is scientific if it uses models to systematize observations. Models refer to shared experience within a culture and they need not be "true" according to a universal biomedical understanding of the body. For example, a model of illness based on "dhatu loss" is congruent with an underlying cultural conception of the body, performs a function in ordering and explaining the world, and creates a framework within which to speak about a body experiencing physical illness, or social and political oppression. The deep metaphorical meanings of "*dhatu* loss" also speak a poetic truth about the experience of the sick body in a specific cultural context. In these ways,

“*dhatu* loss” has its own internal logic and its own “truth”.

In many cultural contexts, several knowledge systems exist simultaneously. People may access these systems either in parallel or sequential fashion, moving quite easily between systems. In the pluralistic setting of South Asia, for example, people seek health care from different healing systems in a pragmatic manner, apparently unperturbed by the different epistemological frameworks upon which the systems are based (Bhardwaj 1975; Nichter 1980; Nordstrom 1988). However, one particular system of knowledge may gain ascendancy. As this system of knowledge is progressively legitimized, all other systems of knowledge undergo progressive devaluation. In her discussion of the evolution of "authoritative knowledge" Brigitte Jordan points out that "the power of authoritative knowledge is not that it is correct but that it counts" (Jordan 1997:58). Authoritative knowledge is persuasive because it seems reasonable and consensually constructed. Its socially constructed and often coercive nature is often lost. Authoritative knowledge, as Jordan analyses it, is an interactionally grounded notion in which members of a community of practice will display and share their version of this knowledge with others.

8.2. Divergent Concepts of “Risk”

Betty-Anne Daviss, a midwife who has worked for many years in cross-cultural settings, expands upon Jordan's ideas of authoritative knowledge to produce an analytical framework about the ways in which diverse communities make decisions about the

management of birth (Daviss 1997). The illustrative case study Daviss uses in her article comes from her work with the Inuit. Since the 1970's, Inuit women have been evacuated to southern communities far from their home communities to give birth. Birth, traditionally seen by the Inuit in social and spiritual terms, has been transformed into a secular event which is analysed in terms of "reproductive risk". It took a concerted community effort in coordination with midwives and activists to return birth to one community at Povirnituk, where midwives (both white and Inuit) now deliver most of the community's babies. At the POV maternity, midwives attempt to balance the clinical risks of harm to the mother and baby with the risks of personal trauma and cultural and spiritual assimilation.

In analysing how decisions around birth are made, Daviss identifies several types of logic that people use in managing birth: scientific, clinical, personal, cultural, intuitive, political, legal and economic. Several of these types of logic may be used either simultaneously or sequentially in making decisions around the management of birth. Certain forms of logic are regarded as carrying more weight, or are more authoritative, to use Jordan's term. In the biomedical view of the risks surrounding birth, the scientific, clinical and legal forms of logic are the most authoritative categories. Cultural and personal factors are rarely acknowledged as being at risk. The analytical framework proposed by Daviss is helpful in recognizing the frames of reference that different communities may use in the way they speak about the contested domains of health knowledge and practice.

The issue of risk is a key concept in health interventions. Risk as conceptualized in the dominant discourse of science is about specific pathological processes, or cause-and-effect models that link specific predisposing variables to risk-related outcomes. Yet ethnographic work on risk permits an understanding of risk within a densely differentiated social context. Paul Farmer's work in Haiti reveals a world in which the risk of contracting HIV/AIDS is interwoven into a social context where complex social realities of gender and power interact (Farmer 1992). Patty Spittal's work in Uganda similarly reveals a complex social reality where simple causation models of risk for HIV/AIDS are inadequate (Spittal 1997).

At the interface between two systems of understanding about health, negotiation about alternate ways of practice is often possible. However, when the powerful element of "clinical risk" enters the equation, biomedical discourse usually dominates. Events occurring in the conceptual world of the indigenous group must then be interpreted within the framework of the dominant discourse. This can lead to serious distortions, particularly when biomedical framework has no categories that correspond to the conceptual event that is occurring in the indigenous world. Leukorrhea clearly illustrates such a translational distortion. An illness that is part of a densely interwoven network of indigenous meanings is taken out of context, dissected into component "symptoms", and then reconstructed to fit a biomedical version of the body. In this radical reconstruction, the symptoms are translated into the symptoms of reproductive tract infection, and "disease control" solutions are proposed. Clearly in this case a mis-translation of serious dimensions is occurring.

8.3. The Reductionism of the Biomedical Gaze

In many traditional cultures, the concept of good health has personal, social and spiritual dimensions. The relationship of the individual to the supernatural world is often an important and well-differentiated aspect of the healing system, involving complex rituals that serve to mediate between the natural and the supernatural world. Here, the search for areas of conceptual congruence between biomedical and indigenous health knowledge becomes problematic. Healing through the power of spirits, possession states, honouring the power of ancestor spirits - these are phenomena which don't easily lend themselves to understanding by a mind conditioned by biomedical understandings of the body. In the biomedical paradigm, these transcendent dimensions of healing have been collapsed into the dominant physiological model of healing. Since there are no readily available congruent patterns of thought with which to analyse these healing dimensions, these phenomena are often dismissed as "superstition". As a result, the richness and differentiation of these dimensions of healing simply disappear, through what Ken Wilber refers to as the "self-obliterating reductionism" of the scientific gaze (Wilber 1998). It is ironic that in contemporary Western culture, these elusive transcendent dimensions of healing are eliciting great interest by patients exploring alternative ways of healing through the holistic health movement. "Mind-body medicine" has become a focus of considerable academic interest as well, as some of the physiological effects of altered mental states are explored.

8.4 Indigenous Knowledge in the Context of Development

The profound differences in epistemology between the dominant discourse of biomedicine and the discourse of indigenous knowledge about the body leads to considerable conceptual difficulties for those who stand at this interface. How is it possible to work across a conceptual divide in a manner that honours both "ways of knowing"? These issues become particularly acute at the "point of intervention", the moment when theory meets practice, when concepts must be translated into action. Applied anthropologists who take on the challenge of developing "culturally congruent" interventions need to find ways to make biomedical knowledge co-exist with symbolic systems with different epistemological underpinnings, and work towards applications of that knowledge that blend these understandings in a way that is coherent in both epistemological frameworks. Part of the anthropologist's role at the interface of knowledge systems may be that of a "cultural broker", attempting to promote understanding on both sides of a conceptual divide. The issue of unequal power relations between biomedical knowledge and indigenous knowledge often makes this position fraught with difficulty. For many anthropologists, the root of the challenge in working at the interface is a deep unease about the position of Western civilization vis-a-vis the indigenous peoples themselves. Malinowski himself was one of the early critics of the scientific approach, which he described as the "worst nuisance and greatest calamity of our days..it transforms our inner selves with uncanny thoroughgoing penetration....it is dehumanizing to man and denaturalizing to nature....." (Malinowski quoted

in Purcell 1998).

Many anthropologists followed in the uncritical positivist stance of the colonial administrators, with the anthropological encounter rooted in the epistemological dyad of the knowing subject and the unknowing object of study. The work of Geertz, however, strengthened a view of people constructing their own world in their own cultural image (Geertz 1983). Later, the rapid development of ethnoscience, with its study of internal meaning, deepened an understanding of how diverse systems of knowledge are ordered. The discourse on indigenous knowledge has always had profound political and ethical dimensions. Contemporary discourse on indigenous knowledge is ideological, ethical and epistemological, as Fahim points out (Fahim 1982).

A discussion about the interface between indigenous knowledge and biomedical understandings must include some analysis of the broader context within which these systems of knowledge interact. The anthropologist who stands at the interface between knowledge systems stands in a social context that has been shaped by a discourse on development. How does the "development encounter" affect the interaction between the anthropologist and the indigenous people with whom he or she is involved?

In the mid to late seventies an awareness developed within international aid and development circles that "cultural factors" in development were somehow missing. Evaluations of previous "top-down" projects had revealed many failures, some of spectacular

proportions. Ignoring local needs had clearly led to tensions and failure of many of these projects, compelling project planners to pay closer attention to local perceptions. In several analyses of international primary health programs, Justice described ways in which a universalist biomedical model of health frequently fails to take into account essential local understandings about health (Justice 1986;1987).

Employment opportunities began to open up rapidly for development anthropologists in the 1980's and 90s. As "cultural specialists", they seemed to be in a unique position to assist in development efforts. A far more detailed analysis of the interaction between culture and development began to emerge, conceived by anthropologists and also by development workers with years of experience in the field (Whisson 1985; Justice 1986; Verhelst 1992; Chambers 1993; Kley Meyer 1994).

Innovations in popular education approaches in Latin America and elsewhere led to the emergence of participatory action research, the first ideas about "bottom-up" approaches to development. Increasingly, local people were recognized as having their own effective "science" and resource use practices. These concepts were not new to applied anthropologists, and various forms of "action anthropology" have been a part of the discipline for many years (Tax 1964; Thompson 1976; Bennett 1996). Participatory action research adds some interesting new methodological approaches, however, and applied anthropologists have recently become interested in blending some of these approaches with traditional anthropological methods, to provide innovative ways of working closely with the people at

the grassroots (Singer 1994; Spittal 1997; Willms 1998). For other anthropologists, the role of indigenous forms of knowledge and practice in development became a particular focus for attention (Blunt and Warren 1996; Brokensha et al 1980; Warren et al 1995).

In international development, many anthropologists are consciously choosing to work with the NGO sector rather than with the large multilateral aid agencies. NGOs are often perceived to be closer to the people, to have a dynamic, empowering style of work, and to be free of many of the constraints under which aid agencies and governments work (Korten 1990; Ghai 1992; Burkey 1994). Yet NGOs are too frequently accepted uncritically. In a recent excellent review of NGO work, Fisher describes the complexity of the issue and points out some of the often-overlooked problems and pitfalls of NGOs in development (Fisher 1997).

8.5. Dilemmas of Applied Anthropology in Development

Anthropologists who participate in the "development encounter" often face significant critiques, both from fellow anthropologists and from those who study development in its historical and political context. Some of these critiques focus on the underlying paradigm of development (Kothari 1988; Hobart 1993; Norgaard 1994). A powerful critique that focuses specifically on the role of the development anthropologist has been written by Escobar (Escobar 1991). He writes that development anthropologists take "development" as natural, without analysing its underlying ideologies. He warns that the analyses that development

anthropologists use are not "neutral frameworks within which "local knowledge" innocently shows itself" (Escobar 1991: 667). Rather, Escobar asserts that these analyses are subtly shaped by the analytical frameworks of the large aid institutions, frameworks which reproduce dominant ideologies about development that are often harmful to indigenous communities. The anthropologist discovers a pattern in the community that he or she has been trained to discover, and "the local situation is inevitably transcended and objectified as it is translated into documentary and conceptual forms that can be recognized by institutions" (Escobar 1991: 667). The development encounter, from Escobar's point of view, thus becomes an act of cognitive or social domination.

Escobar's analytical tools help us to dissect the case of leukorrhea and international multilateral aid agencies. Clearly, the contexts in which "local knowledge" appeared, in the form of Bang's study, and the book entitled "Listening to women talk about their health"(Gittelsohn et al 1994) appeared within a framework of analysis that was powerful. The dominant ideologies about development and the woman's body were at work here, shaping the way the discourse about leukorrhea was elaborated. The South Asian woman's body became the focus for attention, constructed as both defective and infected. The infection was subtly constructed as sexually transmitted infection, thus placing South Asian women in a category of clinical risk for HIV. This construction of South Asian women provides the theoretical foundation upon which the "syndromic approach to the management of STIs" is based. Clinical logic, however defective, is powerful.

8.6 Rapid anthropological assessment: a critique

Anthropologists working in the field of health and development often are part of a much larger team, in which the public health specialists dominate the discourse. The role of the anthropologist is often to add “the cultural factor” to the analysis, learning how local people think about an illness or an intervention. Applied anthropologists, under pressure to make their work relevant in a time-bound fashion, have developed a number of techniques for acquiring large amount of qualitative data in a short period of time. These techniques, called “rapid anthropological assessment” techniques, use a range of systematized procedures including listing, ranking and mapping, as well as focus group and individual interviews. Computer programs are often used to sort and analyse the data generated in this way, to develop conceptual models of local ideas about a particular disease. Such methods are promoted as being cost-effective while nevertheless providing basic sociocultural data. These methods are rapidly becoming a part of many international health programs, and are often not performed or designed by anthropologists at all. The traditional methods of anthropology involving ethnographic description and longitudinal participant observation are becoming less common. In the field of women’s reproductive health in South Asia, rapid anthropological assessments were used quite extensively. A large Ford Foundation project directed by anthropologists at Johns Hopkins University and involving collaboration of a network of Indian NGOs used this type of methodology (Gittelsohn et al 1994).

In a critique of the rapid assessment techniques used in these studies on women's reproductive health, Helen Lambert comments that "the apparent advantages of greater selectivity and precision imparted by these developments may be outweighed by the costs of discarding the very precepts which make anthropological contributions valuable to public health." (Lambert 1998:1004). She points out that the relation of language to action is critical and insights may be lost by treating reported behaviour as a direct reflection of observable reality. Lambert goes on to say that the difficulty with the rapid anthropological assessment approaches is that they produce cognitive models which are divorced from the selective and particular utilization of local understandings in practice, yet are taken to determine actual behaviour. The resulting focus on cultural constructs as determining practice may reflect an adaptive response to an institutionalized focus within international public health on methods of enquiry that enhance reliability rather than validity. A broader anthropological perspective combines participatory and observational approaches with critical interpretation and links this evidence with the accumulated knowledge of previous anthropological work. Noting the cultural meanings surrounding genital secretions in South Asia, Lambert warns against a methodological approach that links symptoms directly with disease. She concludes powerfully that "the danger of rapid anthropological assessment as currently practised is that it may produce findings that are quick, practical - and wrong."

8.7 Ethical Dilemmas at the Interface between Knowledge Systems

The anthropologist who works at the interface between knowledge systems faces several multilayered ethical issues. As Escobar points out, the anthropologist needs to be aware of the wider development context in which he or she works. To what extent is the anthropologist merely an agent of the mainstream development paradigm? Can the anthropologist really keep the interests of the indigenous people as the top priority when the development agency is funding his or her work? These ethical concerns are perhaps most acute in situations where the anthropologist has been hired to help cope with some of the human effects of a major development project - for example, the building of a dam which displaces many thousands of people from their homes.

Hoben, in a review of development and anthropology, makes the comment that the development anthropologist's role as "interpreters" of traditional society only reinforces stereotypes about the development paradigm's view of traditional societies while providing no critique or alternative view (Hoben 1982:354). Both Hoben and Escobar point out that the anthropologist has relatively little power in the development game, making it difficult for the anthropologist's holistic perspective on indigenous people to really count. The indigenous knowledge perspective may be used only insofar as it supports a dominant development viewpoint. Delvecchio-Good warns of the tendency of anthropologists in practice to market

their skills in qualitative research, and to work primarily as technicians, whereas their skills as anthropologists have much broader application in the conceptualization of the problem and in exploring meanings behind illness. (Delvecchio-Good 1992).

These issues were ones that I struggled with in my years working in health and development in Garhwal. I had been deeply committed to the work, particularly in the early years of my work as a doctor, when I was working out of a positivist, empiricist epistemological framework. The study of anthropology was subversive, forcing me to re-evaluate my own "ways of knowing" about women's health in Garhwal. The insights of anthropology enriched my understanding of women's health, giving me a fresh perspective on illness meanings in different cultural contexts. Yet the anthropological perspective was also deeply unsettling, preparing the ground for my own "crisis of meaning" that occurred in late 1995. That painful crisis of re-framing my work in the world of NGOs and development led me to an analysis in many ways analogous to Escobar's critique. My position as a "cultural broker" between large multilateral aid agencies and small Garhwali NGOs became untenable. Although some of the rhetoric behind what I was doing made sense (yes, Garhwali women do want better access to contraceptives), I felt that the means of doing this was deeply flawed. The pre-packaged development programs planned in the US, to be implemented by small NGOs in Garhwal, would lead to co-optation of NGOs whose evolution had been grounded in the realities of local people's lives. On my recent visit back to India in February 2000, I observed the fallout from some of these programs. The multilateral agencies were upset with the small NGOs, because they felt the NGOs

had not implemented their programs properly, and the small NGOs were resentful of the power of multilateral agencies in dictating the agenda and scope of their development work, which they did not see as appropriate.

8.8 Refining an Iterative Approach in Applied Anthropology

The nature of applied anthropology practice is evolving rapidly and in several different directions. Fiske and Chambers note that "the invention of practice" is occurring so rapidly that many practitioners seem unaware that very different theoretical positions and models for practice exist (Fiske and Chambers 1996). Whatever the specific task, the moment of translating theory into practice - the point of intervention - presents extraordinarily difficult challenges. Theories that look workable at the outset may not stand the test of practice. The interface between theory and practice turns out to be a crucible for transformation, as collections of case studies so clearly show (Wulff and Fiske 1987). Yet it is this very transformation that occurs at the interface that can inform and deepen a theoretical perspective, as Warry describes in his discussion of a praxis approach in applied anthropology. In this approach, theory is tested for validity at the point of intervention, and may be modified as the process evolves. Praxis, therefore, is a form of reflexive activity concerned with change, which is collaborative in nature (Warry 1992). The reflexive, or iterative nature of much of contemporary applied anthropology has great potential to shape theory in new and fruitful ways. Trends in participatory action research,

which evolved originally in popular education approaches in the Third World, are also enriching applied anthropology with innovative methodologies (Singer 1994). Willms writes of the co-creation of stories in which the rich experiential truths of people's lives are infused with some of the insights of science (Willms 1998). The test of the usefulness of this process lies in the successful application of these blended understandings to better health outcomes.

CHAPTER NINE

CONCLUSION

In my ethnography of leukorrhea, I have explored the ways in which the body acts as a communicative agent of the self, with its own wisdom, intentionality and language. Nature, society and culture speak simultaneously through the bodies of South Asian women. In exploring this concept, I have examined the linkages between the individual body, the social body and the body politic, using ethnographic accounts to illuminate the meanings of leukorrhea at the level of the individual body as well as at a societal level. In developing a “thick” description of leukorrhea as an indigenous illness idiom, I have attempted to bring the voices of women who suffer from leukorrhea and the voices of those who treat them in a way that allows some of the finely nuanced meanings of the illness to emerge.

In later chapters, I have traced the complex process by which a symptom with richly layered cultural meanings has been transformed into a symptom whose biomedical meanings predominate, framing my discussion in terms of the power of dominant discourse, or authoritative knowledge. This process of medicalization has the power to transform what may be socially significant signs into pathological signs. At the interface between “ways of knowing”, hazards of mistranslation abound. Anthropologists have often attempted to speak from an indigenous perspective, a position that is frequently fraught with ethical dilemmas. Clearly, there are many difficulties inherent in speaking from a point of view that does not represent “authoritative knowledge”.

9.1 Leukorrhoea as a Bodily Idiom of Communication: Ethnographic Reflections

Leukorrhoea as “embodied wisdom” is a subtle and varied form of communication that permits women to express that which may not be verbally expressed. The illness as a bodily idiom of communication allows the sufferers, and those who care for them, to express many different ideas through the medium of the body. In order to understand the symbolic and metaphoric meanings of the illness idiom, I have interpreted these illness accounts within a theoretical framework of an indigenous cosmology of the body, using source materials from Ayurveda. I have attempted to portray the deep ethnomedical

significance of leukorrhea, by an exploration of the multi-layered cultural meanings of the symptom.

Genital secretions, both in men and women, are considered to be the most highly refined form of "*dhatu*", and loss of "*dhatu*" is considered dangerous, a sapping of the person's vital strength. Among South Asian men, preoccupations about semen loss reflects deeper concerns about powerlessness, social stress and concerns around sexuality. Many ancient and modern sources provide evidence that loss of genital secretions in men and in women have similar meanings, linking these two conditions as "idioms of bodily distress". The cultural meanings of "*dhatu* loss" speak about a loss of vital energy, a serious imbalance of the body. In speaking about "*dhatu* loss", women communicate complex cultural messages that often have social and emotional roots, through the medium of their bodies.

Leukorrhea provides a rich illustration of the way in which culture can shape the manifestation of illness. South Asian women who complain of vaginal discharge often have little evidence of pathology - the discharge of which they speak may be simply physiological discharge or the mildly increased discharge due to colonization of the vaginal tract by non-pathogenic bacteria. It is likely that the normal physiological

experience of loss of genital secretion has the potential to assume many different meanings in the South Asian context. Women experiencing social or emotional distress may focus upon this symptom because of its deep cultural meanings. The bodily symptom then becomes a way of eloquently expressing the woman's deep distress, the "language of the organs". It is a metonym that speaks of the ebbing away of life force, a gradual loss of power. Each of the somatic symptoms that commonly accompany leukorrhea has a culturally shaped meaning also. Dizziness has a metaphorical meaning of being out of balance, as do burning hands and feet. Weakness, the consequence of loss of precious "*dhatu*", symbolically reflects feelings of oppression and powerlessness.

Women who speak about their experiences of "dhatu loss" may be speaking at several levels about their life experience. They may be speaking about an experience of their physical bodies, debilitated by physical disease in the form of anemia, undernutrition, overwork and exhaustion. They may also be speaking at a more metaphoric level about a loss of energy and vitality in the social sphere, an expression of the powerlessness within their daily lives. Genital secretions also have deep sexual significance in the South Asian life-world, and loss of genital secretion may also speak of a sexuality repressed or denied.

9.2 Culturally shaped illness and biomedical disease: tensions at the interface

The cultural meaning of leukorrhea as a bodily idiom of communication can be placed in sharp juxtaposition to the powerful biomedical meanings of the symptom. Clearly, the cultural meanings of the symptom must temper the biomedical meanings, or else serious mistranslations may occur. In the case of leukorrhea, these cultural meanings have deep roots within the Ayurvedic view of the body. These metaphorical meanings shape the way people perceive the seriousness of the symptom, and affects the rate at which people will report symptoms. Symptoms that may be regarded as innocuous in one ethnomedical context might be viewed with alarm in another ethnomedical context, or the symptom may be viewed with alarm but for entirely different reasons. The symptoms of vaginal discharge is viewed with alarm in Western cultural contexts because of its association with reproductive tract infection - in South Asia it is viewed with alarm because of its association with ideas of loss of a vital essence of life.

At the interface between culturally shaped illness and biomedical disease, there is significant potential for mistranslation. The meaning of the symptom of “*dhatu* loss” in South Asia has come to be dominated by biomedical discourse, particularly within the last decade. I have traced the way in which “*dhatu* loss” has been constructed as a sign of

disease of the reproductive tract, the sign of a body both defective and infected. In this dominant discourse, reproductive tract infection is seen as being widespread, under-diagnosed, under-reported. Reproductive tract infection is constructed as significant because it causes morbidity among women (pain, debility, infertility) and their male partners, and because its presence increases susceptibility to HIV transmission. A public health response to this construction of reproductive tract infection has been the “syndromic approach to the treatment of sexually transmitted infection”, in which men and women are treated presumptively with antibiotics for STIs on the basis of symptoms and a brief risk assessment. Despite recent evidence that this program is neither identifying nor appropriately treating people with sexually transmitted infection, the program continues.

In my discussion of the “syndromic approach to the treatment of sexually transmitted infections”, I have placed leukorrhea in the context of international programs of the World Health Organization, discussing how South Asian bodies have become the targets of international surveillance and control. The current construction of South Asian bodies as infected with sexually transmitted disease has interesting parallels with colonial representations of Indian bodies. In both sets of circumstances, it can be argued that biomedicine has been used as a tool for control and domination in the subcontinent.

9.3 Research Directions

Leukorrhea as an indigenous illness idiom deserves multidisciplinary study. 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 socioeconomic status, age, and psychosocial indicators, such as family conflict, bereavement, financial losses, and so on. Further clinical studies using “gold-standard” diagnostic tests for reproductive tract infection are needed to study the prevalence of RTI in a variety of South Asian population settings, and clinical observations need to be correlated with bacteriological studies. Some bacteriological studies done on community-based rural populations have demonstrated the presence of many bacterial types - are these organisms clinically significant, or just colonizing bacteria? Studies of treatment-seeking strategies and follow-up after treatment would also be helpful. How do women decide that they are suffering from leukorrhea and how do they make a decision regarding which type of health care to seek? How do various practitioners conceptualize leukorrhea and what are their treatment approaches?

Some research on leukorrhea is being done by psychiatrists interested in the somatic manifestations of emotional distress. Comparative studies in cross-cultural

psychiatry could help to clarify the associations between emotional distress and unexplained gynecological symptoms in different sociocultural contexts. The methods of psychiatry research differ from those of anthropology, yet there is a potential for fruitful inter-disciplinary collaboration in research on culturally shaped illness.

In-depth anthropological study of women suffering from leukorrhea would be helpful to unpack the complex cultural meanings of this condition. Leukorrhea appears to have a range of meanings. The preliminary ethnographic work I have presented suggests that leukorrhea may often represent a “bodily idiom of distress”, allowing women to express their concerns regarding physical unwellness, social oppression, and emotional distress. Yet it also appears to be a discourse about sexuality, allowing women to express themselves on a topic which cannot be discussed openly. At times, leukorrhea can be a discourse of resistance, in which women protest against unjust social realities. For the Ayurvedic practitioners treating women with leukorrhea, the illness becomes a way of reflecting and commenting on a changing society. In this way, leukorrhea can truly be thought of as a “bodily idiom of communication”, which can have varied meanings according to the person who speaks about it, and the circumstances under which they speak. The meanings of leukorrhea for the husbands and mothers-in-law of women who suffer from the condition would also represent an interesting avenue for further research.

Genital secretions have deep meanings with South Asian culture among both men and women, and “semen loss” is one of the most commonly reported complaints among men at outpatient clinics across South Asia. Health workers using the syndromic approach to the management of sexually transmitted diseases also treat men presumptively on the basis of reported symptoms, without clinical or laboratory confirmation of infection. It is likely that men are also being over-treated for STIs in the same way that women are, because of a mistranslation between “*dhatu* loss” and reproductive tract infection. An evaluation of the syndromic approach among men is clearly an urgent priority.

A considerable body of anthropological work exists on the “*dhatu* loss” disorders in men, yet very little exists on the disorder in women. There are undoubtedly both similarities and differences between the meanings of this illness idiom in men and women - a gender-based comparison of the illness would make a fascinating study.

9.4 Towards an Anthropologically Informed Approach to Leukorrhea

At the interface between knowledge systems, misinterpretations abound. At this

particular knowledge intersection, biomedical understandings clash with Ayurvedic understandings of women's reproductive health. An anthropologically informed approach to women's reproductive health would require that symptoms are understood in terms of the meaning of the symptom within a given knowledge system. In-depth anthropological work might clarify some of the range of meanings that leukorrhea has for women in South Asia. This knowledge could be put to practical use in an approach to the woman complaining of the symptom of vaginal discharge, by combining a biomedical diagnostic approach with an understanding that this particular symptom may not represent organic disease, but rather be a marker of social or emotional distress.

What might an anthropologically informed approach to women's reproductive health in Garhwal look like? In a setting where bacterial cultures are not possible, a modified diagnostic approach might be used to help distinguish between pathological vaginal discharge and the vaginal discharge associated with the culturally shaped condition of leukorrhea. Criteria associated with vaginal discharge that would suggest that the discharge is associated with clinically significant reproductive tract infection would include symptoms such as: vaginal discharge accompanied by fever and/or abdominal pain; the presence of symptoms in the male partner; an abrupt onset of symptoms; presence of local irritation, and signs (if physical examination is done) of vaginal redness; excess discharge;

cervical irritation or erosion; or adnexal tenderness. Symptoms associated with vaginal discharge that would suggest that the condition is more likely the culturally shaped condition of leukorrhea include: long duration of symptoms, waxing and waning of symptoms; associated symptoms such as burning of the hands and feet; dizziness; weakness. If physical examination is done, there is a relative lack of clinically significant physical findings.

When the history and physical suggest that the woman is likely suffering from the culturally shaped condition of leukorrhea rather than reproductive tract disease, then the practitioner could choose treatment options that do not involve inappropriate biomedical therapies such as antibiotics or electrocautery. Gynecologists who have been working for a long time with women in Garhwal will often use Ayurvedic therapy to treat leukorrhea, or they may combine Ayurvedic treatments with allopathic therapies that blend in with indigenous understandings of leukorrhea (such as calcium, vitamin or iron supplements). They reserve allopathic treatment for those women who have signs and symptoms suggestive of clinically significant disease of the reproductive tract. This type of syncretic approach may be appropriate and cost-effective, and would not expose women to the risks of inappropriate antibiotic use. There would be women who have clinically significant RTI who would be missed using this approach, since some forms of RTI are virtually

asymptomatic in women (chlamydia for example). Carefully designed studies would be needed to compare such an approach with other treatment strategies, weighing the risk of missing some cases of clinically significant RTI with the benefit of protecting large numbers of women from the risks and expense of inappropriate antibiotic use. Women suffering from leukorrhea also would benefit from a more detailed discussion with the practitioner around social and emotional issues. If the woman appears to be significantly depressed, then antidepressant medications may play a role. It is important, of course, that one biomedical diagnosis is not simply substituted for another (i.e. leukorrhea represents depression rather than RTI). Often, concomitant physical problems exist. Anemia, nutritional deficiencies and parasitic infestation are widespread among South Asian women, and treating these problems can relieve some of the symptoms of physical unwellness. Women facing social and emotional distress need to have their concerns listened to in an attentive manner, a key orientation in the therapeutic approach of any sensitive health care practitioner. Practitioners are often in a good position to suggest to the woman's family that she requires better nutrition and more rest, and to probe family members for areas of social dysfunction within the woman's life that might be amenable to change. Many allopathic practitioners in Garhwal also suggest to women suffering from leukorrhea that they should consult an Ayurvedic therapist. Since the illness idiom is deeply rooted in an Ayurvedic view of the body, these practitioners often offer therapy

that is understandable and culturally sensitive.

The diagnoses of leukorrhea and reproductive tract infection may co-exist, of course- the diagnoses are not mutually exclusive. It may be necessary to combine treatment for a suspected or proven RTI with the longer-term follow-up needed for leukorrhea. The practitioner always needs to be alert for clues to the deeper ranges of meaning that the complaint of vaginal discharge may represent.

What does this imply for strategies to control HIV/AIDS in India? The study done by Hawkes et al found that the syndromic approach to the management of STIs as currently practised is resulting in massive over-treatment of women with antibiotics, with all its attendant side-effects. The syndromic approach is currently being financed by a loan from the World Bank - scarcely a good use of the subcontinent's limited financial resources. The development of widespread antibiotic resistance is clearly a danger when antibiotics are used inappropriately. Given the cultural complexities of the meanings of the symptom of vaginal discharge in the South Asian context, the syndromic approach to the diagnosis of STIs is inappropriate in this cultural setting. Treatment of STIs in South Asia needs to employ more stringent diagnostic criteria than the syndromic approach. Where the prevalence of STIs is high, such as in "red-light" districts of Bombay, a

modified form of the syndromic approach may be usable. However, in community-based populations where STI prevalence is low, this approach should not be used. The massive investment of time and resources currently being used for the syndromic approach to STI management could better be used for other methods of HIV/AIDS prevention.

9.5 Leukorrhea in Relation to Anthropological Theory

My study of leukorrhea contributes to a critique of an empiricist approach in anthropology and advances an anthropological approach that takes the body as central to analysis. Within the empiricist paradigm, ethnomedical categories of "health beliefs" are superimposed upon "natural realities", reproducing the epistemology of biomedicine (Good 1994). The serious shortcomings of this approach are illustrated in my analysis of anthropological work on leukorrhea funded by the Ford Foundation that began with the assumption that leukorrhea represents reproductive tract infection, a biomedical rather than an anthropological interpretation. My critique of this approach calls into question the recent trend within international health to use "rapid anthropological assessment" techniques as a way of generating qualitative data. These techniques use a range of systematized procedures, including listing, ranking and mapping, as well as focus group and individual interviews. The data thus generated is then analysed to develop conceptual

models of local ideas about a particular disease. Such methods are promoted as being cost-effective while nevertheless providing basic sociocultural data. This approach is rapidly becoming a part of many international health programs, and the techniques are often not performed or designed by anthropologists at all. The traditional methods of anthropology involving ethnographic description and longitudinal participant observation are becoming less common. Yet these more traditional forms of anthropological inquiry can provide key insights concerning the relation of language to observable reality. Language has a referential function when it is used to name natural objects; it also has a semiotic function when it is used to illuminate layers of culturally constructed meaning.

In my construction of leukorrhea, I have attempted to see the illness as part of a complex cultural system that has its ontological grounding in the way South Asian women perceive and understand their world, following Good's meaning-centred approach to illness (Good 1994). I have tried to illustrate, through the ethnography, the way in which interpretations of the nature of the illness are contested within specific locations, historical sequences and sets of power relationships. In describing leukorrhea as an idiom of communication, I have attempted to bridge micro and macro perspectives by creating a finely detailed sociocultural context in which women speak through their bodies. Taking the body as central to my analysis, I have described ways in which individual bodies

reflect the local moral worlds in which they live. Further, I have attempted to create a thick description of this culturally shaped illness that focuses on the body as central to analysis, creating an "experience-near" ethnography that has both critical and interpretive dimensions, following the work of anthropologists such as DiGiacomo (1987;1992), Kirmayer (1988;1992), and Kleinman (1995,1996). In illustrating the ways in which the body may become a medium of communication, I use an "embodied" approach to the study of illness, similar to that of Rosaldo (1984), Csordas (1990), and Farmer (1988).

Drawing upon a critical analysis of illness, I have described the social and political context within which Garhwali women live, demonstrating some of the linkages between oppressive social forces and the manifestations of illness in women's lives. An interpretive, "meaning-centred" approach has been used to unpack some of the meanings of leukorrhea within the lived experience of Garhwali women, drawing on ethnographic accounts. The symbolic and metaphorical meanings of this illness relates to an underlying life-world that is informed by an Ayurvedic conception of the body. In this work, I hope to contribute to the field of illness representation by blending three theoretical approaches- the critical, the interpretive and the existential. A political economy perspective has been linked to both interpretive and existential understandings; historical and global perspectives have been linked with rich cultural analysis. In this way, I hope to do justice

to the extraordinary depths of leukorrhea as an indigenous illness idiom.

9.6 Culturally shaped illness as indigenous knowledge: philosophical reflections

Indigenous illness idioms offer a form of communication through the medium of the body that allows voices to be heard that may otherwise go unrecognized. When biomedicine interprets such illness idioms as representative of organic disease, a process of medicalization begins with the construction of South Asian women as diseased and defective. These women are then treated with antibiotics and electrocautery for pathology that exists primarily in the eye of the beholder. Malinowski's critique of science, in this case biomedical science, as "dehumanizing and denaturalizing to nature" seems peculiarly appropriate.

How well have anthropologists answered Malinowski's critique of the scientific world view? More than any other group, anthropologists are in a position to see the problems and difficulties that arise at the interface between different assumptive worlds. In the development field, anthropologists have witnessed the destruction of indigenous ways of living and the gradual disappearance of many forms of indigenous knowledge. In the field of medical anthropology, anthropologists have witnessed the systematic denigration

of indigenous ways of thinking about the body in health and illness, and the subordination of these ways to the dominant biomedical view of the body.

Anthropologists often speak from a point of view that is not honoured within the dominant discourse, and it can be very difficult to make a difference to the indigenous people the anthropologist hopes to serve. Yet, valuable contributions can be made. Anthropologists can use their skills in attending to diverse voices to conduct careful, thoughtful studies of the lifeways of other cultural groups and a fine-grained analysis of some of the traditional ways that such groups maintained a harmonious relationship with their environment. Studies of traditional healers can elucidate the way these healers address the social, psychological and spiritual worlds of their patients - how does this therapeutic interaction speak to our world of biomedical healers, who have nearly eliminated these roles? Studies of indigenous illness idioms can illustrate the multiple ways in which illness becomes a medium of communication. The cultural messages transmitted by the illness idiom have multilayered meanings, that are often different for those who suffer from the illness and those who treat the illness. Yet all these illness meanings have relevance, offering windows of understanding into the life-worlds of those who speak using this idiom.

Ethnography can be a powerful tool to allow voices to be heard. As Scheper-Hughes writes, "seeing, listening, touching, recording can be, if done with care and sensitivity, acts of solidarity. After all, they are the work of recognition." (Scheper-Hughes 1995:409). Applied anthropologists have unique opportunities to develop and refine methodologies to hear these voices more sensitively, and to respond to identified needs in ways that are collaborative and emancipatory. By so doing, they contribute to an evolving body of theory particularly suited to the applied aspects of anthropology.

In their role in the development encounter, anthropologists need to be more reflective and more sensitive of the ethical dimensions of their work. When they work at the interface between knowledge systems, they need to consider the wider ramifications behind the application of the knowledge that they produce. Perhaps one way of becoming more aware of the ethical dimensions of what they do is to critically examine what is happening at the epistemological interface. If the anthropologist is able to develop some awareness of his or her own epistemological framework, it may then be possible for true translation to take place, which must permit transformational change on both sides of the epistemological divide to occur. This transformational work at the interface is difficult, and can be deeply unsettling.

What does it mean to be open to transformation? Perhaps it helps in resisting "the colonization of our minds" by only one dominant way of thinking, as Apffel-Marglin (1996) warns. The process of transformation can have a myriad of unexpected results - anthropologists may need to revise their theories, their research agenda, even their action commitment. An anthropology that attempts to listen to the voices in novel ways and to allow itself to undergo multiple transformations in the process is deeply useful. It counteracts the "flatland" of the objectivity of science, and represents the rich interior dimensions of the human condition more elegantly and more poetically.

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