

Male Sexual Health Concerns in Orissa – An Emic Perspective

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Introduction

This paper presents data from a comprehensive study of male sexual health problems in the state of Orissa in eastern India. The materials, based on in-depth qualitative interviews followed by a carefully constructed quantitative survey, show that men's concerns about sexual health comprise a complex array of symptoms, of which a major portion are not directly related to sexual transmission, but rather a reflection of their worries about semen loss. On the other hand, the data indicate general, widespread awareness of sexually transmitted infection, including at least superficial knowledge of AIDS. The study suggests that programmes of sexual health information, as well as clinical services for males, should be equipped to provide counselling and other services that go beyond simply concentrating on diagnosis and treatment of sexually transmitted infections¹ (STIs).

The last decade has seen dramatic changes in population policy in India. From the mid 1960s until recently, the family planning programme adopted a target-based approach, fixing method-specific quantitative targets for contraceptive acceptance for each health worker (Khan and Townsend 1999). In 1994, the International Conference on Population and Development (ICPD) in Cairo redefined the population agenda with a major paradigm shift away from demographic targets towards individual reproductive health needs. The Indian Government responded to this central element of the ICPD Programme of Action by introducing the target-

free approach from April 1996 and the launch of the Reproductive and Child Health Programme in October 1997 (Visaria and Visaria 1999).

The need for more 'male involvement' in reproductive health was another important recommendation at the ICPD conference. With the focus on addressing women's reproductive health needs, male involvement refers mainly to the encouragement of men's responsibility as sexual partners, husbands and fathers. There is little recognition of this ICPD recommendation in India's government policy documents since 1994, though some non-governmental organisations (NGOs) have been paving the way through actively including men in their community based programmes to improve women's health (Raju 1999). Even though it was fully acknowledged that men's sexual behaviour has direct effects on women's health, ICPD paid only lip service to men's own reproductive and sexual health concerns (Basu 1996).

Sexually transmitted infections (STIs) including the human immunodeficiency virus (HIV) are a major burden to health in India as in other countries. Since the AIDS pandemic, there is increased interest in the public health importance of the 'classic' STIs since they are shown to facilitate HIV transmission. Control and prevention of these STDs are important goals in their own right. According to the World Development Report of 1993, STIs are the second most important cause of loss of healthy life years in women of child bearing age worldwide (World Bank 1993). In India, there are an estimated 40 million new STI infections a year; prevention programmes and facilities for diagnosis and treatment are seriously neglected (Ramasubban 1999).

The diagnosis of STIs in women is complex because of the high rate of asymptomatic infections and the relatively low specificity of the symptoms of possible infections. Fifty per cent of women with STIs will not have any symptoms, whereas their infected male partners will usually experience pain and other signs of infection (Hook and Handsfield 1999, Stamm 1999). Symptoms are more specific in men compared to women, and the cost associated with overtreatment is therefore likely to be lower in men than in treating equivalent symptoms in women. Policies to provide clinical services for men may as a consequence reach asymptomatic but infected women through partner notification strategies. Prevention of some of the sequelae of untreated or mis-diagnosed STIs in women, such as chronic pelvic pain and infertility, could greatly contribute to lowering the physical and social burden of reproductive ill health.

Risk reduction and effective STD case management are central to STD control. To address the problems of clinical diagnosis and low specificity of symptoms, syndromic management has been widely propagated. Flowcharts of clinical algorithms are used for presenting symptoms like genital ulcers, urethral and vaginal discharge, and treatment is identified for several possible infections. In a study on the adequacy of STD case management in public and private health facilities in India, Mertens *et al.* (1998) show that only 10% of the STD patients were satisfactorily managed. According to Indian guidelines, clinicians diagnose cases on aetiological basis only and do not recommend co-treatment when the aetiology is uncertain. The study concludes that by promoting the syndromic approach to STD management and thereby simplifying existing guidelines, doctors in India could provide better care.

The provision of syndromic STD management for women attending family planning or antenatal clinic has received high priority on the international health agenda. In general, populations with relative low STD prevalence the indiscriminate application of syndromic management may lead to overtreatment on a large scale. The resources for STD control should be concentrated to individuals at higher risk and men should be targeted (Cleland and Lush 1998, Hawkes 1998). The introduction of STDs into the framework of reproductive health care provision necessitates the incorporation of men as potential intervention recipients. In South Asian societies, it is reasonable to assume that men are the ones who are more likely to initially contract STDs and transmit them to their wives (Mundigo 1995). Sanctions against

non-marital sex are less harsh for men than for women, male mobility and migration is higher, and men are the predominant patrons of sex workers.

India, like many other countries, was slow to react to the emerging AIDS epidemic. Arguments that traditional socio-cultural norms of monogamy and universal marriage provided protection from HIV led to an initial period of denial (Ramasubban 1999). The National AIDS Control Organisation (NACO) was only established in 1992. The sentinel sites set up in 1994 to monitor trends in seroprevalence among sex workers, STD clinic attenders and women at antenatal clinics, showed rapid increases in both high-risk and low-risk groups. After the initial denial, the AIDS problem was then considered a purely medical problem to be dealt with by the medical establishment with their longstanding history of running centrally administered curative-oriented disease control programmes. None of the existing control programmes included a disease prevention component, and no attention was given to understanding people's health behaviour received no attention (Ramasubban 1999).

Pelto (1999) has recently discussed the dearth of systematic information on sexuality and sexual behaviour in India at the time that both governmental bodies and NGOs started awareness campaigns in the face of the HIV/AIDS epidemic. Since the promotion of safe sex is at the core of programmes for HIV prevention, HIV/AIDS has opened up the discussion on sex and sexuality. In the second half of the 1990s, under the impetus of international donors, there was a rapid increase in intervention research on sexual behaviour and health with considerable social and behavioural science inputs. Most studies focus on groups with high risk behaviour.

Men and women in India are relatively unaware of the use of condoms to prevent sexually transmitted infections (Pelto 1999). This is indeed consistent the medical curative focus of disease control. In the study on the adequacy of STD case management Madras, only 30 per cent of STD patients had been given advice during consultation on the use of condoms to prevent infections (Mertens *et al*, 1998).

Although social marketing programmes were initiated by the Government of India in 1968, the objective was the provision of a better choice in family planning methods. In 1995, the Department for International Development (DFID) started funding a social marketing programme of condoms and oral contraceptives in the state of Orissa. The focus of the advertising campaign was on the promotion of the concept of child spacing and the increased use of reversible methods of contraception. Research in urban areas showed higher reported condom use among men than women (AIMS 1996). Male use for extra-marital sex and under-reporting by women due to cultural sensitivities was suggested. To learn more about attitudes towards condoms and their use, a study was thus designed to measure the need for condoms and to identify and quantify sexual risk behaviour among single and married men. Since DFID was also planning to fund a male health clinic in Cuttack, the research included the study of sexual health problems as perceived by men in the community. This paper discusses these data on sexual health concerns.

The paper starts describing the setting of the study. This is followed by a discussion of the focussed ethnography methods and the survey data used in the research. The data collected reflect the emic perspective, using men's own vocabulary and criteria for categorising illness. The symptoms and perceived causes of the main conditions are described and the emic categories of sexual health concerns are analysed. The prominence of psychosexual concerns of semen loss in the qualitative data is confirmed with use of the population based survey data. Differentials in reported experience of semen loss are presented. The listing of AIDS in men's free association about sexual health concerns is compared with the probed AIDS awareness data in the survey. The paper finishes with a discussion on the importance and implications of semen loss.

The Setting

Orissa is a state in East India, with a coastline on the Bay of Bengal. It borders West Bengal and Bihar in the North, Madhya Pradesh in the West and Andhra Pradesh in the South. Its coastal plains have for centuries served as a link between north and south India and are a more developed region than the mountainous areas. Of all states in India, Orissa has the second highest concentration of tribal people: the 62 different Scheduled Tribes make up 22% of its population. Of the total population of 32 million enumerated in the 1991 census, 86% was classified as rural.

Orissa is one of poorest states in India. Using the Planning Commission poverty line, Datt (1998) estimated that over 40% of Orissa's urban and rural population was living in absolute poverty², compared to a national average of 35%. The adult literacy rate is one of the lowest at 49%, though rates are higher in the coastal developed districts (60%). Women are less likely to be literate than men and strong social norms on women's mobility prevail. About 95 per cent of the Orissa population is Hindu, with two per cent Muslim and two per cent Christian.

The general condition of poverty in Orissa contributes to poor reproductive and child health. The total fertility rate (TFR) in urban areas is 2.5, and around 3 for rural women. Though knowledge of sterilisation was very high (91%), women were less aware of reversible methods of contraception. Family planning is dominated by use of permanent methods, mainly female sterilisation (28.2% versus 3.4% male sterilisation), and only 3% reported use of reversible methods of contraception (pill, IUD and condom). Infant and child mortality rates in Orissa are among the highest in India. Morbidity in small children is equally high, with diarrhoea and malaria as main contributors (PRC Bhubaneswar and IIPS 1993).

The study area for the research on sexual health and behaviour was limited to the 4 coastal districts³ with low concentrations of tribal people: Puri, Cuttack, Balasore and Ganjam districts. The distinctly different cultures of the scheduled tribes in Orissa suggest the need for a separate, in depth study in the tribal areas. Such study was not feasible in the project reported here.

Methods and Data

The strategy adopted for the qualitative data collection broadly followed the guidelines for doing Focused Ethnographic Studies (FES) (Pelto 1994, Pelto and Pelto 1997). The focus of the data gathering was on information needed to answer programmatic questions in sexual health and condom promotion interventions. The fieldworkers were trained in in-depth interviewing, social mapping and the various structured interviewing techniques.

In total, 17 sahis (localities: colonies, neighbourhoods or hamlets) were studied in-depth by a study team of 4 male and 2 to 3 female researchers. The average number of days spent in one location varied from 7 to 10 days, depending on the availability of the informants, and initial time taken for rapport building. Though locations were studied in all four districts, nine were in Puri district, in and around the state capital Bhubaneswar and Puri town, famous for its beaches and the Lord Jaganath Temple, which attracts thousands of pilgrims and tourists throughout the year. Certain sahis in Puri are known to have a high prevalence of casual sex and men having sex with men. Sahis were thus selected according to expected variations in sexual behaviour and access to condoms. Four localities studied were rural. Each sahi was treated as a separate case and a detailed study of the various role players in each location was carried out. Data gathering and analysis took about four months to complete from May to September 1997.

Participatory mapping exercises were carried out with informal groups of men and women in the community. It was used for introducing the research topic in a sahi and for motivating local people to participate in ongoing activities. Mapping involved drawing a social and resource

map of the community with identification and marking places of health providers, places of recreation, places where liquor is available, where condoms are available and places where men go to find or meet partners for sex (Pelto *et al.* 1998). Other informal group discussions were done to get further situational data and to identify appropriate key informants for more in-depth interviews.

In-depth individual interviews were done with both key informants, and case study informants. Key informants were selected for their extensive knowledge about local cultural beliefs and practices and the conversation focused on local perceptions and behaviours. They included ordinary community members, outreach workers, medical practitioners, traditional healers and retailers selling condoms. Case study informants included individuals who had experienced sexual ill health and others who engaged in risky sexual behaviour. The conversation focused on their personal lives, to elicit illness episodes, case histories and sexual histories. Each case was contacted several times in order to build up rapport and to permit probing of sensitive issues.

Information on peoples' own explanatory models of sexual illness and local vocabulary was generated through various structured qualitative techniques like free listing, pile sorting, rating and ranking, and time-lines (Weller and Romney 1988). This paper draws heavily on these data for understanding the cultural perceptions of men's sexual health problems.

Free lists were done to help isolate and define the domain of sexual illnesses. By asking key informants and case study informants during in-depth interviews 'what are all the sexual health problems men experience in this community?' a list of sexual health concerns is defined by the informants in their own language, using culturally relevant categories. Given that there is no exact Oriya term for 'sexual health concern', it was defined as 'problems relating to, or affecting, the genital area'. The usual key terms in Oriya language included *asubidha jounanga* (problem of sexual organs), *jouno rog* (secret disease) and *jouno sambandhya rogo* (disease relating to sex).

Pile sorting was the next step. A selection of conditions produced by the free lists was written on slips of paper and informants were asked to sort the conditions into separate piles of similar illnesses. The criteria for similarity were left to informants to decide and the reasons mentioned for grouping revealed details of explanatory models. After the pile sort exercises the same cards were used for severity ranking of sexual health concerns. The men were asked to group the concerns/illnesses into three groups 'severe', 'intermediate' and 'mild, not severe'.

Fieldworkers took notes during the group and in-depth interviews. These were expanded and written out immediately afterwards. Transcripts of all interviews were coded and analysed in Ethnograph. The software program ANTHROPAC (Borgatti 1996) was used to analyse the free list and pile sort data. The Multi-dimensional Scaling procedure was adopted to provide a visual representation of how conceptually close or far the different illnesses were. Cluster analysis was a second method used to interpret the pile sort data.

The structured survey to estimate the extent of sexual risk behaviour and the need for condoms in the general male population followed the qualitative fieldwork. The findings from the qualitative study were used in the design and refinement of the survey instrument, mainly in terms of using the correct local vocabulary and defining coding categories (e.g. categories of partners, locations where people have sex). A free listing question on sexual health concerns in the community was also included in the questionnaire. The free list was included towards the beginning of the interview, mainly as a rapport-building question before moving on to the more sensitive personal questions on sexual behaviour.

This survey covered a large population-based random sample (n=2087) of single and married men in urban and rural areas of the four coastal districts in Orissa. A multi stage random sample was obtained by randomly selecting two community development blocks and two urban areas in each district; the second stage listed the villages in the blocks and the wards in the

urban areas and from these four sampling clusters (villages or wards) were selected with a probability proportional to size. In each village/ward all houses were mapped and numbered. After enumeration, thirty-two households in each sample cluster were randomly selected. All members age 15 or over in the household were listed. All eligible members for individual interview -men age 18 to 35- were ranked by age. According to the number of eligible men in the household, the youngest, second youngest etc... was selected in strict rotation in consecutive households to ensure randomisation. The selected respondent was then invited for an interview in privacy outside his home. The pre-test indicated that the interview needed to be preceded by a rapport-building chat of about half an hour. Refusal rate for interview was as low as 1%.

The statistical analysis of survey data was done using SPSS software. The data file was weighted according to urban/rural residence and the size of the district, to make it truly representative of the four coastal districts.

The Cultural Domain of Sexual Health Concerns in Orissa

A main objective of the qualitative research was defining the boundaries of the cultural domain of sexual health concerns in local terms rather than basing it on the biomedical pre-conceptions of the investigators. Free lists obtained from 35 male informants deemed knowledgeable about sexual health related issues were compiled. The most commonly mentioned problems are presented in table 1. The concerns are ranked by the number of informants listing them, and the local terms have been given an approximate English 'equivalent'.

The number of respondents mentioning a condition -or the frequency- is one indication of the importance of a health concern in that community. When a condition is mentioned first or second it is also more 'on the person's mind' than when it comes lower down the list. The frequency and rank order combine in a measure of salience. *Dhatu padiba* was the most frequently mentioned disease, with 80 per cent of informants listing it. On average, it was the second or third concern mentioned by the individual informant and it is thus clearly the most salient concern. Although *jadu* was the second most listed concern, on average it was further down the lists than *swapnadosh* and AIDS. In fact, AIDS comes out as the second most salient concern.

Most items on the list refer to symptoms rather than specific diseases. The local Oriya vocabulary is clearly influenced by allopathic terminology, with the use of medical terms like *Gonoriha* and *Syphilis*. However, these do not necessarily translate directly into the specific medical diseases. They more broadly indicate conditions which are sexually transmitted, and can thus be understood as generic terms for STDs. When probed with questions about sexual diseases (*jouno rog*), most informants directly mentioned 'gonorrhoea'. They described the symptoms like *linga-gha* (ulcers in penis) or *ling-ghimiri* (small eruptions on penis) which correspond more to the medically defined infections syphilis and herpes respectively. Thus, any sore or ulcer on the penis is interpreted as gonorrhoea. Men attributed symptoms to sex with sex workers.

Table 1: Most commonly mentioned sexual health problems in free listing

	Sexual health problem	Frequency (n=35)	Avg rank	Saliency
Local term	English translation			
Dhatu Padiba	semen discharge	28	2.750	0.424
Jadu	itching	22	4.636	0.195
Swapnadosh	nocturnal emission	19	3.211	0.242
AIDS	AIDS/HIV	17	2.529	0.353
Handling	masturbation	14	5.000	0.106
Gonoriha	Gonorrhoea /generic term for STI	13	2.231	0.285
Linga-gha	ulcer/sores on the penis	9	3.222	0.106
Parishra-poda	burning during urination	9	3.333	0.095
Hernia	hernia	7	4.714	0.093
Fileria	swollen penis, scrotum, leg and foot	6	5.500	0.035
Hydrocele	swollen scrotum	6	5.333	0.066
Katchu	itching –scabies	6	3.667	0.090
Syphilis	Syphilis or generic term for STI	4	3.500	0.061
Bata	rheumatism	4	3.250	0.040
Linga-ghimiri	eruptions on penis ~ herpes	3	1.000	0.086
HIV	HIV	2	5.000	0.024
Ulcer	ulcer	2	4.000	0.014
Malakantaka	fistula	2	2.000	0.046
Chau	white patches - skin infection	2	3.500	0.029

AIDS was frequently mentioned and was the second most salient concern. Sexual transmission was clearly understood, though many informants stressed the fact that it was due to sex with 'many' partners 'If a person is having sex relation with many women then AIDS may be transmitted (jadi kehi adhika mahila sange samparka rakhe, tebe aids heba)'. It is generally described as dangerous and very serious. There are indications however that the term *AIDS* is becoming another generic term for sexually transmitted disease. This is illustrated by an informant expressing anxiety about having *AIDS*: 'I had Lingare Gha (sores on penis) which used to be painful. It also had pus. Now there is no pus but the Gha is still there. It is not getting healed. I do not know what to do..... when I got this disease, I went to Dr. Nanda, he said and wrote on my prescription that it was AIDS. He then prescribed both medicines and injections and said it can be cured.' The contradiction of 'curable AIDS' suggests that the informant suffered another STD which was labelled as AIDS.

Dhatu padiba (or *meha padiba*) is high on the minds of men in Orissa. The condition is best described as involuntary semen loss and symptoms include : secretion of semen during urination or defecation, and secretion of semen during erection. It is associated with thinning of semen. Men mention *dhatu padiba* as a secretion of milky or chalky watery or semi-liquid substance from the penis. Several informants relate their personal experience. This extract from an interview points to the fact that it 'overcomes' men, as they seem to lose semen 'without their knowledge'

Informant: During defecation, dhatu comes out. Not all the time but some time even a large amount of dhatu comes out during urination. Even I am having this problem. Most of the time dhatu comes out without my knowledge.

Interviewer: How long you are suffering from this problem?

Informant: It will be around last seven year I have been suffering from this dhatu padiba

Most people attribute *dhatu padiba* to various physiological factors. The general causes stated are: excessive heat in the stomach (*peta garam*), improper diet and strain due to hard physical labour. Some also attribute it to absence of sex as a consequence of which the accumulated semen gets discharged. One informant states: 'Long days of abstinence causes accumulation of semen which produces heat in the body and semen discharge occurs during urination. (Bahuta din kichi nakaley bija jami jaye o deha heat hoijaye). Parisra kala bele dhatu padey)'. The immediate result of this situation is irritation and pain during urination, physical emaciation, weakness, body pain, head reeling or even 'death'. One respondent states 'Dhatu padiba results in complete loss of physical power (Dhatu padiley deharu sabu bala palai jaye)' and thus it interferes with a healthy sex life.

Some respondents have also attributed *dhatu padiba* to excessive masturbation. One of the key informants states 'Excessive masturbation cause widening of the urethral opening making dhatu padiba easier (Besi muthimariley parisra dwara chouda hoi jaye o dhatu padiba sahaja huey)'. Many of the respondents indicated anxiety over the loss of dhatu (semen) and perceived it as affecting their married life.

Jadu was frequently mentioned. It is a very common skin infection, usually affecting the inner thigh and groin. It also affects the testes and leads to severe itching. Other skin infections are *chau* and *kachhu*. Men made a distinction between *bayasa chau*, which is common among elder people, and not perceived as an illness and *dhala chau*, which are white patches on the skin. *Kacchu* is scabies and this can affect any part of the body. Skin infections generally are explained by unhygienic conditions 'If a person doesn't clean his body after the day's hard work then there are chances of having these problems'

Swapnadosh are nocturnal emissions and they are thought to be abnormal if they occur more than two or three times a month. It is a common concern among youths. Men associate *swapnadosh* with both *dhatu padiba* and with *handling* (masturbation). The difference with *dhatu padiba* is that *swapnadosh* occurs during sleep and after erotic dreams. An informant asked to differentiate between the two said 'in both the cases dhatu comes out spontaneously without our knowledge, but night fall sometimes is related to dream problem (Swapna pai)'. The link with masturbation follows from this quote 'since boys watch blue films and always think about erotic acts, they indulge in masturbation when alone. Excessive dwelling on sexual thoughts results in erotic dreams and seminal emissions.' The result is weakness, loss of weight, and memory loss.

Another concern sometimes mentioned in conjunction with *dhatu padiba* is *parishra-poda* denoting a burning sensation during urination. Both conditions are believed to be caused by *peta garam* (heat in the stomach) as a result of excessive heat. One respondent states 'Parisra poda occurs due to peta garam. Prolonged parisra poda leads to dhatu padiba'.

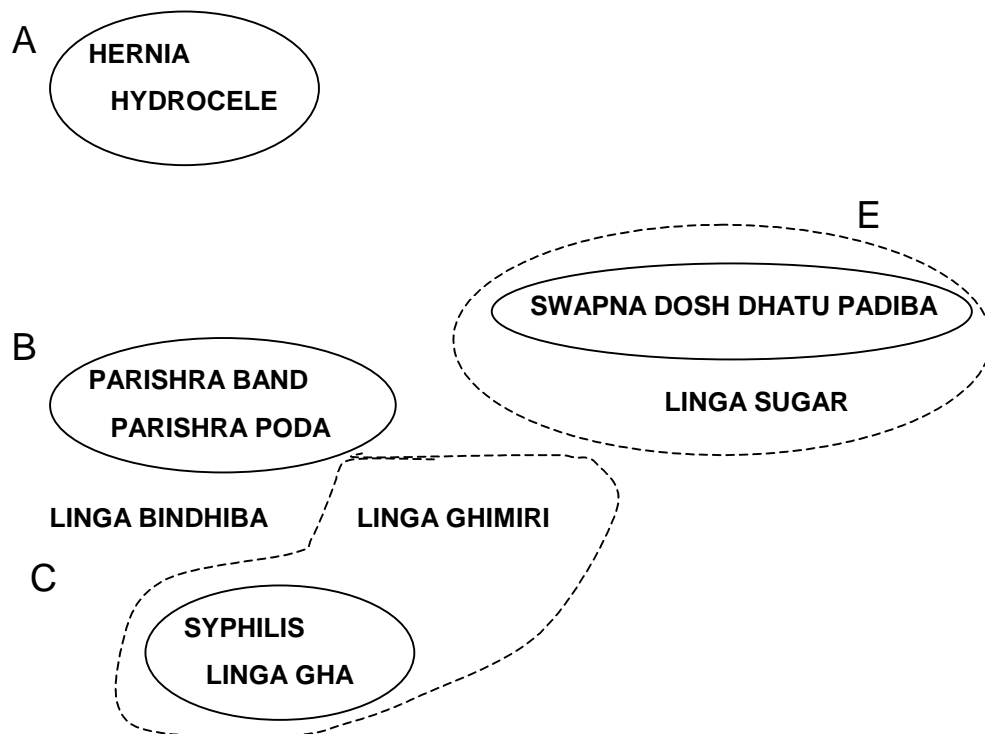
Filaria is elephantiasis with swelling of the feet and legs which extends to swelling of the penis and scrotum. In *hydrocele*, there is enlargement of the testicles due to water accumulation.

Malakantaka are wounds (fistula) affecting the anus and it is associated with pain. *Arsa* is another anal condition which leads to severe pain during defecation. In contrast to *Malakantaka*, bleeding occurs in *arsa* and this agrees with the medically recognised piles or haemorrhoids.

Pile sort data give a better understanding of categories of 'similar' diseases. The more often two illnesses or symptoms are grouped together by different informants, the closer they are conceptually. In multidimensional scaling (MDS), similarities are translated into distances and concerns considered very similar appear close to each other while illnesses that are not related will be furthest apart. Figure 1 gives an example of a cognitive map by two-dimensional scaling of sexual health concerns. The encircling of the 4 groups of illnesses/conditions is

based on cluster analysis (Johnson's hierarchical clustering). The multidimensional scaling picture (stress < 0.15) together with the cluster analysis indicate that the Orissa men make fairly clear distinctions among the types of sexual problems, particularly separating the infectious conditions (group C) from the non-contact, semen-loss problems in group D. They also recognise that hernia/hydrocele (group A) are a different kind of problem, with different aetiology.

Figure 1. Multidimensional scaling of sexual health concerns in Orissa.



These maps are a means of exploring patterns among illnesses and this is supplemented by the information given by the sorters on reasons for grouping items together. In other localities, other cards were sorted which resulted in different conceptual maps (not presented). One common feature to all maps was the clear distinction men had made between sexually transmitted diseases and others. In their mind, they have no doubts that *linga cancer* and *jouna gha/linga gha* can be clubbed together with *syphilis* or *gonorrhoea*. Among the other concerns, pain passing urine, *parishra poda*, and blockage of urine, *parishra band*, have been categorised together.

In locations where AIDS had been mentioned, most informants grouped it as a separate category. When it was associated with other items, it was grouped with sexually transmitted illnesses, and this was confirmed by in-depth interviews. *Dhatu padiba* was consistently categorised with other psychosexual concerns such as *swapnadosh* and *handling*. In people's mind, *dhatu padiba* is not associated with sexual transmission.

The five broad categories emerging from these data are sexually transmitted conditions, psychosexual concerns, skin infections, anal conditions and a final category grouping other diseases which also affect the genital area.

The severity of illnesses was elucidated by ranking. Informants were asked to rank order the sexual health conditions in terms of severity as follows: 3 = 'severe', 2 = 'intermediate' and 1 = 'mild, not serious'. All informants rated AIDS as severe, so it has a mean severity of 3.00. Other conditions suggesting sexually transmitted infections, such as *jouna gha*, *linga cancer*, *syphilis*, *gonorrhoea* with mean values of 2.00. The various psychosexual concerns received more varied severity rankings. Among them *dhatu padiba* was considered most severe with a mean ranging from 1.50 to 2.42. For *swapnadosh* it ranged from 1.50 to 1.92. Skin infections, like *jadu* and *kacchu* were generally ranked as not severe (a mean ranging from 1.00 to 1.38. With average ratings between of 1.50 to 2.00, the anal conditions were considered more severe than skin infections.

The key findings from these qualitative data can be summarised as follows:

A foremost sexual health concern among these men centres around concepts of semen loss, which is basically unrelated to STIs.

The men are well aware of sexually transmitted infections, but they do not appear to be as concerned about these conditions, perhaps because they believe those illnesses can be cured with appropriate medication.

AIDS is now a moderately familiar concept among these people, even though they do not have much depth of understanding about it. Practically all the men considered AIDS to be very serious.

The informants contacted in the qualitative phase of the research are a 'convenience sample' of men who are probably more knowledgeable and approachable concerning sexual matters. In any case, we do not consider them to be a representative sample for the entire region. While we believe the main culturally constructed ideas to be broadly applicable in the population, it remains to explore these data systematically in the quantitative survey.

Comparison with Survey Data: Triangulation

Awareness and Reported Experience of Psycho-Sexual Concerns

In order to explore men's concepts and concerns about sexual health problems, we also collected free lists from the respondents in the quantitative survey. The results of this large-scale collection of free lists will be somewhat different from the qualitative phase, mainly because less time was given to building of rapport and probing for further responses. Thus, we anticipated shorter lists, but we still expected that the same general picture would emerge concerning types of sexual health problems. Table 2 compares the lists of items from the qualitative phase with results from four different groups of respondents in the survey: single and married men in urban and rural areas. The table shows the differences in the salience ranking (salience is the frequency of mention of each item, weighted by the average rank order in which it appeared in peoples' lists). Not all freelists from the survey were entered (freelists are considered stable from 30 to 50 respondents), limiting the analysis to 50 per category in each district.

Table 2. Rank order of salience of sexual health concerns

	qualitative	urban		rural	
	(n=35)	single (n=196)	married (n=203)	single (n=189)	married (n=202)
Dhatu Padiba	1	5	8	6	6
AIDS	2	3	5	7	11
Gonoriha	3	4	3	11	8
Swapnadosh	4	11	15	12	>15
Jadu	5	2	2	1	1
Handling	6	>15	>15	>15	>15
Linga-gha	7	12	12	10	10
Parishra-poda	8	>15	>15	14	13
Hernia	9	9	9	8	7
Kachu	10	6	10	5	5
Linga-ghimiri	11	>15	>15	>15	>15
Hydrocele	12	1	1	2	2
Syphilis	13	14	11	>15	>15
Bata	14	>15	>15	>15	12
Fileria	15	>15	>15	>15	>15
Malakantaka	>15	7	4	4	3
Machala	>15	8	7	3	4
Arsa	>15	10	6	9	9

We note immediately that *dhatu padiba*, which was the most salient item in the qualitative sample, falls to lower salience (from fifth to eight on the lists of survey respondents). *AIDS*, which was second in salience in the qualitative sample drops slightly for urban single men, but drops more sharply among rural men (seventh and eleventh). Thus, the survey results give a clear indication of the greater impact of AIDS information programs in the urban sector. In a similar way, *gonoriha* salience drops quite sharply in the rural population. Compared with the qualitative data, *jadu* (itching) turns out to be the most salient item in rural populations and ranks second in the urban population. Perhaps the most striking result of the triangulation is in the salience of *swapnadosh* and *handling* (masturbation). These are somewhat more sensitive or embarrassing, we believe, and most of the respondents in the surveys did not mention them in their lists. In this part of the study, we feel that the qualitative data give a more realistic measure of salience of those items. One manifestation of the difference between the qualitative data and the survey is that men in the survey gave shorter lists.

Overall, the free lists in the survey give more prominence to several types of itching (*jadu*, *machala* and *kacchu*). In addition, the salience of *hydrocele* in both urban and rural populations is notable. It seems to us entirely logical that Orissa males consider *hydrocele* and other symptoms of filariasis as a sexual health problem since it affects the genital area. This inclusion of *hydrocele*, *hernia* and *filaria* among men's reported sexual health problems is widespread in India. Despite our feeling that the qualitative data give a truer picture of the sexual health concerns in Orissa, the survey materials are extremely useful for assessing differences between the rural and urban populations, as well as variations among the four districts of the study. These variations are especially important as measurements of differential awareness of *AIDS* and *gonoriha* (discussed below).

Some further questions on sexual health concern in the questionnaire included the personal experience of *dhatu padiba*, *swapnadosh* and *jadu*. These questions were added because of the anxiety expressed among the qualitative informants about semen loss and to test whether respondents would report on their own experience of it. *Jadu* was added since it is a prevalent rash, which is 'innocent' and considered not severe. When asking about the nocturnal emissions, the question referred to 'excessive' *swapnadosh*, i.e., more than two to three night emission a month. Table 3 presents the differentials in reported lifetime experience of these three conditions.

Table 3. Differentials in reported personal experience of dhatu padiba, swapnadosh and jadu.

	N ^a	dhatu padiba	swapnadosh	jadu
Total	2087	27.4	52.3	40.1
marital status				
single	1054	26.7	55.6	39.6
married	1033	28.2	49.0	40.5
residence				
urban	296	25.4	51.7	33.2
rural	1791	27.8	52.4	41.2
district				
Puri	513	34.2	69.6	36.6
Ganjam	386	34.8	52.7	34.2
Balasore	400	25.7	46.1	44.7
Cuttack	788	20.3	44.0	42.8
education				
no/primary education	679	29.7	50.8	41.7
secondary education	723	29.3	51.7	40.8
higher education	685	23.2	54.5	37.7
household income				
low	1110	29.0	52.2	40.9
medium	658	26.6	52.1	39.2
higher	319	23.6	53.3	39.0

^a weighted number in each category

The first observation is the relative lack of differential observed. On average 27.4 per cent of men reported personal experience of *dhatu padiba*. Although it was experienced less among the more educated, richer and urban, the differentials were not stark. The district-wise variations were the largest: nearly 35 per cent of men in Puri and Ganjam reported they had ever had *dhatu padiba*, compared to 20 per cent of men in Cuttack. Since men in Cuttack have a better education and are more likely to live in urban areas, multivariate analysis was done to look at the independent effect of these factors (not presented). For *dhatu padiba*, district was the only factor which had an independent effect. For *swapnadosh*, both marital status and district had an independent effect, with single men reporting more problems of excessive nocturnal emissions than married men. In Puri, nearly 70 per cent of men had a lifetime experience of night emissions compared to an overall average of about 52 per cent. Though men in Cuttack report lower rates for *swapnadosh*, they give slightly higher rates for

jadu. In the multivariate analysis, district and living in a rural area have an independent effect on lifetime experience of *jadu*.

AIDS Awareness and Reported STD Symptoms

In the in-depth study, 49 per cent of informants had brought up AIDS against 22 per cent in the survey. The spontaneous reporting of AIDS in the free list can be compared with AIDS awareness as probed later on in the questionnaire. Table 4 gives the comparison of the proportion of respondents spontaneously mentioning AIDS and proportion of men who know AIDS can be transmitted sexually. These proportions are calculated on the unweighted data file and the free list data refer to subsamples in each category.

Table 4. Spontaneous listing of AIDS and AIDS awareness in subgroups of the population

	percentage ^a spontaneously mentioning AIDS in freelists		percentage ^a with awareness of sexual transmission of AIDS	
	urban	rural	urban	rural
total	28 (399)	16 (389)	86 (1044)	70 (1043)
single	31 (196)	19 (189)	89 (654)	82 (475)
married	24 (203)	13 (201)	75 (390)	50 (568)
Puri	40 (100)	26 (90)	90 (262)	72 (256)
Ganjam	28 (98)	14 (100)	72 (258)	30 (261)
Balasore	25 (101)	13 (99)	82 (263)	69 (261)
Cuttack	18 (100)	12 (102)	91 (261)	88 (265)

^a number of respondents in each category in brackets

Probed knowledge on sexual transmission was much higher than the spontaneous reporting of AIDS in the freelists suggest. The broad patterns of higher awareness among the urban men and among the single men are evident in both prompted and unprompted awareness. The differences in probed knowledge between single and married men became larger when the data are age stratified, and they are most distinct in the rural areas where the single men do not lag far behind their urban brothers (82 versus 89 per cent respectively). An overall lower awareness by increasing age is actually reversed when disaggregating the data by marital status, with older men having higher knowledge. Awareness is as low as 32 per cent for young rural married men under the age of 25. Using the age structure of single population as a standard, the age-standardised rate for the married men is 71 per cent in urban areas and 36 per cent in rural areas (compared to crude rates of 75 and 50 respectively). There are big differentials according to district, with Ganjam having far lower AIDS awareness than the other districts. The prominence of AIDS in the freelist does follow an unexpected pattern according to district. In Cuttack where AIDS awareness is highest, men did not incorporate AIDS in their domain of sexual health concerns. This may indicate that in Cuttack, men do not consider AIDS a concern within their own community.

Since the freelists were analysed for subsamples in each districts (for 50 men in each of the 4 combination of residence and marital status), one might argue that differences are due to sampling variability. To check this, the analysis of probed AIDS awareness was repeated on

this subsample. Generally the same pattern remained though the subsample did have slightly lower AIDS awareness among the single and higher among the married.

The questionnaire also included the two standard questions on incidence of STIs which are routine in national HIV/AIDS monitoring surveys. The success of AIDS programmes to reduce risk behaviour by promotion of condom use and other safe sex practices, is monitored by evaluating levels of reported STI incidence. One question asks about the incidence of sores and ulcers on the penis, symptoms that indicate possible infection of syphilis and chancroid. The second question concerns pain during urination with discharge from the penis, giving an indication of the incidence of gonorrhoea and chlamydia. When men reported painful urination together with discharge, there was additional probing to distinguish between semen discharge, *dhatu padiba* or pus discharge, *pujo padiba*. The questions were framed asking first about ever having experienced these symptoms with a second question on when they had last experienced them.

In total 132 men reported ever experience of pain during urination (*parishra pada*) concurrent with discharge. The probing on discharge resulted in 110 reporting *dhatu padiba* with painful urination, 15 *pujo padiba* with painful urination and 7 both *pujo* and *dhatu* with painful urination. So when probed more on the nature of discharge, 87.7 per cent reported semen discharge and only 16.7 per cent specified the discharge as pus. This raises the question of whether there is a huge over-reporting of penile discharge, and also the extent to which men confuse pus and semen in the discharge.

Discussion

This study on male sexual health in Orissa started off with a clear assignment to learn more about the local perceptions of sexually transmitted infections in order to inform condom promotion and sexual health services. It is clear that men in Orissa have a wide range of culturally constructed beliefs and complaints that differ considerably from biomedical concepts of STDs. However the concept of sexual transmission of disease is clearly understood and medical terms of diseases such as gonorrhoea and syphilis are common words in the local language.

Awareness of HIV/AIDS seems to be spreading fairly quickly. AIDS came as the second most salient concern in the qualitative study and was also classified the most severe sexual health concern. Respondents in the survey tended to mention AIDS or any other sexually transmitted diseases less frequently, with *hydrocele* and skin infections as most important concerns, especially in rural areas. No doubt, cultural sensitivities may have influenced this result among the general male population. However, probed knowledge of AIDS and its sexual transmission was high but men therefore not necessarily view it as a sexual health concern within their community.

Nearly 90 per cent of urban single men were aware of AIDS compared to 50 per cent of rural married men. AIDS awareness campaigns have run on television and in the print media, and this can explain the rural/urban differential. The most striking differential however is the one by marital status, with 86 per cent of single men and 60 per cent of married men knowing that AIDS can be transmitted sexually. Age standardisation brought the rates for married men further down to 50 per cent. We suggest that this indicates the 'recent' nature of AIDS awareness. Single men are generally more preoccupied with sexual issues and will therefore be more open to media messages. Before marriage, men also socialise more among friends outside the home and are more likely to discuss issues about sex. The concerns and anxieties about nocturnal emissions confirm this preoccupation about sex, and are understandable given the patterns of late marriage and the fact that more than 70 per cent of men have their first intercourse at marriage. It was estimated from the data on age at first intercourse that 80 per cent of men are still virgin at age 20, and 44 per cent at age 25.

The current programme and public health focus is on interventions to reduce the burden of STIs, by both preventative measures and encouragement of prompt treatment seeking. On the other hand, the focus of the men in Orissa was clearly more toward conditions that are non-infectious, and to some extent reflect psychosexual concerns. The salience of involuntary semen loss in the minds of Oriya men is unmistakable. The frequency and promptness with which *dhatu padiba* emerged in the process of free association when men were asked about sexual health concerns is reinforced by the survey results. More than a quarter of men in a representative sample reported personal experience of the condition.

This study is certainly not the first to report concerns about semen loss. Other studies in South Asia, both in the anthropological and psychiatric literature relate the importance and associated anxieties of involuntary semen loss (Bottero 1991, Caplan 1987, Dewaraja and Sasaki 1991, Kakar 1996, Malhotra and Wig 1975, Nag 1996, Verma *et al.* 1998, Weiss *et al.* 1986). Semen leakage is invariably associated with fears over weakness. This can easily be understood by the fact that semen is considered to be the ultimate vital force. *Virya*, the Hindi word for semen, also means 'vigour'. The loss of *virya* through sexual acts or imagery is thought to be harmful both physically and spiritually (Nag 1996). Among slum dwellers in Mumbai, *virya* was also equated to money, and *dhat girna* (the local term for semen loss) was referred to as 'loss of money' drawing a parallel between a poverty stricken man without money and a sexually weak person without semen (Verma *et al.* 1998).

As Bottero (1991) points out from his fieldwork with Ayurvedic doctors in an Oriya town, *dhatu padiba* is diagnosed either directly or indirectly. In the first case, the patient reports a white discharge from his penis while urinating or defecating, or the discovery of a stain on his clothes. In the other case, the doctor diagnosed it on the basis of a set of complaints about weakness, persistent fatigue and skinny appearance, a combination of mental and physical weakening. Semen loss is thus implied during indirect diagnosis. Complications of consumption by semen loss are mental exhaustion with constant negative thoughts (or depression) and hypochondria, mainly due to the extreme anxieties a diagnosed patient suffers about his condition. The indirect diagnosis of semen loss through complaints about weakness was far more common than the direct diagnosis of reported white discharge (Bottero 1991). This leaves us pondering whether the 27 per cent of men in our survey who reported personal experience of *dhatu padiba* actually observed a discharge or simply attributed an episode of weakness and fatigue to semen loss. In terms of the associated anxiety, this may be irrelevant however.

In a comparative study among psychiatric patients in Sri Lanka and Japan, Dewaraja and Sasaki (1991) show how attitudes and cultural beliefs become incorporated into patients' explanations of their subjective feelings of distress and anxiety, both to the therapist and to themselves. In Sri Lanka, psychological problems were self-attributed to semen loss, whereas in Japan stress and overwork prevailed as explanations. In the survey in Orissa the relative lack of educational differential in reporting semen, leakage would support the importance of the cultural beliefs of power and energy associated with semen into male explanatory models of illness. The differential by district does point to some very local variations in understanding or perception. It is not clear what sets Cuttack apart from the other districts: are men happier there, is there less hardship?

The responses of the Orissa males remind us that peoples' ideas and concerns about health cannot be approached simply using Western biomedical models. Particularly striking is the fact that men's worries about sexual health include many more ingredients besides STIs. The prominence of the semen loss complaints points to needs for more aggressive dissemination information about reproductive/sexual health, as well as more effective counselling of individuals seeking clinical services. Experiences in other areas suggest that sexual health clinics in Orissa should be equipped to give considerable attention to men's worries about masturbation, nocturnal emissions, and other conditions, whether real or imagined.

In addition to these programmatic aspects of the data, we should pay careful attention to the ways in which the men's constructs about sexual health problems might affect clinical diagnosis of gonorrhoea and chlamydia. In syndromic management, these infections are diagnosed on symptoms of 'urethral discharge and pain during urination'. As evident in the survey, nearly six per cent of men reported *parishra-poda*, the burning feeling during urination, together with semen loss, whereas only one per cent specified it together with a pus discharge. Although in the men's conceptual framework *dhatu padiba* was never believed to be related to sexual transmission of infection, both 'semen discharge' and 'burning during urination' are believed to be caused by *peta garam*, i.e. by excessive heat in the stomach. Bottero's practitioners agree that the main cause of *dhatu padiba* is overheating due to an unbalanced diet of too many heating food, such as meats, fish, garlic, pepper and eggs. These foods

'.... increase the internal fire which burns the semen and melts it as ghee (clarified butter). As a result of becoming liquid, the semen is discharged spontaneously, without the patient being aware of it. And semen is all the more vulnerable to this overheating as it is not localised in the testicles but stored throughout the body Thus they believe that 'sperm is in the body as butter is in milk', i.e., as a dissolved constituent which is expelled through a churning-like process at the moment of the ejaculatory convulsion,' (Bottero 1991,307)

The general cultural ideas of relationships between pervasive hot-cold qualities/events and conceptualising of semen as distributed widely in the body, give us a clearer perspective on the as yet poorly understood models of semen loss. Pool (1987) has pointed to the central importance of the hot-cold belief system in organising understandings of physiological processes, particularly those related to disease. These ideas about hot-cold qualities and processes are practically world-wide, but the link with ideas of semen loss may be rare or totally absent outside of South Asia.

Malhotra and Wig (1975) describe semen loss as a specifically Indian culture-bound syndrome. However, the data presented by Bottero (1991) point to a much wider distribution of this explanatory model, at least in earlier history. He goes back to Hippocrates on 'consumption of the back', but the most striking parallel he quotes from the work of Tissot in 1760. This French physician became famous for his work on diseases caused by masturbation. He describes something very similar to *dhatu padiba*:

'loss of "a very liquid seminal liqueur" during urination, defecation an nocturnal emissions, masturbation and also through spontaneous discharges, which constitute "gonorrhoea simplex", "a flow of semen without erection", described in "true gonorrhoea" as opposed to "bastard or catarrhal gonorrhoea" (which corresponds to our modern blennorrhagia, a purulent urethritis)' (Tissot in Bottero 1991, 312)

If AIDS had been around in the 18th century with the corresponding interest for STD control, Tissot might have made the point we want to make about syndromic management.

As we have seen before, more often than not semen loss is *implied* in the diagnosis of *dhatu padiba*. In the assumption that India may in future move to adopting syndromic management in primary health care settings, the implications could be two-fold. There is the potential for both under- and overtreatment. Reported or implied discharge could be treated as gonorrhoea and chlamydia, leading to overtreatment. Good training of health workers with insistence on substantiating evidence of discharge, i.e. observed during consultation through milking of the urethra (Mayaud *et al.* 1998) (rather than based on reporting), should probably overcome this. Another suggestion could be to include a 'risk assessment step' based on sexual behavioural risk factors similar to those proposed by WHO to reduce the overtreatment for vaginal discharge (Mayaud *et al.* 1998). One might argue that men may also confuse discharge due to infections with semen loss. If those men who diagnose themselves as having *dhatu padiba* do

not seek appropriate care, this would result in undertreatment. In the interest of both clinical and mental health, further research is needed into this.

The data from Orissa present a very interesting, complex picture of men's sexual health problems. It should not be surprising to experienced social science researchers that the 'real world out there' corresponds rather little with the narrow outlines of sexual pathology found in the usual medical school training. The data suggest that sexual health clinics in Orissa (and elsewhere in South Asia) should be equipped to deal with a much more comprehensive array of sexual health issues beyond a narrow focus on STIs. Effective, well-informed counselling should be included. Such an approach would be complementary to that advanced for the expansion of comprehensive reproductive health care to women -i.e., the shift away from single issue services (family planning), towards broad-based holistic care (Collumbien and Hawkes *forthcoming*).

We estimate that 85 percent of the needed male sexual health services would be in the form of well-informed, client-centred counselling. Much of that counselling would involve concepts and language that is already part of the common-sense knowledge carried by health care personnel. Health care workers, in their private lives, are participants in the general cultural belief system about sexual health. They do not need to be taught these concepts as a strange new system. Rather, they must be given ways to bring men's concepts of sexual health problems into a more realistic relationship to biomedical facts about male physiological/sexual processes. Experiments in Gujarat with men's groups have demonstrated that their concepts about the effects of masturbation can be changed significantly through group discussions. Similar experiments are needed in Orissa. We would urge that programmes which pay adequate attention to those other aspects of men's sexual health concerns will have a stronger likelihood of success in dealing with new ideas of safer sex, use of condoms and other messages relevant to the campaign against STIs and the spread of HIV infection. Presentation of information about these 'facts of sex life' can be effectively integrated with HIV/AIDS health promotion.

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Endnotes

- 1 For the purpose of this book the terms STIs and STDs (sexually transmitted diseases) are considered synonymously and used interchangeably
- 2 The poverty line was defined as the per capita monthly expenditure of Rs 49 for rural areas and Rs 57 for urban areas at 1973/74 prices. There are Rs 42 to 1 US \$
- 3 This refers to four of the 13 undivided districts. In 1992, the 13 districts were divided into 30 new districts