

## **Risky Sexual Behaviour, Marital Relationship and Gupt Rog ('secret illnesses' in Hindi) in the Slums of Mumbai city, India**

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### **Background**

India is experiencing a rapid increase in HIV/AIDS and in other sexually transmitted infections. It is now the country with the second largest absolute number of HIV infected individuals in the world, with UNAIDS (2000) placing the current figure of individuals with HIV/AIDS in India at close to four million, with a rate of 0.7%. An estimate of the actual burden of HIV-infected population in India suggests that 1.5% of the 1 billion Indian population, or 11.5 million individuals were already infected with HIV, making it the country with the largest numerical burden in the world (Kumar 1999).

The State of Maharashtra and the city of Mumbai have been severely impacted by the spread of STDs and HIV/AIDS. In Mumbai, surveillance data indicates there has been a steady progression of HIV positive individuals among patients attending STD clinics rising from a low of 1.6% in 1987 to the most recent estimate of 64.4% in 1999, with HIV prevalence increasing in the city from 1% in 1993 to 3% in 1999 (UNAIDS 2000). A screening of female sex workers and their clients attending a STD clinic in Mumbai shows that 42% were seropositive for HIV, 72% for herpes simplex virus II, 79% for cytomegalovirus, 38% for syphilis and 26% for gonorrhoea. Findings also indicate that members of high-risk cohorts suffer from multiple STDs, which increases the risk of subsequent HIV infection (Das, Yemul and Deshmukh 1998; Hawkes and Hart 2000).

Reproductive health services in India have not as yet found effective approaches for consistent involvement of males in utilization of STD/HIV services, engagement in reproductive health

information, education and communication programs. When males do go to primary care or STD clinics that frequently find an insensitive, judgmental staff with little understanding or appreciation for male reproductive health problems.

Men's sexual health concerns are deeply embedded in South Asian and Indian culture through the concept of *gupt rog* ("secret illness" in Hindi), which refers to culturally defined illnesses that belong to the secret parts of the body. Most of the *gupt rog* problems reported by men in India are derived from concerns about excessive semen loss, penile size, and impotence that have a long-standing tradition in India. Further, a significant number of men seek treatment for sexual health problems mostly from private allopathic and "Indian systems of Medicine (ISM) practitioners, who may prescribe antibiotics, as well as herbal remedies, but have limited understanding of proper treatment for prevention of sexually transmitted infections. Any reproductive health service in India that hopes to introduce early identification of STDS/HIV in men and to increase safer sex practices must start by addressing these male sexual health concerns.

This paper demonstrates an important link between risky life style (as defined by premarital and extramarital sex) and the culturally-defined, performance, penis and semen-related problems (termed "non-contact" problems) and those STI-like symptoms reported by men (termed "contact" problems) and the marital disturbances in life.

## **Methodology**

The sexual behaviour research began with 21 in-depth interviews with men in one slum community followed by a survey of 1344 men in northeastern Mumbai during 1998-99. The current five-year (2001-2006) research and intervention project on addressing the male sexual health concerns in prevention of STDs/HIV has expanded the scope of study to include three slum communities with a population over 700,000 and the triangulation of research includes mapping, key informant interviews, consensus modeling, indepth interviews with 45 health care providers (ayurvedic, homeopathic, unani, and allopathic), an additional 31 in-depth interviews with men and a baseline random survey of 2408 married men in the age-group of 21-40 years. In addition to behavioural research, STD testing was conducted for HSV-2, Syphilis, Gonorrhoea,

and Chlamydia with a subsample of 640 men who responded to the baseline survey. This study examined the cultural differences, attitudes, beliefs, sexual behaviour and sexual health of men. Qualitative analysis of the interview identified several issues surrounding premarital, marital and extramarital sex, marital and sexual satisfaction, including peer relationships, relationship with wife, patterns of pre & extramarital sex and their sexual health. Quantitative data analysis examined the socio-economic, familial, friends and marital relationships (satisfaction in marriage, sex and marital disturbance) on the sexual behaviour among men. Indicators of sexual behaviour included the attitudes, beliefs, and reported practices of sex (pre-marital, marital and extramarital) that are relevant to these relationships.

## Results

In depth interviews with men and providers identified the following:

**Male sexual health problems:** Four themes emerged from the men's discussion of their sexual health problems—definition and symptoms, perceived etiology, perceived impact, and emotional concomitants. For example, one man said: *"I suffered from the problem of bent penis, lack of desire for sex, erection difficulty, early ejaculation."* Another interviewee described his kamjori as *"loss of sexual desire, joint pain, black circles around eyes, and early ejaculation."* One man spoke of the sexual problem in the context of his marital relationship, *"My wife wants sex for a longer period, but unfortunately I get early ejaculation . . . before doing intercourse [on the first night] my semen fell on her thigh and clothes."* Descriptions of contact problems are summarized in one man's description of gar-mi, *"I suffered from...pus discharge, burning urination . . . also the penis became red."* Men viewed their sexual health problems as stemming from previous sexual experiences with partners they perceived as risky (older women, CSW, eunuch, multiple partners). *"People say if we do sex with eunuchs then there is a chance of suffering from [garmi]."* *"If a man has intercourse with a woman elder than his age, then he becomes impotent . because [older women] are very passionate, for which the man's semen becomes spoilt."* *"Those who are suffering wet dream and do excessive masturbation, their semen bag becomes weak and [are not able to do] intercourse. In this case, they should not marry."* *"Before marriage I used to masturbate . . . by which I wasted semen to a great extent, for which I suffered the problem of bent penis, lack of desire for sex, erection problem and early ejaculation."* *"Due to anxiety and hesitation I ejaculated beforehand."* "[During first sexual experience] I was

*scared to do sex with her; I was not getting a proper erection."* Other men cited reasons related to perceived male and female roles (e.g., failure of man to be dominant), having sex too frequently (e.g., if sex daily, *"there is no semen in the penis, how can I get erection?"*), lack of physical strength, and external factors such as income and arranged marriages.

**Concepts of masculinity:** Men's definitions of masculinity or "manliness" showed a clear link to their concerns about sexual health problems, emphasizing the importance of cultural-specific role definitions. *"A real man or manliness is [one] who can satisfy his wife and should be ready for sex whenever his wife asks for sex. If he has relation with more than one woman, he should be able to [satisfy] all..."* *"He can produce a male child, also females should be attracted to him."* *"Man should be able to control himself till her ejaculation."* *"A real man should have control on masturbation."* *"[A real man should be] able to do sex for a longer period at least for 30 minutes."* *"The sign of manliness is the size and thickness of penis"* Presence of sexual health problems was seen as contrary to manliness: *"[A real man] is not suffering from such problems like early ejaculation and loss of semen."* *"In case the wife initiates [sex], that means her husband is a eunuch."* *"Wife should never take initiative in sex; rather she should feel scared about sex. She should always be satisfied during sex."* *"When I need sex it takes place; no need to give any special indication."* *"I also don't ask her about satisfaction. As it is penetrative sex, she gets the semen inside her vagina, by which I know that she is satisfied."* Men also associated masculinity with forced sex: *"Unless the man forces his wife [for sex] he will not be called a real man, in other words forceful sex is a sign of manliness."* *"A real man is he who can do sex till his wife cries in pain."* Men's definitions of masculinity, and thus their self-perceptions, were closely tied to sexual health. This link is critical in the treatment of men's sexual health problems.

**Relationship with spouse:** Men's sexual health concerns were closely linked to the quality of their marital relationships. Men spoke mostly about the actual or potential impact of their sexual health problems on their marital relationships or wife's health. *"From a health point of view, there should not be any sexual health problems. So he [husband] will be able to satisfy the sexual urges of his wife and in turn marital relations will be good"* Men also expressed concerns about the failure to satisfy their wives, *"If my wife is not satisfied, she will get attracted to other males."* The men also talked about negative reactions of their wives to sexual difficulties. For

example, "[in response to early ejaculation], she becomes annoyed and teases me for this;" or "she sleeps with anger and doesn't talk to me." The potential impact on the wife's health is exemplified in the following quote: "She also has pimples around her genital organs. She also has the problems I suffer from... complains about pain in her abdomen, burning urination, white discharge; she looks like a TB patient." The men spoke of forced sex as typical in their own marriages, "She always says no to sex. But I always force her." "As per my knowledge everyone does forceful sex in the first night [of marriage], so I also did forcefully;" "But this is my right to have sex forcefully, which I do frequently." "Friends also told me in the first night of course the bride would feel shy and hesitate . . . forcefully I had sex for two times... But the second night she completely refused for intercourse and told me she is getting severe pain in vagina due to forceful sex at first night. I shared the experience with my friends . . . they told me nothing is wrong in this, every women search some excuses to avoid sex... when women are getting pain, they enjoy more."

**Risky Lifestyle:** The risky lifestyles of the respondents were evident in their comments about extramarital sex, sex with commercial sex workers, perceived norms about acceptable sexual activity of men, and attitudes toward condoms. The men spoke about engaging in sex with commercial sex workers before and during marriage. There were several references to having sex with CSWs. The men provided several reasons for engaging in extramarital relationships, particularly with CSWs. They cited sexual dissatisfaction in their marriages: "CSWs are prepared to do sex in different ways, as we saw in blue films, which we can't do with our wives. So I went to the CSW"; "with CSW, I can enjoy sex as I wish within Rs. 50/-." They spoke also of general marital dissatisfaction: "/ am fed up of my family. Nowadays I am involved with a Nepali girl. First time, I met her is at a beer bar." They also cited perceived norms that support premarital and extramarital sex, "Who is a saint these days. Everybody experience sex before marriage . . . Everybody gets bored with their wives. If one wants true enjoyment, then he should go out and keep someone for that, no matter he has to spend money for that." "I experienced it [first sexual experience] with a CSW, when I was around 20 years;" and "/ had extramarital relation [with CSWs]." "We enjoy sex together rather than one by one. She [CSW] does masturbation to all. I prefer to do intercourse, so I used to have intercourse first, after that my friends enjoy with her in different ways as show in blue films."

## **Research findings from the quantitative survey:**

### **Profile of the sample**

Of the total sample of 2408 men, about 72.4% are non-native of Maharashtra and 62% of the men migrated to Mumbai after the age of 14 years among the total migrants (66.3% total migrants in the sample). Three-fourths of these men migrated to Mumbai either alone or with friends and stayed with either relatives or friends in slum areas. A majority of the migrant men in the study communities are either from Uttar Pradesh, Tamil Nadu or Maharashtra. Each of three states represent different socio-cultural settings and religious beliefs, as is evident from both qualitative and quantitative data on religious beliefs and the qualitative information on cultural practices. Most of the men in the slum areas are daily wage workers (37.6%), petty traders (22.6%), salaried working in private offices (10.6%) and rest from other occupational categories. About one-fourth of the men work overnight and stay away from home either frequently or sometimes.

### **Concerns about masculinity**

The results in table 1 describes the adjusted mean score values of concerns of masculinity constructed using 20 statements ( $\alpha=0.605$ ), which covers the issues of general, sexual and power relations (statements in masculinity scale were derived from the qualitative research). In the present analysis, higher the scale value, lower is the concern about masculinity. The total variance explained by the model with the available covariates is given as 35 percent. The results indicate that the average adjusted mean score value of concerns about masculinity in the study communities is 1.71. Further, different socio-demographic and economic characteristics have shown significant association with the masculinity. For example, men having a male child (mean=1.68 points) have shown relatively a high concern about masculinity than the men with no male child (mean=1.72 points). Lesser the age difference between husband and wife, greater is the concern about masculinity. In the present study, alcohol use was found to be one of the significant predictor of concern about masculinity. These results suggests that men from low income families, men who drink alcohol, men who have male child are more concerned towards the masculinity than their respective counterparts.

**Table 1: Adjusted mean scores of concerns about masculinity scale, percentage distribution of respondents by the intensity of such concern according to different background characteristics**

Background characteristics	Mean Score <sup>\$</sup>	Concern about masculinity			Total Sample
		High	Medium	Low	
<b>Age Difference***</b>					
Husband's age less or equal	1.70	17.4	39.1	43.5	23
1-5 years	1.69	30.8	34.2	35.0	1623
6-10 years	1.70	25.5	34.2	40.3	695
11+ years	1.77	19.3	22.8	57.9	57
<b>Education Difference*</b>					
Wife's education is more than husband	1.68	28.3	38.3	33.4	598
No difference	1.70	27.6	33.5	38.9	550
Husband's education more five classes	1.70	28.8	30.9	40.3	847
Husband's education more than five classes	1.67	31.5	34.5	34.0	403
<b>Religion*</b>					
Hindu	1.70	30.6	33.8	35.6	1007
Muslim	1.68	28.1	34.3	37.6	1304
Others	1.77	19.5	31.0	49.4	87
<b>Age at marriage<sup>NS</sup></b>					
<= 20	1.68	31.8	34.5	33.8	743
21+	1.70	27.5	33.8	38.7	1655
<b>Male child***</b>					
No	1.72	25.7	33.9	40.4	933
Yes	1.68	30.8	34.0	35.1	1465
<b>Family income**</b>					
<2500	1.68	31.4	35.7	33.0	809
2600 - 5000	1.69	28.1	34.1	37.9	1244
>5000	1.72	25.8	29.6	44.6	345
<b>Alcohol Use***</b>					
No	1.73	22.6	34.0	43.4	1577
Yes	1.61	40.9	33.9	25.2	821

\*\*\* p < 0.001

\*\* p < 0.05

\* p < 0.10

NS - Not Significant

\$ Lower the scale value, higher the intensity towards concern about masculinity

## Marital Relationship

The present study considers two measurable variables (help in household chores, and domestic violence) as to define their marital relationship. Unadjusted and adjusted mean score values of men's contribution in household chores are shown in table 2. Help in household chores was measured using the works that include both inside (cooking, fetching water from common tap, washing clothes, washing utensils, home cleaning, taking care of natal guest) and outside (taking family member to the doctor, purchasing vegetables and groceries, payment of electric bills, going to ration shop) house. Higher the score value, lower is the involvement of man in household chores. The results presented in table suggests that age, educational difference between husband and wife, family income, and having a male child are the significant predictors of marital relationship. For illustration, positive relationship is being demonstrated by the men in

**Table 2: Unadjusted and adjusted mean scores of involvement of man in household chores and self assesment as a husband according to different background characteristics**

Background characteristics	Help to wife in household chores <sup>§</sup>		Self Assessment as a husband <sup>\$\$</sup>		Total Sample
	Unadjusted	Adjusted	Unadjusted	Adjusted	
<b>Age Difference</b>		***		**	
husband age less or equal	2.26	2.25	2.89	2.89	24
1-5 years	2.25	2.27	2.85	2.86	1627
6-10 years	2.34	2.30	2.89	2.87	695
11+ years	2.35	2.31	2.84	2.82	57
<b>Education Difference</b>		***		***	
wife education is more than husband	2.32	2.30	2.88	2.87	601
No difference	2.28	2.28	2.84	2.84	550
husband education more five classes	2.29	2.29	2.88	2.87	849
husband education more than five classes	2.17	2.21	2.82	2.83	403
<b>Religion</b>		***		***	
Hindu	2.20	2.23	2.83	2.85	1012
Muslim	2.33	2.32	2.88	2.87	1304
Others	2.28	2.25	2.87	2.86	87
<b>Age at marriage</b>		***		***	
less than 21	2.17	2.21	2.81	2.82	743
21+	2.32	2.31	2.88	2.88	1660
<b>Male child</b>		***		***	
no male child	2.21	2.22	2.83	2.82	937
have male child	2.32	2.31	2.88	2.88	1466
<b>Family income</b>		***		**	
<2500	2.19	2.21	2.84	2.83	812
2600 - 5000	2.30	2.29	2.87	2.87	1246
>5000	2.40	2.39	2.88	2.89	345
<b>Alcohol Use</b>		NS		**	
No	2.29	2.28	2.87	2.87	1579
Yes	2.25	2.26	2.84	2.84	824

\*\*\* p < 0.001

\*\* p < 0.05

\* p < 0.10

NS - Not Significant

§ Higher the value, lower the contribution in house hold chores

\$\$ Lower the score value negative is the self assesment as a husband

low income families, men with no male child, those men married at early than 21 years. On contrary, the men on the otherside does not provide help in marital relationship and treats themselves as a perfect husband to their wives. Their definition of self assessment as husband is close to the maculine behaviour due to which the correlates associated with concerns about masculinity does matches with the self assessment as a husband.

Further, the data on domestic violence suggests that, about 34 percent of the men in the survey reported of beating their wives in the last six months and such reporting varied across different socio-demographic and economic characteristics, concerns about masculine behaviour. Violence



was found to be more among the couples whose family income is as low as less than 2500 rupees a month (table 3). As found in many other studies in research on domestic violence, this study too explains the significant association between alcohol use and domestic violence. Further, men with more concerns about masculinity have had reports of beating their wives as compared to the men with less masculine behaviour.

**Table 3: Logistic regression coefficients, Standard error, and odds ratio on the effects of selected characteristics on the likelihood of violence<sup>s</sup>**

Characteristics	$\beta$	S.E.	Odds Ratio
Alcohol Use	0.963***	0.107	2.620
Family Income	-0.203**	0.079	0.817
Concerns of masculinity	0.036	0.066	1.037
Help in household chores	0.012	0.076	1.012

<sup>s</sup> controlled for age, educational difference between husband and wife, religion, having a male child and age at marriage

\*\*\* p < 0.001      \*\* p < 0.05      \* p < 0.10

Dependent variable: Violence (0 – No, 1 – Yes)

Independent variable categories: alcohol use (do not take, takes), family income (<2500, 2600-5000, >5000), Concerns of masculinity (low, medium, high), help in household chores (never helps, helps but few times, helps many times, quite often helps)

### **Risky Sexual Behaviour**

Of the total sample, 38% reported having penetrative sex prior to marriage (not shown in table), while 23% reported having at least one extramarital experience of penetrative sex. Mann-Whitney "U" test showed a highly significant relationship between both premarital sex ( $Z = 10.01$ ,  $p < .001$ ) and extramarital sex ( $Z = 9.49$ ,  $p < .001$ ). The results on extramarital sex in table 4 present some interesting findings according to the socio-demographic and economic background of the respondents. Extramarital sex (both ever and current) was found to be relatively more among men who marry before age 21 years as compared to the men who marry after the age of 21 years.

**Table 4: Percent of respondents ever had extra marital sex, percent had extra marital sex in the last 12 months according to different background characteristics, concerns about masculinity, marital relationship**

Characteristics	Ever extra marital	Extra marital sex in the last 12 months	Total Sample
<b>Age difference</b>	**	*	
Husband age less or equal	45.8	25.0	24
1-5 years	22.9	12.7	1630
6-10 years	21.3	12.1	697
11 + years	14.3	5.3	57
<b>Education Difference</b>	NS	NS	
wife education is more than husband	22.4	13.1	601
No difference	20.8	11.1	550
husband education more five classes	23.0	13.3	852
husband education more than five classes	23.8	11.6	404
<b>Born in Mumbai</b>	***	***	
Yes	26.4	15.7	810
No	20.5	10.8	1598
<b>Religion</b>	***	**	
Hindu	18.9	10.1	1015
Muslim	25.7	14.5	1306
Others	16.1	8.0	87
<b>Age at marriage</b>	***	***	
less than 21	28.2	16.0	745
21+	19.9	10.9	1663
<b>Male child</b>	NS	NS	
no male child	21.5	13.5	939
have male child	23.1	11.8	1469
<b>Family income</b>	NS	NS	
<2500	21.4	11.3	814
2600 - 5000	23.6	13.2	1249
>5000	21.2	12.5	345
<b>Concerns about masculinity</b>	***	***	
High	28.8	17.1	692
Medium	22.2	12.0	815
Low	17.8	9.4	890
<b>Help to wife in household chores</b>	***	NS	
Never helps	19.4	10.9	567
Help but few times	24.2	13.0	1277
Help many times	19.8	12.6	476
Quite often helps	32.1	14.0	86

\*\*\* P<0.001

\*\* P<0.05

\* P<0.10

NS Not Significant

Further, the gap in extramarital sex between the men with low and high concerns about masculinity was found to be around ten percent suggesting the more risk with the men having high concerns about masculinity. The multivariate analysis results in table 5 suggests that the odds of having extramarital sex among men with alcohol use is two times more as compared to the men with no alcohol use. Further, the odds of extramarital sex is 1.25 times higher for men with more concerns about masculinity than the men with less concerns about masculinity.

**Table 5: Logistic regression coefficients (and standard errors) and odds ratios indicating effects of selected characteristics on the ever<sup>s</sup> and current<sup>s</sup> extramarital sex**

Characteristic	Ever extramarital sex			Current extramarital sex		
	$\beta$	S.E.	Odds Ratio	$\beta$	S.E.	Odds Ratio
Alcohol use	0.821***	0.105	2.272	0.935***	0.130	2.547
Family Income	0.077	0.077	1.080	0.135	0.096	1.145
Concerns about masculinity	0.213***	0.065	1.237	0.243***	0.081	1.276
Help in household chores	0.022	0.070	1.022	-0.005	0.087	0.995

<sup>s</sup> controlled for age difference, educational difference between husband and wife, religion, having a male child and age at marriage

\*\*\* p < 0.001      \*\* p < 0.05      \* p < 0.10

Dependent variable: Extramarital sex (0 – No, 1 – Yes)

Independent variable categories: alcohol use (No, Yes), family income (<2500, 2600-5000, >5000), Concerns of masculinity (low, medium, high), help to wife in household chores (never helps, helps but few times, helps many times, quite often helps)

Extramarital sex partners were usually either from the same community and most often in neighborhood or the women at workplace.

### Sexual Health Problems

Little more than half (53%) of the men had at least one sexual health problem in the last three months and 38% currently have at least one problem. Figure 1 describes the percentage distribution of men suffered/suffering with different culturally defined sexual health problems in the last three months under broad themes of Dhat (mostly semen related), Kamjori (mostly performance related) and Gar-mi (typical STI like symptoms). The results in table 6 reveals that almost two-thirds of men who never used condom or inconsistent condom use have reported about currently suffering from sexual health problems as compared to only one third of the men among those who did not have extramarital sex in the last 12 months. Further, relatively more men with pre or extramarital sex and inconsistent use (59 percent) are suffering with sexual health problems as compared to the men who never had pre or extramarital sex (30 percent).

**Table 6: Percent had/have sexual health problems (SHP) in the last 3 months, currently suffering according to different background characteristics, concerns of masculinity, marital relationship (help in household chores), risky sexual behaviour**

Background characteristics	Sexual Health Problems		Total Sample
	In the last three months	Current	
<b>Age difference**</b>	NS	NS	
Husband age less or equal	70.8	54.2	24
1-5 years	52.6	38.1	1630
6-10 years	52.4	36.7	697
11 + years	57.9	45.6	57
<b>Education Difference</b>	NS	NS	
wife education is more than husband	53.1	37.4	601
No difference	52.2	36.4	550
husband education more five classes	51.2	37.7	852
husband education more than five classes	56.7	41.8	404
<b>Religion</b>	NS	**	
Hindu	50.8	35.0	1015
Muslim	54.4	40.7	1306
Others	52.9	33.3	87
<b>Age at marriage</b>	**	***	
less than 21	56.6	42.6	745
21+	51.1	36.0	1663
<b>Male child</b>	NS	**	
no male child	53.8	41.4	939
have male child	52.2	35.9	1469
<b>Family income</b>	NS	NS	
<2500	52.2	38.8	814
2600 - 5000	54.4	38.9	1249
>5000	48.4	33.0	345
<b>Alcohol Use</b>	***	NS	
No	49.9	37.5	1582
Yes	58.4	39.1	826
<b>Concerns of masculinity Group</b>	NS	NS	
High	50.3	36.0	692
Medium	53.0	38.7	815
Low	55.0	39.3	892
<b>Help in household chores</b>	NS	**	
Never helps	50.3	37.7	567
Help but few times	52.8	38.3	1277
Help many times	54.2	34.7	476
Quite often helps	64.0	55.8	86
<b>Unprotected Sex</b>	***	***	
Did not use condom	74.1	61.9	139
Used condom either with sex worker or non-sex worker <sup>#</sup>	83.3	66.7	12
Used condom with both sex worker and non-sex worker	69.9	56.6	143
Never had extramarital sex in the last 12 months	50.1	35.1	2114
<b>Risky Sex</b>	***	***	
had pre/extra marital sex and used condom every time	59.8	43.4	122
had pre/extra marital and not consistently used condom	71.6	59.8	102
had pre/extra marital and never used condom	65.7	49.5	778
Not having any pre/extra marital relationships	43.7	29.7	1406

\*\*\* p < 0.001

\*\* p < 0.05

\* p < 0.10

NS - Not Significant

# Too few cases

Results from multivariate analysis demonstrates risky sexual behaviour as a strong significant predictor of sexual health problems. In addition, the odds currently suffering with sexual health problems is significantly associated with the concerns about masculinity, as presented in table 7 even after controlling for different socio-economic and demographic characteristics.

**Table 7: Logistic regression coefficients (and standard errors) and odds ratios indicating effects of masculinity, marital relationship, and risky sexual behaviour on sexual health problems in the last 3 months and current suffering**

Characteristic	SHP in the last 3 months			Suffering currently with SHP		
	$\beta$	S.E.	Odds Ratio	$\beta$	S.E.	Odds Ratio
Alcohol use	0.286**	0.094	1.331	-0.009	0.095	0.991
Family Income	-0.018	0.065	0.982	-0.088	0.066	0.916
Concerns of masculinity	-0.211***	0.055	0.810	-0.127**	0.056	0.881
Help in household chores	0.106*	0.059	1.112	-0.007	0.060	0.993
Risky sex	0.298***	0.032	1.348	0.294***	0.032	1.342

<sup>s</sup> controlled for age difference, educational difference between husband and wife, religion, having a male child and age at marriage

\*\*\* p < 0.001      \*\* p < 0.05      \* p < 0.10

Dependent variable: Sexual health problems: in the last 3 months, current (0 – No, 1 – Yes)

Independent variable categories: alcohol use (do not take, takes), family income (<2500, 2600-5000, >5000), Concerns of masculinity (low, medium, high), help in household chores (never helps, helps but few times, helps many times, quite often helps), risky sex (Not having any pre/extra marital relationships, had pre/extra marital sex and used condom every time, had pre/extra marital and not consistently used condom, had pre/extra marital and never used condom).

## Conclusion

The results of this study indicate that, subset of men are engaged in risky premarital and extra marital sex. Some of this involvement is derived from concerns about their own masculinity and self esteem which can translate into and be exacerbated by pre marital sexual relationships and a peer group that promotes risky pre and extramarital sex. Further, it suggests that the risky sexual behaviour and the concerns about masculinity have significant impact on the men's sexual health problems. These data propose that interventions need to address the issues of masculinity, sex and sexuality in marriage, and sexual health problems that provides the means of alternative strategies at the community, provider and individual levels in the drive to prevent STDs/HIV.

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**Figure 1**



