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Ethnomedical concept of heat and cold in Koro: study from Indian patients

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Abstract. *The present study involves the examination of explanation of Koro illness as perceived by the patients during a Koro epidemic in the North Bengal region of West Bengal state, India. Using both quantitative and qualitative method of data collection several ethnomedical explanatory concepts like increased body heat, supernatural, sexual, physical strain; fever and fear were elicited as the emic framework of causes for this malady from the sufferers. Body heat emerged as one of the primary concept. These explanatory narratives were put into different models of body heat pathology, viz., structural, sexual energy, heat loss and heat avoidance and their modus operandi were elaborated. The prevailing community treatment of Koro in the context of these cognitive dimensions along with some trans-cultural reference was discussed.*

Keywords: Koro, body heat, ethnomedical Koro perception, Indian Koro

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INTRODUCTION Koro, a psychogenic reactive state, which is intimately related with the socio-cultural construct of sexual somatization, does reflect varied types of illness beliefs in different cultural groups. In spite of a handful of medical hypotheses (*etic* explanation) of Koro (both sporadic and epidemic forms) e.g., premorbid sexual conflicts and guilt (Gwee, 1963; Rin, 1965); morbid preoccupation with sexual functioning (Yap, 1965a, b) heightened genital awareness and autonomic hyperarousal (Chowdhury, 1993a; Oyebode *et al.*, 1986), biomedical potentials (Edwards, 1984; Chowdhury, 1989a), hypochondriacal genital concern (Rosenthal & Rosenthal, 1982); mass-fear in relation to castration anxiety (Suwanlert & Coates, 1978) and cultural belief in malevolent fox spirit (Prince, 1992; Chowdhury 1993b), we really have not a single patient-reported (*emic* explanation) explanatory framework of Koro from any of the patient groups till date, except the study of Tseng and colleagues (1992) from Guangdong, China. This is an important gap in our knowledge, especially when folk explanations and illness cognition do have a significant role in disease causation (Kirmayer, 1984a,b). The present study, first of its kind in the world koro literature, attempts to bridge this gap by exploring the ethno-medical etiological basis of koro illness as perceived by the patients themselves in the background of Indian culture.

The land and the people

North Bengal region is the northern part of the state of West Bengal, India, comprising of five districts, viz. Darjeeling, Jalpaiguri, Koch-Bihar, West Bengal Dinajpur and Malda. This region is inhabited by diverse ethnic population like Nepalis, Rajbanshis, Tribal, Muslims, Bengalis and migrant settlers like Jains and Behari Hindus from other Indian state and Bengalis, both Hindu and Muslims, from Bangladesh. The Rajbanshis, a Hinduized tribe, are indigenous inhabitants of

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this region. The origin of this tribe is uncertain. They probably are mixed people arising out of Dravidian stock with marked admixture of Mongoloid blood. They follow the Hindu custom in marriage and worship of gods. Apparently they have different worldview from that of the Hindus with a greater stress on magico-religious principles.

MATERIALS AND METHODS

Sample

A total of 101 male Koro cases were interviewed in different hospitals, private clinics and in the community during the epidemic of Koro in North Bengal region (Chowdhury *et al*., 1988), the detailed clinical features of the cases were reported elsewhere (Chowdhury, 1989b; 1990; 1992a,b; 1996).

Instruments

In-depth Interviews for 'Cause Cognition': Each Koro patients were asked to designate the most important cause or causes for his disability. His descriptive account was noted with a mark "P" (Primary) for the most important cause cognition and "S" (Secondary) for the additional causes they thought was also contributory. All the collected narratives were grouped according to the primary cause perception and grouped them in different categories.

Ethnomedical Explanation of Cause(s): A detailed descriptive open-ended account of each 'cause' perception was then elicited. They were asked to specify and elaborate the detailed mechanism of factors they perceived as the cause of their 'genital' illness. As 'body heat' was the predominant concept found, so a detailed analysis of these perceptions was done and the responses were grouped into distinct models as per their key dynamics of operating mechanisms. The author for the ease of communication did the naming of the models. Some of the cases were also agreed to draw an illustration of the mechanism of penile pull (Chowdhury, 1989c).

RESULTS

Demography

Maximum cases were Rajbanshis (41.6%), unmarried (64.4%) with primary education (48.5%) and agricultural occupation (32.7%). The age mean of the sample was 23.6 ± 7.4 years.

Perceived Cause (see Table 1)

Maximum cases (54.5%) perceived excessive 'body heat' as the primary cause of Koro, followed by 'supernatural' (14.9%) and 'sexual' (7.9%) causes. The highest attribution for secondary cause was 'sexual' (30.7%) followed by 'body heat' (8.9%)

Table 1. Cause cognition of Koro by the patients (N=101)

	Primary Emphasis		Secondary emphasis					
Perceived Causes	**N**	**%**	**Body Heat**	**Supernatural**	**Sexual**	**Physical Strain**	**Fever**	**Fear**
Increased Body Heat	55	54.5	-	-	29	-	4	-
Supernatural	15	14.9	4	-	-	-	-	7
Sexual	8	7.9	3	-	-	1	1	-
Physical strain	6	5.9			2		1	
Fever	5	4.9	2	-	-	1	-	-
Fear	4	3.9	-	3			-	-
Can't say	8	7.9	-	-	-	-	-	-
Total (%):	101	100	9 (8.9)	3 (2.9)	31 (30.7)	2 (1.9)	6 (5.9)	7 (6.9)

Ethnomedical explanations of Koro causes

Body Heat

Maximum patients (54.5%). perceived body heat as the primary cause of Koro. Their narratives of body heat mechanism for causing Koro is grouped into four models according to their central theme (Table 2).

Table 2. Explanatory Models of Body Heat excess (N=55).

Body Heat Model	Ethnicity									
	Rajbanshi		Behari Hindu		Nepali Hindu		Bengali Hindu		Total (N=55)	
	No.	%	No.	%	No.	%	No.	%	No	%
1. Structural	22	40	1	1.8	1	1.8	2	3.6	26	47.2
2. Sexual Energy	9	16.4	2	3.6	1	1.8	2	3.6	14	25.5
3. Heat Loss	7	12.7	3	5.5	0	0	0	0	10	18.2
4. Heat Avoidance	4	7.3	1	1.8	0	0	0	0	5	9.1
Total	42		7		2		4			
% Total	100		87.5		22.2		16.7			

Body Heat - *Structural Model*: Maximum (47.2%) patients perceived that when the usual body heat becomes excessive, it causes destruction of the outgoing nerves (Note 1) and vessels from abdomen to penis, causing destruction of their strength and resulting in their shrinkage. This shrinkage of internal, vital supporting and nourishing structural connections (with the penis) pulls the penis inside the abdomen. The precise reason of such sudden body heat increase though was not clarified, yet majority of patients (59.8%) attributed it to excessive consumption of red meat, garlic, onion, spicy food and egg (Note 2) or "bad" (sexual or forbidden erotic) thoughts.

Body Heat - *Sexual Energy Model*: Patients (25.5%) in this group stated that sexual energy is stored inside the penile mass and scrotum. This energy is primarily responsible for the maintenance of penile girth, erotic desire and sexual functions like erection and seminal discharge and procreation. Under normal condition, this 'energy-function' factor has a correlation with the ageing process, e.g. in adolescence there is an increase in body heat which causes increased frequency of penile erection, even on minimal erotic provocation and nocturnal discharge. Contrawise, as one grows older, there is a decline of body heat as is reflected in diminishing penis size, lesser number of penile erection, lowered sex-urge and diminished quantity of discharged semen. The normal body heat also provides an optimum inner temperature for the survival of seeds (sperms), thus ejaculated semen is always hot. With ageing however, due to diminished body heat, most of the sperm dies, causing sterility, so also the sexual urge. This is one of the important reasons why girls do not want to marry aged persons.

In koro illness, too much increase (pathological) of body heat consumes this sexual energy and the situation resembles a "low-heat" condition of old age, namely shrinking of penis. Moreover, because of the low heat, the patient's extremities turn cold and senseless (correlated with the accompanying anxiety symptoms with Koro attack). However, unlike in old age where the process is slow and gradual, in koru it is sudden, untimely and thus resembles an illness, which may lead to potency problem. The exact reason of this increase in body heat was not clear to them, but most believed that it might have some relation with 'abnormal sexual urge' (64.3%) or with 'physical hard labor' (21.4%) or 'long hours of work under the scorching sun' (14.3%).

Narrative of a male Koro patient aged 26 years:

> *… I was feeling a hot sensation all over the body since last few days before my attack. My head was hot, eyes were red and hot and even the urine was so hot that it inflicted uneasiness and shock-like sensation in the penis during micturation. This phase persisted for 3-4 days and I became not only exhausted and tired but also became frightened*

that I might be caught by some illness, especially there were plenty of jhinjhini (local term for Koro illness, Note 3) *cases were occurring in our community. On the day of the attack, I felt extreme lassitude since morning as if I have lost all my energy and my hands and legs were abnormally cold. I understood that the excessive body heat, which I experienced during last few days, destroyed my inner body system and made my body numb and cold. I develop the fear that I might be attacked by jhinjhini and I repeatedly checked my penis, which had no sensation, and unduly cold. I was so fearful, I slept up to 3 pm without taking my lunch. I went for urination and with utter surprise I found my penis completely dead, small and abnormally lax and loose- just like a piece of clay. I tried to hold it securely but I found it was going inside and could not be grasped or pulled out. I shouted with fear and my elder brother came to rescue me and he called others also…… I don't know why my body heat had increased so much before this attack… may be I was preoccupied heavily with sexual thoughts because my marriage negotiation was going on… these sexual thoughts have increased specially after meeting the girl (prospective bride) few days ago…*

Body Heat - *Heat-Loss Model*: Proponents of this model (18.2%) expressed a homeostatic physiological dynamics of body heat. Body heat is perceived here as a very useful inner body energy for the maintenance of all functions. Body heat has an inbuilt system of continuous generation and subsequent dissipation through the body orifices. Hot breath is expelled through the ear, nose and mouth. A blockage anywhere in these pathways by disease or natural objects (water logging of the ear) causes reeling (tinnitus), cough or hiccough. Abdominal heat passes through the anal orifice via wind and faeces, a blockage of which causes distension, acidity and burning (heart-burn) and indigestion. Urine and semen also help to pass out this heat through the penile aperture, both of which are always hot to touch. Excessive body heat causes damage of the penis-pathways (of energy transmission) and of the semen store, connected to the umbilicus or in the head (Fig1) causing thereby any of the following three dangerous disorders: shrinking of the penis; stoppage of urine or blockage of seminal discharge, all of which have the potential to cause death, if not intervened immediately.

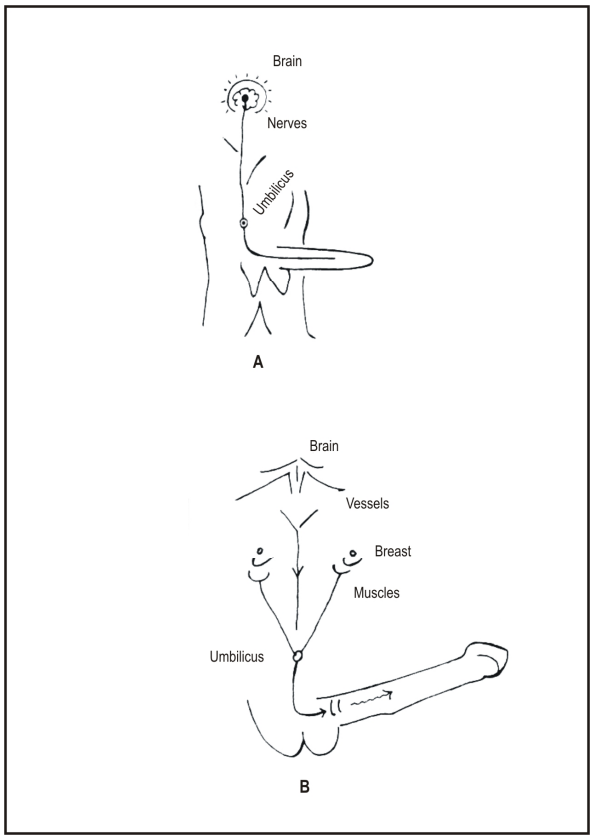

Figure 1 - Illustration of body heat mechanism in causing Koro: A by a 31-year English school teacher and B by a 22-year shop-owner.

Body Heat - *Heat Avoidance Model*: Patients (9.1%) with this perception narrated that the skin plays an important role in the conduction of normal body heat. Fever is one such example of heat loss through skin. Penis, being a highly sensitive organ is vulnerable to damage by increased body heat. So in koro, a state of increased body heat, the penis shrinks or retracts into the abdominal cavity in an attempt to avoid heat insult. This explanatory model, unlike the others, tries to explain a protective body mechanism for the aetiopathogenesis of Koro. The extreme fear and anxiety it arouses, was perceived, because of the suddenness of the process and the uncertainty and unpredictability regarding the reappearance of the penis from the abdomen, if not intervened immediately. This idea was also reflected in the folk intervention of the immediate cooling of the body either by pouring hundred of buckets of water over the head of the patient or submerging (often forcefully) him in the pond or river- popularly termed as 'water

treatment'. This mode of community treatment was not without health hazards even death (Chowdhury, 1991).

Influence of Body Heat on other systems of the body Table 3 depicts the perception of the Koro patients regarding the pathological influence of excessive body heat on other systems of the body. Forty-two types of ailments (Note 4) involving four systems/ regions of the body (head and neck, gastrointestinal, genitourinary and general) have been attributed to the body heat excess and is presented here as per their terminology. The four highest perceived distress/illness to body heat in descending order were sleep disturbances (94.5%); excessive seminal liquidity (81.8%); liver damage (78.2%) and heat over head (65.5%).

Table 3. Ethnomedical categorization of body heat in causing distress/illness of the various systems of the body (n 55). [More than one symptom is reported by the cases].

	N	%
A. Head and Neck Symptoms		
1. Heat over Chandi (head)	36	65.5
2. Falling of hair	23	41.8
3. Burning inside head	22	40.0
4. Brain short	17	30.9
5. Headache	16	29.1
6. Never catches cold	14	25.5
7. Hot Breath	13	23.6
8. Heaviness of head	12	21.8
9. Drying of brain	8	14.5
10. Stiff neck	7	12.7
11. Red eyes	6	10.9
12. Pricking sensation over scalp or body	6	10.9
B. Gastrointestinal Symptoms		
1. Liver damage	43	78.2
2. Indigestion	38	69.1
3. Excessive wind	37	67.3
4. Acidity and burning	29	52.7
5. Vomiting	28	50.9
6. Upward pressure from stomach	23	41.8
7. Loss of appetite	21	38.2
8. Pungent/ bitter taste	15	27.3
D. General Symptoms		
1. Disturbances of sleep	52	94.5
2. Burning feet	39	70.9
3. Black spot on skin or under the eyes	35	63.6
4. Boils/Acne on the face	21	38.2
5. Lethargy	16	29.1
6. Prominence of blood vessels over skin, mainly in hand	15	27.3
7. Bad dreams (of sexual nature)	7	12.7
8. Increased thirst, often during sleep	6	10.9

	N	%
C. Genito-urinary Symptoms		
1. Excessive liquidness of semen	45	81.8
2. Quick semen discharge	42	76.4
3. Passage of semen in urine	40	72.7
4. Increased sex urge	24	43.6
5. Burning pain in the penis	18	32.7
6. Impotency	11	20.0
7. Lax penis	10	18.2
8. Sexual weakness	6	10.9
9. Scrotal pain	2	3.6
10. Sterility	2	3.6
11. Twin pregnancy	1	1.8
In Females		
1. Black menstruation	22	40.0
2. Excessive vaginal secretion	11	20.0
3. Menstrual disorders	6	10.9

Supernatural Cause

This cognitive construct (14.9%) reflected the prevailing community perception of shared paranoia during this epidemic. In this category a fairly good amount of paranoid ideas were expressed, e.g. envious persons having inflicted the illness by black magic or spell, which helped to generate an internal (abdominal) malevolent force that pulled the penis inside the abdomen. Some believed that the Koro malady is a punishment given by God for their excessive masturbatory practice (a bad habit- causing useless spoilage of valuable seeds in semen) or for their past sexual

misdeeds (some mentioned like prostitute visit, incest or reading pornographic materials). God wanted to make them sterile or sexually weak forever via this illness.
In tune with this concept of malevolent inner force (that pulls the penis inside) the folk strategy emerged was to counteract this by applying outer pulling force, viz. manual or mechanical traction of penis. This force-counter force paradigm, depending on the intensity, duration and lethality of the method of outer pull, often resulted in penile injury in many instances (Chowdhury, 1991).

Sexual Cause
Perceived cause in this category (7.9%) showed strong ideas of guilt with moral tone in relation to different sexual function and events, like masturbation, nocturnal seminal discharge, semen density (too liquid) and sexual behaviors like prostitute visit and illegal sexual intercourse within the bond of family kinships (incest). The resultant effects of all these 'sexual wrong-doings' were sexual weakness, which had increased their vulnerability to this *jhinjhini* malady. Nocturnal emission was perceived by most as an inherent constitutional weakness, which if present in excess was believed to generate multiple physical distresses and disabilities with ultimate impotency. Many of the cases had history of *dhat-patla* (nocturnal emission – 52.5%); sexual weakness (37.5%) and impotency (19%) and took recourse to different treatment methods, including kabiraji, homeopathic or indigenous herbal or folk medicines for cure.

Physical Cause
Physical weakness, either from fever or physical strain, was believed to be the cause of Koro by 10.9% of cases. Three cases had a spell of acute fever preceding their Koro attack with positive blood smear for malaria parasite. The account of physical strain varied from exhausting physical labor in the paddy field or in tea plantation work, to carrying heavy load or too much cycling in the sun. It was believed that physical strain makes their system too weak and thus made them vulnerable to this penis shrinking illness.

Fear
Fear was described mainly as the mental reaction to the various threatening news or rumors of spreading Koro illness in the locality. Two important facts elicited from the Koro patients, especially from Koch-Bihar district, need mention at this point. First is the episodic community fear-wave at one or two year's interval prevalent in some rural areas of the district. The most educated Koro patient of this series (had double MA, in English and Economics and a school teacher by profession) gave this account:

> *"… All of a sudden a terrible news spreads in the locality regarding an imaginary unholy mystic creature that has immense supernatural or magical power to cause harm, even death, to humans, if one confronts it face to face. The precise appearance of the creature is not known as nobody has seen it distinctly, but everyone is horribly fear-stricken, so much so that they shut all the doors and windows of the house well before evening, sometimes even at noon. No one goes out of the house alone or in the afternoons. People pass each night in great apprehension as if some catastrophe will occur at any moment. The news of someone's death or disappearance in nearby villages is attributed to this mystic event, which adds further anxiety in the community. In each such incidence there is a local name for this creature, the last such one a few weeks back being "Hullu" – a monster with a body of a monkey and face of a demon. This intense collective fear (Note 5) usually stays for a week or so and then it passes off gradually. … So when the news of this jhinjhini illness came to this part, say after 3-4 weeks of this Hullu episode, people were very fearful and reactive and fearing that they will be afflicted by it…"*

The second phenomenon is the experience of a fearful monosyllabic mystic sound, somewhat akin to a solitary auditory hallucination (or pseudo-hallucination), just before the Koro attack by the victim. The sound, lexically resembling "Kottash or Kattaw", is heard suddenly by the subject, usually in an open space (paddy field, river bank), which invokes a terrible and dreadful feeling of an impending danger in the hearer who instantaneously develops the deadly symptom of penile

pull. This magical sound gained a terrible fear symbol in the locality during the epidemic days so much so that people used to avoid going to the fields alone and took charmed amulets from local folk healers to protect themselves from this sound (to make it inaudible). The illness was also locally known as the "attack of Kottash or Kattaow" (Note 6). The exact source and intent of this sound of peril is not known but some patients believed that it was an evil force, somewhat similar to a malevolent spirit, whose intention was to make the hearer sexually invalid or even dead, if not treated immediately.

DISCUSSION Two most important ethnomedical concepts, viz. body heat and supernatural connections to Koro has emerged from this study of Indian patients which is also having some transcultural relevance to Koro aetiopathogenesis reported from other parts of the world. The following discussion will thus focus on heat-cold dualism and supernatural-magical connections to Koro from a transcultural perspective.

Heat-Cold dualism in Koro

Heat and cold – two natural physical states, occupy important ethnomedical disease cognition of many cultural groups. The Chinese traditional Taoist medical system, for example, acknowledges the dichotomy of heat and cold physical states in terms of the yin-yang theory and its influence on health and diseases (Chen, 1937). Chinese traditional medicine since the time of Ch'in dynasty (220 B.C.- 265 A.D.) identified cold (pertaining to both climate and food articles) as the precipitator of genital retraction illness (Gwee, 1970; Devon & Ong, 1987). It is amazing to note the citation of correlation between body heat and genital retraction in Chinese medical text in 1834, written by Pao Sian-ow in "New Collection of Remedies of Value" (Gwee, 1968). In Chapter 6, the symptom of genital retraction is described as "Yin-Yang transposition" as follows: "*….this arises when after a fever, this* poisonous heat *(present author's emphasis) remains in the sperm and the marrow, and can not be discharged. If intercourse is performed with a healthy person the illness of the man will be passed on the woman, and vice versa, hence it is called 'Yin-Yan trasposition'. The patient feels heavy and short of breath, the lower abdomen is tense, the genitalia may be affected by spasm and retraction, that heat rises in the chest, the head is too heavy to be lifted up, the eyes are blurred and the knees and calves are tight*." (Gwee, 1968). In the same book, in Chapter 14, cold is implicated in genital retraction as 'yin-type' of fever: "*….. after an intercourse between the male and female, may be arising of exposure to wind and cold, or the ingestion of raw and cold food, the result is pain in the abdomen, the scrotum in the male or the nipples in the female are retracted*" (Gwee, 1968).

Complementary to this 'cold' model of genital retraction theory, one can note the indigenous Chinese medical practice prevalent in old Batavaia (now Djakarta, Indonesia) for Koro, documented by Palthe in 1936: in Indonesia, the genital retraction illness or Koro was perceived by the Chinese as the predominance of yin principle or feminine power or heat in the patient over his yang principle or the masculine power or cold. In the treatment therefore, medicine of yang principle, i.e., *panas* (heat) in contrast to *dingin* or *sejok* (cold) of yin principle was advised. *Panas* was a mixture of gunpowder, arak, powdered tin with sulphur and various medicinal herbs. Pa-leng or frigophobia, a morbid fear of cold (with obsessive-compulsive or hysterical symptoms) in Chinese (Rin, 1966) and Futeishuso, a feeling of coldness with multiple bodily pain and dysphoric mood in the Japanese (Kirmayer, 1984a) are two notable examples relating to the clinical attribution of cold in the area of mental health. Rin (1963) cited a Chinese Koro case whose account shows how the ethnomedical belief shapes the symptom perception and expression: "*my nerve got leng (cold), hern (coolness) and feng (wind)…my lungs gets hot and my head too*".

Heat as the cause and cold as a cure of illness is a well-known disease theory in the ancient Indian medical classics, well discussed in Charak Samhita (1949) and Sushrutu Samhita (1938). The cultural concept of body heat in India has a deep root in these Vedic references. At least two heat related disease conditions, quite prevalent even today, are mentioned there, viz., "Head irritated

by heat" or *Sisabhitapa* and " Burning in the body" or *Daha*. The remedies advocated for the former was application of cold vegetable oil on the top of the head (Kutumbiah, 1974) and for the latter, use of cooling shoots (*dala*) of the lotus plant (*padma*) for the patient's bed, sprinkling of sandal-wood water and bathing in ponds or river containing lotus. The present study of the ethnophysiological perception of body heat among the Koro patients also endorses similar views (cooling of body). Not surprisingly the pouring of cold water or submerging the patient into ponds or rivers was a widespread social healing ritual observed in the traditional treatment of koro patients in North Bengal region (Chowdhury, 1991).

Sensation of body heat either localized (commonly on top of the head) or generalized (burning sensations in eyes, limbs etc.) is a frequent symptom in hypochondriasis and hysterical somatization in India (Nichter, 1981). Body heat and its connection with sexual arousal is well evident in the cultural interpretation of semen as a "hot fluid" (Kapur, 1979) from its Ayurvedic link (Obeyeskere, 1977). Some ritualistic prohibition relating to food articles is thus advocated, specially for widows who are forbidden to consume 'hot' items like raw meat, egg, onion or garlic, to keep their soul 'cool' or 'tame'. A number of Ayurvedic 'cold oils' are available, both from folk healers and commercially, for keeping the head (brain) and body cool. Quite a few Koro patients in the present study, used this cold oil over their head and body after their Koro attack.

Transcultural analysis shows that in many cultural groups the ethnomedical explanation of illness does endorse this heat aspect in the expression of distress. Relevant examples from six distinct cultural groups will support this contention. The most fascinating example in the present context is the *nervios*, a ubiquitous distress or a symptom of chronic illness reported from Puerto Ricans, Costa Ricans, Guatemalan, Ecuadorians and Salvadorians (Guarnaccia & Farias, 1988; Koss, 1987) which is characterized by a host of symptoms including "heat arising in the body" and altered perception. An acute attack of nervios is indigenously interpreted "as a flash of heat shooting up within the body" (Abad & Boyce, 1979). Currier (1966) describes an ethnomedical concept (and related practices) of Mexican villagers, which is based on the physical dualism of heat and cold. They attributed these two principles to foods, illness and therapeutics. Illness is perceived as the intrusion of outer coldness or hotness into the body. Aho & Minott (1977) noted a similar faith in the hot-cold theory of disease in Trinidadian culture, West Indies. They too have hot or cold levels attached to symptoms, causes and remedies of illness. Illnesses classified as cold includes influenza, asthma and common colds, while the hot disease are illnesses with skin changes like small pox, measles and infant's rashes and teething problem. Treatment involves that use of (either external application or internal consumption) of 'cool' medicines for 'hot' diseases or vice-versa. The "Brain fag" syndrome of Nigerian students comprises a host of psychosomatic symptoms among which "feeling of heat inside the head" is a prominent one (Prince, 1960; Morakinyo, 1980). Lin (1983) notes that "excessive fire" (a variant form of heat) was conceived as the reason for *Hwa byung*, a Korean folk illness, by his patients. Ariff and Beng (2006) also noted the notions of hot and cold is related with the cultural health beliefs and practices among the rural Malaysians.

Supernaturalism in Koro

Sexual potency, both physical and functional capacity, is a very important bio-psycho-social phenomenon in every culture. Real or imagined sexual malfunctions in any form thus trigger not only an individual anxiety reaction but a cultural response as well. Macassarese people of south Sulawesi consider the sudden genital retraction symptom as the evil influence of some malevolent supernatural force and a *Sanro* or native healer only cures the condition (Chabot, 1950). Dentan (1968) provides an indigenous Koro folk explanation as the belief in *incubi* and *succubi* among the Sen'oi Semai, an Austro-Asiatic people in central Malay. These are regarded as the class of evil spirits, the *semelit*, which cause sexual disorders including the retraction of genitals into the body.

Jilek (1986) describes a few Koro cases from Bao Man village of Guangdong province, China where the Koro or Suo-Yang is attributed to malevolent ghosts or evil spirits. It is believed that the evil spirits cause the genitals or breasts to shrink. A very similar concept of 'taking away of male organ' by a disguised witch-woman was a popular mass notion in medieval Europe (Malinick *et al.*, 1985; Kirmayer, 1992) and in present Africa (Illechukwu, 1982, Lucieer, 1984-85). De-sexualization of male by magic is an important theme in many witchcraft cults of the world. Recent African examples of penis theft from Benin (BBC news, 2001a) or penis snatching from Ghana (Mather, 2005; CNN World news, 1997) and Nigeria (BBC news, 2001b) strongly pointing towards the prevalent cultural beliefs concerning witchcraft, sorcery and divination related to male sexuality or sex organ. Dzokoto and Adams (2005) in analyzing the genital shrinking epidemics from West African nations stressed the role of local socio-cultural distress as a facilitator of mass psychogenic illness.
Analyzing the Koro epidemic in Hainan Island, Cheng (1997) identified some important cultural risk factors viz., cultural attitudes and beliefs, news and rumors about Koro and mass anxiety in the community. Wen (1998) in his study of the influence of folk beliefs and illness behavior from Taiwan showed how a common thread of cultural context operates among the illness experiences of shen-kuei syndrome, Koro, neuroasthenia, frigophobia or the spirit possession syndrome. Tseng and colleagues (1988; 1992) in their elegant studies on Koro epidemic in Guangdong, China, focused how the community perception and attitude toward supernatural beings helped to create a hysterical atmosphere to facilitate the epidemic. They also found a significant presence of culturally related folk beliefs as the causative factor for individual vulnerability to Koro attack.

Yap (1951) notes that the Chinese traditional method to prevent the penis from retraction is the tying of a red string round the penis, red being the color, which successfully wards off evil influence. Kenneth Pyne in a personal communication to Edwards (1984) narrated the indigenous belief of Koro among the Tagabawa Bagobo of south central Mindanao of the Philippines. The Bagobo believe that Koro is a product of a type of sorcery used to make one's opponent weak. The sorcery, carried out by tainting the food of the intended victim, has a dual action: penis shrinkage in male and tongue-tie in female. Relevant to this concept of supernatural or magical disease causation is the recent analysis of Prince (1992) of Guangdong Koro epidemic where supernaturalism and ethno-cultural magical attribution of Koro centers around the fox spirit which steals away the male organs for her own benefit.

In the present paper the ethnomedical cognition of supernatural causation (malevolent indrawing force) or fear reaction or hearing of mystic sound of peril (*kattaw* – both have deep cognitive root in the cultural notions about spirits, magico-religious extra-sensory phenomena and their magical potentials of harming others. These beliefs entertain different paranoid projections and dictate various folk-healing practices for abating malevolent occult influences. This illness cognition also has a strong relation with long-held traditional social beliefs where the disease is believed to be produced by demonic or malevolent forces. Examples are available where even transculturation may triggered paranoia to the extent of psychosis along with Koro (Rosca-Rebaudengo *et al.*, 1996). Complementary to this belief pattern, the widespread Koro preventive ritual in North Bengal, as prescribed by *Gunins* (local traditional healers), is a good example. Marking of ear lobules and *supra-sternal fossa* with slacked lime and wearing of a fine sheathe of black-stem arum was regarded an effective protection against the evil influence and thus against penile shrinkage (Chowdhury, 1991).

CONCLUSIONS The ethnomedical explanation of Koro patients elicited in this study reflects the age-old Indian cultural illness cognition related to physical (heat) and non-physical (magic) etiology as handed down from the Vedic traditions through centuries. The ethnomedical

perception of body-heat, which not only precipitates genital shrinkage, but was also implicated in a number of sexual pathologies, is an important finding in this study. It is also interesting to note that how the two ancient civilizations, viz., Indian and Chinese, interpret this genital illness in terms of physical philosophy, i.e., heat and cold respectively. Magic or supernaturalism, an answer to mans' many unresolved anxieties and queries, hence constitute an archetypal concept of illness, disability or dysfunction. The modern medical approach should take into consideration of these emic postulations in koro in the context of the local socio-cultural conditions (Tseng *et al*., 1988) for not only better treatment compliance and long-term care (Chowdhury, 1996) but also to explore the interface between cultural beliefs and symptom choice (Cheng, 1996).

NOTE

1. Long back Slot (1935) attempted to elicit the ethno-medical explanation of Koro from traditional healers of Macassaran area of Sulawesi. They stated Koro to be the affliction of nerves ("nerve contracting disease") while physical labour, genital trauma (a fall from horse back) and immoderate sexual practices were also regarded as potential precipitators for Koro and associated fever was viewed as a bad prognostic sign.
2. The erotic energy link of eggs with male sexuality (performance) could be traced to the ancient Arab culture, which in later days became a folk wisdom in almost every part of the world (Camphausen, 1991). The Arabic aphrodisiac prescription speaks of a mixture of fried eggs honey, pepper, cinnamon and myrrh etc. Onion was highly regarded as an aphrodisiac in the Indian Vedic society and among the Chinese, Islamic and European traditions. In the past, owing to its alleged sexual stimulating property, onions were banned in many of the monasteries in the East and the West. This custom is still maintained in the Hindu worship rituals in India.
3. *Jhin-Jhini* was the Bengali term designated by the community to the Koro illness in North Bengal and Assam during the epidemic (Dutta *et al*., 1982; Chowdhury, 1993c). Literally the term implicates the alleged prodormal symptoms of numbness in limbs or genital region before the onset of acute penile retraction.
4. *Brain short* is the term used for abnormal behavior ranging from madness to mental dullness. *Never catches cold* is a typical perception relating to the production of nasal discharge due to common cold affliction. It is believed that if a person dose not has such nasal secretions/discharge, it indicates some unhealthy constitutional traits that need treatment. *Drying of brain* is equivalent to decreasing intelligence and/or common senses or a state similar to dementia. *Prominence of dorsal veins* of the hands is believed to be an indication of ill health, often excessive semen (*dhat*) loss. *Semen density* is considered to be a sensitive indicator of masculinity including sexual vigor. Liquid semen is regarded as week *dhat* (semen) and represents a host of constitutional traits like feeble mind, diminished sexual strength, anxiousness and reduced physical tolerance to hard work and even sterility.
5. Jilek (1986) describes an atmosphere of collective fear of ghosts during a Koro epidemic in Zhanjiang town, Guangdong province, China. The villagers believed that ghost make the genitals of men and breast of women shrink and disappears into the abdomen and chest. The villagers to drive the ghosts out of the village used drum-beating, bell ringing and bursting of firecrackers.
6. *Kattaw* is a local Bengali syntax for small tortoise living on the river bed (Chowdhury, 2003). It is interesting to note that in Koch-Bihar district the rural people use the lexicon *Kattaw* or *Kura* (Mazumdar, 1977) for tortoise. This term, along with its symbolic use to designate genital retraction, reminds one of a similar situation found in Malay and Maacassaran dilect. 'Koro' has a lexicographic link with a Malay term 'Kura' (Gwee, 1968).

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