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Self-Reported Symptoms of Gynecological Morbidity and Treatment Seeking Behavior in Madhya Pradesh

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Introduction and Context

Reproductive health, a crucial aspect of general health is of significant importance for human development. World Health Organization recognized the importance of public health, social and economic consequences of reproductive health as early as 1965 (WHO, 2004). In developing countries, reproductive morbidity commonly affects the quality of women's lives. India has the second largest population and the first national population programme in the world. The population programme saw a paradigm shift during the last decade especially after the importance of reproductive health was recognized in Sept, 1994 at the International Conference on Population and Development (ICPD), Cairo, Egypt.

The main focus of the conference stressed that reproductive morbidity is an important part of women's health concerns and requires that health services expand their focus on maternal health and family planning. Reproductive morbidity (RM) is defined as "*any morbidity or dysfunction of the reproductive tract or any morbidity which is a consequence of reproductive behaviors including pregnancy, contraceptive use, abortion, childbirth or sexual behavior" (World Health Organization-1990)*. World Health Organization (1992) classifies reproductive morbidity broadly into three categories; out of these three, gynecological morbidity is one of them.

Gynecological morbidity includes any condition, disease or dysfunction of the reproductive system which is not related to pregnancy, abortion or child birth, but may be related to sexual behavior. Itching/irritation, bad odour, severe abdominal pain during intercourse, fever etc are related to the gynecological morbidity. Women bear most of the responsibility in sexuality and reproduction through contraceptive use, pregnancy, childbirth and

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breastfeeding. They also bear the greatest burden of reproductive ill-health. One of every three women aged 15-44 years has to bear the disease burden, related to pregnancy, child birth, abortion, HIV/AIDS and RTI/STI (World Health Organization, 1995a).

Globally, reproductive and sexual health problems show an increasing share in the burden of disease over the recent years. In developing countries especially India, morbidity due to Reproductive Tract Infections (RTIs) and Sexually Transmitted Infections (STIs) are very high, relative to those associated with other health problems. Prevalence of reproductive tract infections (RTIs) is determined by a number of factors. Oomman (2000) observed an association between Pelvic inflammatory diseases (PID) among women and husband's extramarital sexual relation. Use of contraception especially intrauterine device (IUD), female sterilization, and copper-T and abortion procedures also increase the risks of RTIs (Bhatia and Cleland 1995; Gogate et al., 1998). Women are more likely than man to develop RTIs and also at a higher risk of experiencing severe health consequences of RTI. In addition certain socio-economic and cultural determinants also affect RTIs.

Wasserheit et al. (1989) in a study of rural Bangladesh tried to link between gynecological morbidity and contraceptive use. IUD users as well as sterilized women each reported four times more of the symptoms than the nonusers and seven times more than nonusers confirmed infection by examination. Rahman and Kabir (2004) have assessed the magnitude of self reported gynecological morbidity unrelated to childbearing among the adolescent women in Dhaka irrespective of their marital status. They have also explored the determinants of health care seeking behavior of the adolescents for their reproductive ailments. The analysis revealed that family income, type of family, type of residence and hygienic practice during menstruation appeared to be influencing factors for older (15-19 years) adolescent's reproductive morbidity.

Although in India there are not many studies related to gynecological morbidity amongst women. Chellan (2004) has assessed the influence of socio-economic and demographic factors on gynecological morbidity and treatment seeking behavior in Tamil Nadu and found that 36.3 percent women of childbearing ages had experienced any one symptom of RTIs/STIs and among them 31.5 percent had taken treatment. The results reveal that women having low level of education, pregnancy wastage and contraceptive use are significantly more likely to report symptoms of RTI/STI.

In the light of National Family Health Survey (NFHS-II) data, the graph (fig. 1) below shows the prevalence of any reproductive health problem, among currently married women in India and some major states.

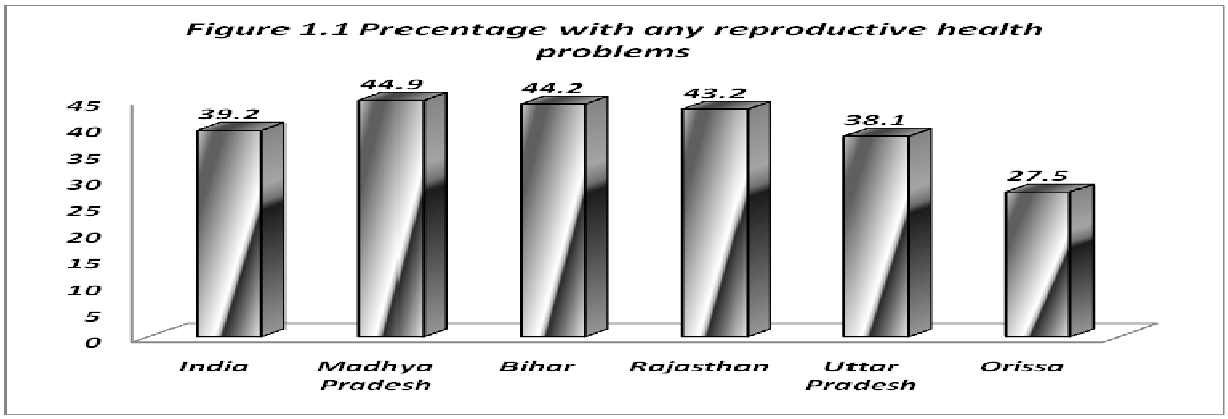

Figure: 1.1, Source: National Family Health Survey (NFHS-2), 1998-99.
Note: Reproductive health problems related to vaginal discharge, urination and intercourse.

The result indicates that the reproductive health problem is reported higher in Madhya Pradesh compared to other major states and India as whole. On the basis of this, the present study i.e. self reported symptoms of gynecological morbidity and treatment seeking behavior is based on only Madhya Pradesh context. The reproductive health issue of women is now on the global social agenda of the millennium development goal. Maternal mortality has been the only indicator of women's health even though reproductive morbidity occurs more frequently and seriously affects women's health. As such, it is evident from the above that it is important to understand the various behavioral aspects related to pregnancy, delivery and gynecological morbidity and how they together influence reproductive morbidity. However, cultural norms and values promote early marriage of women living in Madhya Pradesh. The rural women, who are under-nourished, early pregnancy along with malnourishment, would enhance the risk of hazardous pregnancy outcomes. Broadly, the present study attempts to understand the levels of gynecological morbidity and treatment seeking behavior among currently married women in Madhya Pradesh. Specifically the paper first examine the levels of different health problems related to gynecological morbidity and treatment seeking behavior in Madhya Pradesh by selected socio-economic and demographic variables.

Data and Methodology

The present study utilizes the data from the District Level Household Survey (DLHS-2, 2002-04) under Reproductive and Child Health (RCH) Survey in India. The survey DLHS-2 was completed during 2002-04 in 593 districts as per the 2001 census in two phases. The first phase of the DLHS-II covering 23 districts in Madhya Pradesh was conducted during May 2002 to February 2003. The second phase covering remaining 22 districts was carried out during February 2004 to September 2004. DLHS-2 has collected information through a representative sample of 46,413 households and 38,024 eligible women aged (15-44) in Madhya Pradesh.

The DLHS-RCH has also collected information on awareness and prevalence of RTI/STI, common symptoms of reproductive tract and sexually transmitted infections from women and their husbands, and information on menstrual related problems in the three months immediately preceding the survey. The prevalence of RTIs and STIs is judged by their symptoms. All the respondents were told about the symptoms of RTI/STI, and were asked whether they had any of them. In case of presence of at least one symptom they were further asked whether they had sought treatment for such problems, and if they had sought treatment, details regarding the sources of treatment such as government or private sector were also recorded.

This study uses gynecological morbidity as the dependent variable and it divides whole independent variables into two categories, which are considered here as socio-economic and demographic characteristics. This section briefly describes the various techniques used to study. Level of gynecological morbidity by using uni-variate analysis, cross tabulation and multivariate techniques i.e. logistic regression analysis to highlight the net effects of selected socio-economic and demographic factors on the prevalence of reproductive morbidity among the currently married women aged 15-44 years in India and Madhya Pradesh. The study also utilized Pearson Chi-square test to access significant impact of socio-economic and demographic characteristics on the prevalence of gynecological morbidity. Subsequently, the multinomial logistic regression technique has been applied to understand the correlates of various socio-economic, demographic variables on the treatment seeking behavior among women suffering from gynecological morbidity.

Analysis and Findings

Prevalence of gynecological morbidity:

Table 1 gives an idea about percentage of currently married women who reported any symptoms of RTI/STI and type of problems during three months prior to the survey. Around one third currently married women reported at least one reproductive health problems in India and two fifth reported in Madhya Pradesh. Among these health problems, low backache (25 percent) was reported higher followed by pain in lower abdomen (15 percent), itching over vulva (10 percent) and frequent/painful passage of urine (10 percent). In each of the symptoms, women from Madhya Pradesh have reported higher complications compared to women from India.

Table 1 Percentage of currently married women who reported any symptoms of RTI/STI during three months prior to survey, India and M.P., 2002-04

Symptoms	India	Madhya Pradesh
Women reported any RTI/STI symptoms	**32.3**	**38.8**
Low backache	19.5	25.1
Pain in lower abdomen not related to menses	10.1	14.7
Itching over vulva	7.1	9.8
Frequent/Painful passage of urine	6.3	9.7
Fever	5.4	8.3
Pain during sexual intercourse	5.1	7.3
Some mass coming out of vagina	4.1	2.2
Any involuntary escape of urine	4.4	4.9
Boils/Ulcers/Warts around vulva	2.9	4.9
Swelling in the groin	2.7	3.9
Swelling/Lump in breast	1.3	1.5
Bleeding after sexual intercourse	1.2	1.8
Number of Women	**507622**	**38024**

Differentials by Socio-economic and demographic variables:

Reproductive health status of women is an important indicator of overall health and wellbeing of women having larger implications on healthy sexual life and fertility behavior. Understanding the dynamics of sexual and reproductive health problems in terms of sexually transmitted infections and its rejoinder by the health care system is an apparent upshot for arresting the budge of such infections including HIV.

Table 2 presents the percentage of women with any RTI/STI symptoms. About two fifth women irrespective of place of residence from Madhya Pradesh had reported any symptoms of

RTI/STI compared to India which was 34 percent. Older aged women (35-44 years) have reported higher complications (40 percent) than younger aged women (15-19 years) which were 34 percent. It is worth mentioning that women with any level of education have reported higher symptoms of RTI/STI and the percentage was lower among uneducated women. Women whose husbands were illiterate had reported more complication in Madhya Pradesh (62 percent). Thirty six percent Muslim women reported complication which was lower than other religions in India, but in case of Madhya Pradesh, approximately 45 percent Muslim women had reported such symptoms.

Women from low SLI group have higher problems compared to high SLI group in Madhya Pradesh and it is approximately 5 percent higher reported in each SLI compared to India as whole. Knowledge of RTI/STI is an important indicator to determine the nature and extent of relations between husband and wife in reporting complications during sexual relationship. In India women who were aware of RTI/STI reported higher prevalence of symptoms (36 percent) than those who were not (29 percent) and observed that more women reported of having this symptom in Madhya Pradesh.

Reproductive health problems are not only problems for married women but unmarried women also have experienced gynecological symptoms. But they often do not discuss about this symptoms with any one due to fear of social stigma attached to such problems. ***Table 3*** depicts percentage of women with any symptoms of RTI/STI by some demographic variables in India and Madhya Pradesh. Women living with husband for less than 15 years (35 percent) have reported high health problems related with RTI/STI than the women who have living with more than22 years (25 percent). In Madhya Pradesh, it was reported higher compared to India level in each category. There was not much differential in reporting symptoms of RTI/STI by children ever born.

Pregnancy wastage related with women experienced at least one still birth or induced abortion or spontaneous abortion in the reproductive period. Those women who reported any pregnancy wastage in the reproductive period they had highly reported symptoms of RTI/STI. About 41 percent of women in India reported complication that had any pregnancy wastage. In Madhya Pradesh, about half of the women reported complication that had any pregnancy wastage. Women who are using any contraception method had reported higher complication than who were not using. About 10 percent higher reported in case of Madhya Pradesh than

India as whole. Place of delivery did not have high differential for reporting symptoms of RTI/STI at India level. But in case of Madhya Pradesh, women delivered any child at institution (40 percent) have high symptoms of RTI/STI compared to women who delivered at home (35 percent). About one third women who are currently menstruating have reported symptoms of RTI/STI compared to women who are not (31 percent) in India, but it was slightly higher for Madhya Pradesh (39 percent).

Table 2 Percentage of currently married women who reported any one symptoms of RTI/STI by some selected Socio-economic characteristics, India and M.P., 2002-04

	Percentage of women with any gynecological morbidity	
Background Characteristics	***India***	***Madhya Pradesh***
Place of residence		
Rural	33.7	39.3
Urban	29.3	37.5
Age of women		
15-19	29.7	34.2
20-24	30.9	36.2
25-34	33.1	40.1
35-44	33.0	40.3
Education of women		
Non-literate	41.4	34.1
1-5 years	34.4	42.0
6-10 years	31.5	37.8
11 years and above	32.2	38.4
Education of husband		
Non-literate	41.3	61.8
1-5 years	34.8	41.6
6-10 years	33.3	38.5
11 years and above	30.8	38.0
Religion		
Hindu	31.9	38.3
Muslim	36.2	45.3
Others	29.9	41.8
Caste		
SC/ST	33.9	39.3
OBC	31.4	38.1
Others	32.1	39.1
standard of living index		
Low	34.6	39.1
Medium	32.3	40.9
High	28.4	35.6
Knowledge about of RTI/STI		
Yes	35.8	40.8
No	29.6	38.2
Total	**32.3**	**38.8**
Number of women	**507622**	**38024**

Table 3 Percentage of currently married women who reported any one symptoms of RTI/STI by some selected demographic characteristics, India and M.P., 2002-04

	women with any gynecological morbidity	
Demographic Characteristics	**India**	**Madhya Pradesh**
Age at which women started living with husband		
<15	35.0	41.1
15-18	33.3	37.8
18-22	29.2	37.2
>22	25.2	33.6
Children Ever Born		
0	30.1	35.5
1	27.5	34.5
2	29.7	36.4
3	33.7	41.5
4+	37.5	41.1
Any Pregnancy wastage		
Yes	40.9	49.4
No	31.9	38.4
Any Contraceptive method		
Yes	33.5	42.1
No	30.4	34.4
Place of delivery		
Home	32.9	35.5
Institution	32.1	40.2
Currently menstruating		
Yes	32.5	39.4
No	31.7	36.8
Total	**32.3**	**38.8**
Number of women	**507622**	**38024**

Source of treatment and consultation of treatment for gynecological morbidity:

This section provides treatment seeking behavior and source of treatment by currently married women suffer from RTI/STI problems. Women who experienced any symptoms of RTI/STI were asked whether they had consulted someone or had sought treatment for their problem and also source of treatment. The women who experienced any symptoms of RTI/STI and sought treatment for this symptom have been reported in ***Table 4.*** Among the women who had symptoms of RTI/STI, one out of three had sought treatment in India; while in Madhya Pradesh one fourth has reported. A higher proportion of women had sought treatment from private health facility (62 percent) than the public health facility (26 percent).

Table 4 Percentage of currently married women who had experienced Gynaecological morbidity, sought treatment and who had received treatment, India and MP, 2002-04

	Treatment for Gynaecological morbidity	
Treatment and Source	***India***	***Madhya Pradesh***
Percentage of women sought treatment	27.8	25.3
Number of women	**68842**	**5400**
Source of treatment		
Government Hospital[1]	23.7	26.0
Primary health centre	6.2	5.7
Sub-centre	1.3	1.6
Private Hospital[2]	58.0	62.4
ISM facility[3]	6.1	3.7
Others	16.0	10.3
	Source of treatment	
Received treatment from whom		
Doctor	82.6	86.6
ANM/Nurse/LHV	7.0	6.9
Others[4]	10.4	6.5
Number of women who sought treatment	**19150**	**1368**

Note: [1]include municipal hospital, dispensary, urban health centre (UHP), urban health post (UHP), urban family welfare centre (UFWC), community health centre (CHC), rural hospital, primary health centre (PHC), sub centre,
[2]include private hospital/clinic and non-government organization (NGO)/trust hospital/clinic,
[3]include government or private Indian system of medicine, [4] include home remedy and other source
[4] other include Dai trained or untrained, other health professional and ISM practionner.

A less percentage of women had sought treatment from primary health centre (6 percent) as well as sub centre (2 percent) in Madhya Pradesh. The tendency to seek treatment for RTI/STI is quite low among women in Madhya Pradesh. Among women who sought treatment for RTI/STI symptoms, 83 percent went to a doctor, 7 percent to an ANM/LHV and 10 percent to someone else in India. In Madhya Pradesh, around 87 percent women visited a doctor and about 7 percent women went for treatment to someone else i.e. trained dai/untrained Dai.

Table 5 shows percentage of currently married women who had experienced any symptoms of RTI/STI and sought treatment for these problems by socio-economic characteristics in India and Madhya Pradesh. Only three out of ten urban women sought treatment for RTI/STI symptoms in Madhya Pradesh, compared to rural women (24 percent). Percentage of sought treatment increases with increasing the age of the women. Older women (27 percent) have higher sought treatment for RTI/STI symptoms compared to younger women (20 percent). Education of women has no significant difference for reporting treatment for RTI/STI symptoms i.e. women who are illiterate or literate they have same reporting for sought treatment in India as well as in Madhya Pradesh. About one third Muslim women had sought

treatment for RTI/STI symptoms compared to other religion while one fourth reported in case of Hindu women.

About thirty percent women from other castes have sought treatment for RTI/STI compared to Scheduled castes or Scheduled tribes (21 percent) in Madhya Pradesh. About 36 percent women who belonged to high SLI status had sought treatment compared to low status women only 19 percent. In case of India level, women from low SLI group have higher side reported sought treatment than women from low SLI group of MP. Women who are aware of RTI/STI symptoms (33 percent) have reported higher side of sought treatment than women who are not aware of RTI/STI symptoms (22 percent). In case of India, there was no differential for reporting treatment sought by those women who are aware of RTI/STI and who are not aware (both 28 percent).

Women who are living with husband for more than 22 years have reported 37 percent sought treatment compared to women living with husband for less than 15 years (22 percent). Women with no child (still/live births) have reported slightly higher compared to women with any children in India. But in case of Madhya Pradesh, it is not much differential in reporting sought treatment for RTI/STI. Women who are using any contraception (28 percent) have reported higher sought treatment than those who are not using any contraception (22 percent). Women who delivered any child in institution (private or public sector) have reported (28 percent) higher side of sought treatment than who delivered at home (18 percent).

Table 6 presents the relative risk ratios for treatment sought for any one symptoms of RTI/STI in India and Madhya Pradesh. Women who belonged to urban areas are significantly more likely to seek treatment from public sector compared to no treatment than their counterparts in Madhya Pradesh for RTI/STI problems. Age category has no significantly impact on the sought treatment for gynecological morbidity.

Women who belonged to medium as well as high SLI are more likely to seek treatment from private sector than women from low SLI group. Women from high SLI group have two times more likely to sought treatment than women from counterparts group. Knowledge of RTI/STI is a good indicator for treatment seeking behavior for symptoms of RTI/STI. Women who had no knowledge are less likely to seek treatment from private sector for RTI/STI symptoms but it is not significant for public sector.

Table 5 Percentage of currently married women who had experienced Gynecological morbidity and treatment seeking behavior by selected Socio-economic characteristics, India & MP, 2002-04

	women with gynecological morbidity & sought treatment	
Background characteristics	***India***	***Madhya Pradesh***
Place of residence		
Rural	26.2	23.5
Urban	32.5	31.1
Age of women		
15-19	23.5	20.3
20-24	26.0	22.3
25-34	28.7	26.4
35-44	29.0	27.2
Education of women		
Non-literate	25.6	#
1-5 years	28.5	28.5
6-10 years	32.2	32.7
11 years and above	25.8	22.8
Religion		
Hindu	27.0	24.8
Muslim	32.3	33.0
Others	28.4	29.2
Caste		
SC/ST	23.6	21.3
OBC	28.4	26.5
Others	31.0	30.1
standard of living index		
Low	23.5	19.4
Medium	30.1	31.9
High	34.1	35.8
Knowledge about of RTI/STI		
Yes	27.1	32.5
No	28.8	21.5
Age at which women started living with husband		
<15	25.9	22.2
15-18	27.4	27.1
18-22	29.9	27.9
>22	35.1	36.9
Children Ever Born		
0	29.5	25.0
1	28.1	24.5
2	28.7	25.2
3	28.1	27.9
4+	26.3	24.4
Any Pregnancy wastage		
Yes	31.9	26.2
No	27.5	25.3
Any Contraceptive method		
Yes	28.8	27.9
No	26.0	21.7
Place of delivery		
Home	21.6	17.8
Institution	29.6	28.0
Total	**27.8**	**25.3**

Number of women	68841	5401

Table 6 Relative risk ratios from multinomial logistic regression for sought treatment for any one symptoms of RTI/STI by selected background characteristics, Madhya Pradesh, 2002-04

Background characteristics	Government sector/ No treatment Exp(β)	Private sector/ No treatment Exp(β)
Place of residence		
Rural®		
Urban	1.87**	0.92
Age group of women		
<20®		
20-24	1.18	1.03
>24	1.05	1.30
Religion		
Hindu®		
Muslim	1.32	0.90
Others	0.23*	0.96
Caste		
SC/ST®		
OBC	0.80*	1.09
Others	0.81	0.99
Standard of living index		
Low®		
Medium	1.10	1.77**
High	0.90	2.23**
Knowledge about RTI/STI		
Yes®		
No	0.86	0.75**
Age at which women started living with husband		
<18®		
18-22	0.74	1.09
>22	0.81	1.45*
Children ever born		
0®		
1	1.50	0.83
2	1.80*	0.88
3+	1.97*	0.87
Pregnancy wastage		
Yes®		
No	1.28	0.87
Used any contraception		
Yes®		
No	0.90	1.00
Place of delivery		
Home®		
Institution	1.63**	1.27*
Number of cases	**5359**	**5359**
log likelihood	**-3685.96**	**-3685.96**

Note: **P<=0.01, *P<=0.05

Women with more number of children are more likely to seek treatment for RTI/STI from public sector compared to women with no children and it is statistically significant only in

case of India. Pregnancy wastage has no statistically significant for sought treatment for RTI/STI symptoms. Women who delivered any child at institution are more likely to seek treatment from public sector and 27 percent more likely from private sector than home delivery.

Summary and conclusions:

The reproductive health issue of women is now the global social agenda of the millennium development goal. Maternal mortality has been the only indicator of women's health even though gynecological morbidity occurs more frequently and seriously affects women's health. In the recent years, the problems related to RTI/STI have increased in India including Madhya Pradesh. The main reason for increase is that people are not aware of side effects of contraceptive methods and sexually transmitted infections. Sexually transmitted infections are mainly spread from one infected person to another through sexual intercourse. The paper mainly discussed on two issues, first women suffer from any symptoms of RTI/STI and seek treatment for this morbidity, where women are poor, illiterate and face greater risk of complications but do not get enough treatment.

The prevalence of any one symptom of RTI/STI was quite high among currently married women aged 15-44 years in Madhya Pradesh than India level. The major health problems were low backache, pain in lower abdomen, itching over vulva and pain during intercourse. The prevalence of any one symptoms of RTI/STI is quite high in rural areas and among aged women in Madhya Pradesh. It is observed that age, education level of women and her husband have significant influence on gynecological morbidity. Muslim women as well as women from low SLI group have reported higher complications than women from counterparts. Women who living with husband, who had any pregnancy wastage, currently using any contraception and place of delivery have significantly impact on gynecological morbidity. Knowledge of RTI/STI is an important indicator to determine the nature and extent of relations between husband and wife in reporting complications during sexual relationship.

On considering treatment seeking behavior it was found that, one fourth of women from Madhya Pradesh had sought treatment for RTI/STI while one third women from all India level. Because they are not reporting for health problems and also do not discuss about these problems with any one due to fear of social stigma. Nearly 70-75 percent women did not seek any treatment for RTI/STI or consulted any one for it. Most of the women from Madhya Pradesh

visited private health sector for sought treatment. In case of receiving treatment for RTI/STI, most of the women went to a doctor. Finally, the multinomial logistic regression analysis results for seeking treatment for RTI/STI symptoms suggested that, women from urban areas are significantly more likely to seek treatment from public sector than their counterparts. The results also demonstrate that women from high SLI group are more likely to seek treatment for RTI/STI compared to women from low SLI group. Knowledge about RTI/STI, age at which women started living with husband and place of delivery has significantly impact on the sought treatment for gynecological morbidity.

References:

Al Asya, R., M. Afifi and M.M. Fathalla. 2004."Gynaecological and related morbidities among ever-married Omani women." African Journal of Reproductive Health 8, 3:188-197.

Bang R.A., A.T. Bang, M. Baitule, Y. Choudhary, S. Sarmikaddam, and O. Tale. 1989. "High prevalence of gynecological diseases in rural Indian women." The Lancet 1: 85-87

Bhatia, J. C., and J. Cleland. 1995. "Self reported symptoms of gynecological morbidity and their treatment in South India." Studies in family Planning.26, 4:203-216.

Bhatia, J. C., J. Cleland. and L. Bahaman. 1997."Levels and determinants of gynecological morbidity in a district of South India." Studies in Family Planning 28, 2:95-103.

Chellan R. 2004 "Gynecological morbidity and treatment seeking behavior in South India." Journal of Health & Population in developing Countries 12, 3:1-15.

Deeb, M., F. Ghorayeb, T. Kabakian-khasholian, J. Yeretzian and N. Aswad. 2003."Measuring gynecological morbidity: evaluating two different data sources from Beirut." Health care of Women International 24, 3:254-265.

International Institute for Population Sciences. 2004. Reproductive and Child Health Project: District Level Household Survey (Phase 1 & 2) Mumbai: International Institute for population sciences.

Rani M. and S. Bonu. 2003."Rural Indian women's care-seeking behaviour and choice of provider for gynecological symptoms." Studies in Family Planning.34, 3:173-185.

Stephenson R., M. A. Koenig., S. Ahmed. 2006."Domestic violence and symptoms of gynecologic morbidity among women in North India." International Family Planning Perspectives. 32, 4:201-208.