

Perceptions and Knowledge about Leukorrhea in a Slum Dwelling South Asian Community

JaspreetKaur; M. Sc.,AK Kapoor; Ph.D

¹ Department of Anthropology, University of Delhi, Delhi, India

Received July 2013; revised and accepted September 2013

Abstract

Objective:The problem of RTI/STI is of growing concern worldwide, especially in developing countries; where each year 340 million new cases curable STI occur. Out of these 151 million are in South and Southeast Asia (WHO, 2001). The present paper attempts to capture the prevalence of leukorrhea, its knowledge and perceptions among currently married women of the age-group, 15-49 years, in a south Asian urban-slum dwelling community.

Materials and methods:A total of 400 households were selected from an urban-slum of Delhi and 391 were interviewed in a house to house survey.

Results:The results showed that the awareness about leukorrhea was almost universal (97 percent), and around 33 percent reported to have experienced the same either at the time of survey or prior to 3 months of the survey date. The perceptions about leukorrhea were varied.

Conclusion:The study reports a high prevalence of leukorrhea among the slum dwelling women, and it also reports that there was not a marked difference in the perception and knowledge when it comes to respondent's education, occupational status, and husbands' education.

Keywords:Leukorrhea, Slums, South-Asian women, perceptions

Introduction

The *International Conference on Population and Development* (ICPD) defined reproductive health of an individual as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Despite, reproductive health being the major focus of the ICPD, it was dropped out of the millennium development goals. Reproductive tract infections form one of the major burdens of disease in developing countries, and include infections caused

due to any (or combination) of the three factors: iatrogenic, endogenous, and sexually transmitted. While there are many symptoms that define the disease, the most commonly reported among the women is that of abnormal vaginal discharge (or Leukorrhea). Various community based studies in developing countries have revealed that this morbidity and general ill health has been endured silently by women, due to various factors like gender inequalities, cultural restrictions, lack of women autonomy, poor awareness, lack of proper infrastructure, and focussed counselling services (1, 2, 3, 4, 5, and 6).

The problem of Leukorrhea has been studied in various Indian settings, focussing not only on the medical/clinical aspect, but also on women's perceptions. The vast folk vocabulary and the

Correspondence:

JaspreetKaur Department of Anthropology, University of Delhi,
Delhi-110007, India
Email: jassi4friends@gmail.com

perceived severity of the disease make it difficult for a researcher to measure the exact levels of prevalence. Most of the women perceive it to be a *normal* phenomenon in their life while a few consider it to be a non-curable illness. The normality of the disease is often influenced by cultural, social, and other group specific factors (7). Among adult women it may be physiological or pathological. The physiological may be due to sexual arousal, premenstrual, or during pregnancy, while pathological may be further categorized as infectious (occurring due to one or multiple infections) or non-infectious (detergents, foreign bodies, herbal preparations, or due to some cancers). The biomedical aspect of the Leukorrhea associates it with reproductive tract infections, which include local infections, as well as infections caused by sexual transmission. The various studies have reported a high prevalence of disease (8, 5). However, due to the self reporting of the symptoms, and varied techniques of diagnosis, there is always a chance of over-reporting of the disease. Further, it has been found in many studies that women reporting vaginal discharge did not have clinical evidence of RTI. The symptoms are reported and are of concern more due to the cultural stigma associated with it (9). The medical treatment is often sought by women only when a significant increase in the secretion had occurred, or a fear of contracting a serious sexually transmitted disease.

In India culturally, a variety of local terms are used across India for this symptom, and it is regarded with serious concern by both men and women, even when the discharge is non-pathological. Anthropologically, medically, and clinically, there has been an appreciable amount of work on genital secretions among men, but the literature on women is thin till date. A variety of local terms in north India exists for this symptom. These include safedpanni (white water); dhatu; dholapani; swedpradhar, sharer dhovay; dhatjaye along with somatic symptoms like weakness, dizziness, burning sensation in hands and feet, significant social stress, and menstrual concerns (10). Depression, verbal abuse, sexual violence, concern about husband's extra-marital affairs, low social integration, and autonomy, have also been found to be associated with it (11, 12). Mental tension, as a cause of this illness has also been described in Ayurveda (13). The causes for vaginal discharge have been described by women to be environmental heat, eating particular kind of food, weakness, tension, while biomedical causes like unsafe delivery, copper-T

insertion, abortion, multiple partners have also been reported (1, 4).

In Delhi, slums are commonly called 'jhuggijhonpari', whereas in Mumbai 'jhopadpatti' or 'chawls' are the names for slums, it is 'ahatas' in Kanpur, 'bustees' in Kolkata, 'cherries' in Chennai, and 'keris' in Bangalore. Despite varied nomenclature, physical characteristics in most of these slums are essentially the same. They are usually a cluster of hutments with dilapidated and infirm structures having common toilet facilities, suffering from the lack of basic amenities, inadequate arrangement for drainage and for disposal of solid wastes and garbage. Under Section-3 of the Slum Area Improvement and Clearance Act, 1956, slums have been defined as mainly those residential areas where dwellings are in any respect unfit for human habitation by reasons partially said above, and faulty arrangements and designs of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light or sanitation facilities, or any combination of these factors which are detrimental to safety, health, and morals. For the present study, the definition proposed by Census of India, 2001 has been adopted, which defines slums as all specified areas in a town or city notified as 'slum' by State, UT Administration or Local Government under any Act including 'Slum Act'.

All areas recognized as 'Slum' by State, UT Administration or Local Government, Housing, and Slum Boards, which have not been formally notified as slum under any act; A compact area of at least 300 population or about 60-70 households poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities.

The present paper attempts to bring to light the perceptions and knowledge about leukorrhea among currently married women aged 15-49 years, residing in a South Asian slum. Further, it tries to understand the impact of respondent's education, occupational status and husbands education on the same.

Materials and methods

The population of Delhi is highest among the Union Territories with 13.8 million of which 6.24 million are females (14). This 13.8 million is projected to grow to 20.6 million in the next five years. Of these, the female population is projected at 9.2 million (14). Delhi has the highest per capita income amongst states and Union Territories of India, and also the

highest percentage of urban population (93.0%). Despite this, approximately 18.7 percent lives in slums (15). A total of 400 households were selected from an urban-slum of Delhi and 391 currently-married women aged 15-49 years were interviewed in a house to house survey. In order to account for non-response due to various reasons, an over sampling of 25 percent from these slums was done. Currently pregnant and menstruating women were excluded from the study. The information was sought on various aspects of women's awareness, knowledge, and perceptions regarding Leukorrhoea on pre-structured interview schedules. The data collected was analysed using SPSS v 21.

Ethical Issues

The topic of RTI/STI being sensitive in nature, it was made sure that the privacy of the respondent and their responses was maintained. Ethical clearance from the departmental ethical committee was obtained prior to starting the fieldwork, and written consent of the respondent was obtained before starting the interview. The respondents were made aware of the objectives, relevance and purpose of the research study.

Results

The results are shown in the following sections. Table 1 shows the demographic characteristics of the women respondents. It is evident from the table that majority of women respondents belonged to the age-group of 25-29 years (23.0 percent), followed by the age-group 30-34 years (22.5 percent). Around 20 percent belonged to the age group of 20-24 years, and an almost equal percentage to 35-39 years and 40-44 years. Only 2.8 percent of the respondents belonged to the age-group of 45-49 years. Further, about 70 percent of the respondents were working and among these some were in either government jobs (5.8 percent), or had taken up private sector jobs (58 percent). A good majority of the respondents worked as waged labourers (23 percent), while 13 percent were engaged in some sort of business or were self-employed (took stitching, owned grocery shops, etc). A total of 63 percent of the respondents were non-literate, and never went to school. Only 37 percent of women said that they had ever attended school. 87 percent of respondents had attained either primary education (54 percent) or had completed up to middle (33 percent). The awareness level about leukorrhea was found to be almost universal (97 percent of women being aware of it). Among the

total respondents interviewed around 33 percent reported having the problem of leukorrhea.

Table 1: Showing demographic characteristics of women respondents

	Frequency (n)	Percent (%)
Age-Group (years)		
15-19	21	5.4
20-24	77	19.7
25-29	90	23.0
30-34	88	22.5
35-39	54	13.8
40-44	50	12.8
45-49	11	2.8
Total	391	100.0
Occupational Status		
Working	121	30.9
Home-makers	270	69.1
Total	391	100.0
Kind of Occupation		
Government service	7	5.8
Waged labourer	28	23.1
Private sector	70	57.9
Business/self-employed	16	13.2
Total	121	100.0
Literacy Status		
Literate	144	36.8
Non-Literate	247	63.2
Total	391	100.0
Level of Highest Education attained		
Primary	77	53.5
Up to middle	48	33.3
High school	14	9.7
Higher secondary	2	1.4
Graduate	3	2.1
Total	144	100.0
Respondents who were aware of Leukorrhea		
Yes	379	96.9
No	12	3.1
Total	391	100.0
Respondents who reported having Leukorrhea		
Yes	128	32.7
No	251	64.2
DK/CS	12	3.1
Total	391	100.0

Table 2 shows the perceived causes of Leukorrhoea among currently married women of the age group 15-49 years. It is interesting to note that a very low percentage of respondents were close to identifying the

actual cause of the problem (sexual excitement=1.1 percent and frequent pregnancies= 2.6 percent). Around 12.6 percent of the respondents identified it to be a kind of body disease. Majority of respondents (42 percent) perceived it to be due to weakness, while 11 percent perceived the cause as excess of heat in the body. Tension as a perceived cause was reported by around 20 percent of the respondents, while 8 percent said it is caused by consumption of hot foods. ‘Other’ causes(1.8 percent) that were reported include melting of bones, nutritional deficiency, and some kind of allergy, defect in spinal cord, lifting heavy weights, age-related problem, and diabetes.

Table 2: Showing the perceived causes of Leukorrhoea among currently married women aged 15-49 years

Perceived Causes	Frequency	Percent
Excess heat in the body	73	11.2
Witchcraft	8	1.2
Body disease	82	12.6
Weakness	273	41.9
Hot foods	52	8.0
Mental tension	124	19.0
Sexual excitement	7	1.1
Body balance	3	0.5
Frequent pregnancies	17	2.6
Any other	12	1.8
Total*	651	100.0

*multiple response question

Table 3 shows the perceived effects of leukorrhoea among currently married women aged 15-49 years in a Delhi slum. Majority of respondents (37.2 per cent) reported weakness to be the main effect of leucorrhoea, and vice-versa; followed by aches and pain in the body (22.8 percent). An equal percentage of respondents (7.5) reported visual problem and gastric problems as the effect. An almost equal number (22) of respondents reported anxiety and stress, infertility, and sexual problems as the perceived effects. 6.5 percent of currently married women reported urinary problem, while only 1.2 percent reported genital problems as the major perceived effect. Among ‘others’ 4.2 percentage of respondents reported melting of bones, vertigo, dizziness, trembling of feet, lethargy, and HIV/AIDS as the perceived effects of leukorrhoea on women.

Table 4 shows the factors that were found to be associated with the various perceptions regarding leukorrhoea among currently-married women aged 15-49 years. These include respondent’s occupational

Table 3: Showing the perceived effects of Leukorrhoea among currently married women aged 15-49 years

Perceived Effects	Frequency	Percent
Weakness	307	37.2
Visual problem	62	7.5
Gastric problem	62	7.5
Urinary problem	54	6.5
Aches and pain in the body	188	22.8
Sexual problems	20	2.4
Neurological problems	5	0.6
Genital problems	10	1.2
Anemia	37	4.5
Anxiety and stress	22	2.7
Infertility	23	2.8
Others	35	4.2
Total*	825	100.0

*multiple response question

status, respondent’s literacy, and husband’s literacy. The table shows that more working women (25.6 percent) thought that certain kind of food habits could cause leukorrhoea among women, against 14 percent of home-makers who agreed on this concept. The difference in the percentage of those who opined the other way did not differ much among the working women and the home-makers. The differences were found to be statistically significant. Similarly, the perception about husband’s substance abuse differed significantly between the two groups, i.e. working women and home-makers. While around 30 percent working women were of the opinion that husband’s substance abuse (drinking habit) may lead to leukorrhoea, only 20 percent of women who were home-makers opined the same. However, there was not much of a difference in the two groups in the percentage of respondents who believed that husband’s multiple partners can cause leukorrhoea. A higher percentage (67 percent) of working women said that the health of an unborn child could be affected by leukorrhoea, while a marginally lower percentage (61 percent) of women who were home-makers believed in the same. Respondents were also asked about any kind of religious prohibitions that they were aware of. The results show that majority of women, whether working or housewives did not reported any kind of prohibitions in their religion. A nearly equal percentage (10 percent) of respondents reported being aware of any (one or more) kind of prohibitions. When it comes to literacy, it was found that a higher percentage of literate women (21 percent) said that they believed that certain

Leukorrhea Perception in a South Asian Community

Table 4: Factors associated with perceptions about Leukorrhea among currently-married women aged 15-49 years in a South Asian Community

	Occupational Status			χ^2	Literacy Status of Respondent			χ^2	Literacy Status of Husband			χ^2
	Working N (%)	Home-maker N (%)	Total N (%)		Literate N (%)	Non-Literate N (%)	Total N (%)		Ever attended School N (%)	Never attended school N (%)	Total N (%)	
Food habits cause Leukorrhea												
Yes	31 (25.6)	38 (14.1)	69 (17.6)	8.68**	30 (20.8)	39 (15.8)	69 (17.6)	3.19	47 (19.4)	22 (14.8)	69 (17.6)	6.39**
No	67 (55.4)	159 (58.9)	226 (57.8)		75 (52.1)	151 (61.1)	226 (57.8)		128 (52.9)	98 (65.8)	226 (57.8)	
DK/CS	23 (19.0)	73 (27.0)	96 (24.6)		39 (27.1)	57 (23.1)	96 (24.6)		67 (27.7)	29 (19.5)	96 (24.6)	
Total	121 (100.0)	270 (100.0)	391 (100.0)		144 (100.0)	247 (100.0)	391 (100.0)		242 (100.0)	149 (100.0)	391 (100.0)	
Husband's substance abuse can cause leukorrhea												
Yes	35 (28.9)	53 (19.6)	88 (22.5)	6.51**	38 (26.4)	50 (20.2)	40 (10.2)	2.02	59 (24.4)	29 (19.5)	88 (22.5)	10.5**
No	58 (47.9)	125 (46.3)	183 (46.8)		65 (45.1)	118 (47.8)	183 (46.8)		98 (40.5)	85 (57.0)	43 (46.8)	
DK/CS	28 (23.1)	92 (34.1)	120 (30.7)		41 (28.5)	79 (32.0)	120 (30.7)		85 (35.1)	35 (23.5)	120 (30.7)	
Total	121 (100.0)	270 (100.0)	391 (100.0)		144 (100.0)	247 (100.0)	391 (100.0)		242 (100.0)	149 (100.0)	391 (100.0)	
Husband's multiple partner cause leukorrhea												
Yes	89 (73.6)	194 (71.9)	283 (72.4)	0.32	105 (72.9)	178 (72.1)	283 (72.4)	0.36	168 (69.4)	115 (77.2)	283 (72.2)	3.25
No	12 (9.9)	75 (9.3)	37 (9.5)		12 (8.3)	25 (10.1)	37 (9.5)		27 (11.2)	10 (6.7)	37 (9.5)	
DK/CS	20 (16.5)	51 (18.9)	71 (18.2)		27 (18.8)	44 (17.8)	71 (18.2)		47 (19.4)	24 (16.1)	71 (18.2)	
Total	121 (100.0)	270 (100.0)	391 (100.0)		144 (100.0)	247 (100.0)	391 (100.0)		242 (100.0)	149 (100.0)	391 (100.0)	
Health of the unborn child is affected by Leukorrhea												
Yes	81 (66.9)	164 (60.7)	245 (62.2)	1.69	99 (68.8)	146 (59.1)	245 (62.7)	3.64	161 (66.5)	84 (56.4)	245 (62.7)	4.41
No	18 (14.9)	42 (15.6)	60 (15.3)		19 (13.2)	41 (16.6)	60 (15.3)		35 (14.5)	25 (16.8)	60 (15.3)	
DK/CS	22 (18.2)	64 (23.7)	86 (22.0)		26 (18.1)	60 (24.3)	86 (22.0)		46 (19.0)	40 (26.8)	86 (22.0)	
Total	121 (100.0)	270 (100.0)	391 (100.0)		144 (100.0)	247 (100.0)	391 (100.0)		242 (100.0)	149 (100.0)	391 (100.0)	
Religious Prohibitions												
Yes	12 (9.9)	28 (10.4)	40 (10.2)	2.84	12 (8.3)	28 (11.3)	40 (10.2)	0.91	26 (10.7)	14 (9.4)	40 (10.2)	4.77*
No	103 (85.1)	215 (79.6)	318 (81.3)		120 (83.3)	198 (80.2)	318 (81.3)		190 (78.5)	128 (85.9)	318 (81.3)	
DK/CS	6 (5.0)	27 (10.0)	33 (8.4)		12 (8.3)	21 (8.5)	33 (8.4)		26 (10.7)	7 (4.7)	33 (8.4)	
Total	121 (100.0)	270 (100.0)	391 (100.0)		144 (100.0)	247 (100.0)	391 (100.0)		242 (100.0)	149 (100.0)	391 (100.0)	

Chi Square test,

** significant at P<0.001

kinds of food habits could lead to leukorrhea. These included consuming excess *chai* (tea), *meat* (non-vegetarian), *baingan* (brinjal), *kachhechawal* (raw rice), *anda* (egg), *aloo* (potatoes), *machhli* (fish), *masale-daarkhana* (spicy food), and *milawatikhana* (adulterated food). 27 percent of literate women said that husband's substance abuse can cause leukorrhea, while only 20 percent of illiterate women said the same. An appreciable percentage of women (29 percent literate and 32 percent of illiterate) were not either didn't know or were not sure whether husband's substance abuse could cause leukorrhea. An equal percentage of both literate and illiterate women said that husband's multiple partners could cause leukorrhea, while a higher percentage (69 percent) of literate respondents said that the health of the unborn child could be affected by leukorrhea. On the contrary, only 59 percent of illiterate respondents thought the same. When it comes to religious prohibitions, majority of both, literate and illiterate respondents said there were no prohibitions on women suffering from leukorrhea in their religion. While 12 percent of illiterate women reported one or more kinds of religious prohibitions, including not going near the temple, not entering the kitchen, not worshipping, and not cooking. The differences were not found to be statistically significant. Husband's education was also found to be a factor that influenced the women's perceptions towards Leukorrhea. Significant differences were observed in the percentage of women whose husband's ever attended school, and whose husband's never attended school, who reported that food habits could affect leukorrhea. Nearly 20 percent of respondents whose husband's ever-attended school thought that certain kinds of food habits could lead to leukorrhea, while only 15 percent said no. Further, husband's substance abuse was also reported more by respondents whose husband's ever attended school (25 percent), against only 20 percent who reported the other way around. The difference was found to be highly significant. Husband's multiple partners could lead to leukorrhea was reported by 70 percent of respondents whose husband's ever-attended school, while 77 percent by whose husbands never-attended school. The differences were however, not found to be statistically significant. The health of the unborn child is affected by leukorrhea was reported by 66 percent of respondents whose husband's had ever-attended school, and 57 percent by those whose husband's never-attended school. Religious

prohibitions were reported by 11 percent of respondents whose husband's ever-attended school, while only 9 percent by those whose husband's never attended school. The difference was found to be statistically significant.

Discussion

The present study verges into the lay-woman's perceptions and knowledge about the most commonly and frequently encountered problem in their life. It explores the problem of vaginal discharge beyond the purview of biomedicine, and is an attempt to bring forth the perceptions, and knowledge that women hold towards this *normal* discomfort. In the present study, it was found that 32.7 percent reported the problem of leukorrhea, which was also reported in earlier studies (13, 16,17,18) The respondents comprised majorly to the age category of 25-34 years, and were home-makers. The literacy rate was also not very high, but still appreciable. The respondents were probed for their knowledge and perceptions towards leukorrhea. All the women, irrespective of their status of having and not having leukorrhea, were asked questions towards the perceptions and knowledge. The most common perception that was held among these women, for cause as well as the effect of leukorrhea was 'weakness'. It was commonly believed that internal weakness causes vaginal discharge in women, and also, that it is one of the major affect of the problem. In other words, it's a two-way process; it is an agent-cause-effect triad. The most commonly reported cause of leukorrhea was found to be 'weakness', which has also been reported in earlier studies as well (1,4, 18) Further, the main factors that emerged to be the causative agent for leukorrhea included consumption of *hot* foods, mental tension, economic hardship, allopathic medicines, and body heat. The slum women's perception that body heat, consumption of hot foods, and internal weakness (*kamjori*) (rather than scientific reasoning) lead to leukorrhea often act as a guiding factor for effective treatment seeking. It was found in the present study that most women stick to home remedies prescribed by other elder women of the community, and the most common reason for not going for medical help, or visiting the healthcare worker, was non-effectiveness of the treatment, and reoccurrence of the problem (due to incomplete course of antibiotics). This concept of *garmitha* women commonly hold is a part of general theory of humoral balance, derived from the Indian ayurvedic

techniques. According to the ayurveda, illness results from an imbalance between *garmi* and *thandi*. Most of the reproductive health problems are thought to be a manifestation of *garmi*. A close link between leukorrhea and feeling of weakness, with one seen to be causing the other and vice versa has been reported in a number of studies as (4, 12, 19).

The effects that leukorrhea had on women's body was also probed, and it was found that weakness was the most commonly reported effect, followed by aches and pains in the body. The most frequently reported symptom was lower backache and pains in legs. Only a handful of women could recognize effects that were anywhere close to being medically correct (sexual problems and infertility). Anxiety and stress, which arise partially due to the problem itself and partially due to reoccurrence of the problem, were also reported (20).

[A 30 year old respondent working with as a waged labourer, said *aankhon kea age andheraaajatahai, chakaraatehai, kamjorimehsooshotihai, (I get blackout, vertigo and I feel weakness)*].

Frustration and hopelessness were visible among women who, after months of treatment, only interrupted by a short healthy phase, had to re-encounter the problem. These women held the doctors and the kind (and failure) of treatment they sought responsible for the same.

[A 38 year old respondent who was a house-wife said *kyakarun, bahutilaajkarayamagar ye safedpani fir se janashuruhojaatahai, isliyeabmaineilaajkarana hi choddiahai (What should I do, I had undergone a lot of treatment, but the problem still persists, so I have stopped taking any medicine now)*].

Further, the women also reported urinary, gastric, neurological and visual problems, along with anaemia. They thought that leukorrhea led to weak eye-sight. Blurred vision was also reported, in a slum population of Mumbai, India (21).

Among other perceptions that were explored in the present study were the link between food habits, husband's substance abuse, husband's multiple partners, and religious prohibitions. The differences in perceptions were marginal, between the groups under consideration. More of working women were found to believe that certain kind of food habits led to leukorrhea. This is in accordance with the concept of ayurveda, that eating foods of *hot* constitution disrupts the body balance, leading to leukorrhea. Working women are expected to hold greater knowledge derived from the peer group, whereas, home-makers

are hypothesized to hold less knowledge. In addition to this, a large percentage of home-makers either refused to answer or were not sure, thus adding to our belief that they lacked knowledge about leukorrhea. In all other areas of perception (husband's substance abuse, husband's multiple partners, and health of the unborn child), a higher percentage of working women were seen to respond positively. The difference in perceptions of literate and illiterate women was also marginal. Husband's multiple partners could lead to leukorrhea was responded almost equally by both literate as well as illiterate women. Here, the source of information for illiterate women comes from the public health workers, and other grass-root level workers working for various private organizations in the area. Husband's substance abuse, include drinking habits of husbands, that has been discussed in the literature to be a cause of leukorrhea. According to the women, alcohol consumption leads to increased body heat, which is eventually transferred to women while having sex. The concept of body imbalance and heat transfer has been mentioned in ayurveda as well. On the other hand, according to the bio-medical model, alcohol consumption leads to coercive sex which often leads to women to contract disease from their husbands. The health of the unborn child is affected by leukorrhea was rightly identified more by literate women, than illiterate. As has been seen, in the present study that respondent's literacy affects the perceptions, it was also found that husband's education also affected women's perceptions. A higher percentage of women whose husband's ever-attended school believed that eating certain kind of food could lead to leukorrhea, that there were certain religious restrictions (like not going near the area of worship, not performing religious rituals, not entering the kitchen), that leukorrhea affected the health of the unborn child, and husband's substance abuse could lead to leukorrhea. Only in case of husband's multiple partners the percentage was more for those whose husband's never attended school, the difference was however, found to be statistically insignificant.

Thus, the present study brings out various perceptions about leukorrhea among South-Asian women, dwelling in a slum area. Education, occupational status, husband's education were seen to influence and shape the perceptions and knowledge about the problem of leukorrhea, which is regarded as a *general* discomfort by most of the women. Efforts should be made in the direction to provide meticulous diagnosis and effective health-care. Particularly

awareness and sensitization towards the problem, so that women take proper and complete course of medications, rather than reverting to traditional methods of disease control, is the need of the hour. The narratives clearly embark the need to set new methodologies and intervention, both, at service provider as well as the beneficiary end, to bring down the prevalence rates for leukorrhoea.

Acknowledgements

JK is thankful to the Indian Council for Social Science Research (ICSSR, New Delhi), and Indian Council for Medical Research (ICMR) for the JRF, under which the present work was conducted. A heartfelt gratitude is also extended to all the respondents who agreed to participate in the present study. There is no conflict of interest in this article.

References

- Joshi A, Dhapola M, Pelto PJ. Gynaecological Problems: Perceptions and Treatment-seeking Behaviours of Rural Gujarati Women. In: Michael A Koenig, ShireenJejeebhoy, John C Cleland and BelaGanatra(eds.) Reproductive Health in India New Evidence. Jaipur: Rawat Publications. 2008;133-58.
- Bhatia, Bhatia JC, Cleland J, Bhagavan L, Rao NS. Levels and determinants of gynecological morbidity in a district of south India. *Stud FamPlann* 1997;28:95-103.
- Gittlesohn J, Holmes KK, Pilot P, Et al (eds.) Listening to Women Talk about Their Health: Issues and Evidence from India. New Delhi: Har-Anand Publications. 1994; 21-36.
- Oomman, N. Poverty and pathology: Comparing rural Rajasthan women's ethnomedical models with biomedical models of reproductive morbidity: Implications for women's health in India. Dissertation thesis submitted to John Hopkins University, Baltimore, USA. 1996.
- Wasserheit JN, Harris JR, Chakraborty J, Kay BA, Mason KJ. Reproductive tract infections in a family planning population in rural Bangladesh. *Stud FamPlann* 1989;20:69-80.
- Younis N, Khattab H, Zurayk H, el-Mouelhy M, Amin MF, Farag AM. A community study of gynecological and related morbidities in rural Egypt. *Stud FamPlann* 1993;24:175-86.
- Snowden R, Christian B. Patterns and Perceptions of Menstruation. New York: St. Martin's Press. 1983.
- Bang RA, Bang AT, Baitule M, Choudhary Y, Sarmukaddam S, Tale O. High prevalence of gynaecological diseases in rural Indian women. *Lancet* 1989;1:85-8.
- Hawkes S, Morison L, Foster S, Gausia K, Chakraborty J, Peeling RW, MabeyD. Reproductive-tract infections in women in low-income, low-prevalence situations: assessment of syndromic management in Matlab, Bangladesh. *Lancet* 1999;354:1776-81.
- Nichter M. Idioms of distress: alternatives in the expression of psychosocial distress: a case study from South India. *Culture, Medicine and Psychiatry* 1981; 379-408.
- Chaturvedi S. Psychasthenic syndrome related to leukorrhoea in Indian women. *Journal of Psychosomatic Obstetrics and Gynecology* 1988: 67-72.
- Patel P. Illness beliefs and health seeking behaviour of the Bhil women of Panchmahal District, Gujarat State. In: J Gittelsohn, M. Bentley, and P. Pelto et al (eds.), Listening to Women Talk about Their Health: Issues and Evidence from India. New Delhi: Har-Anand Publications. 1994; 85-96.
- Dash B. Ayurvedic Treatment of Common Diseases. Shiv Narain Printers, New Delhi. 1974.
- Census of India. Provisional Population Totals, Paper 1 of 2001 Supplement, district Totals, Registrar General & Census Commissioner, India; New Delhi. 2001.
- Census of India. Series-1, Slum Population, Office of the Registrar General and Census Commissioner, India. 2001.
- Bhalla P, Chawla R, Garg S, Singh MM, Raina U, Bhalla R, Sodhanit P. Prevalence of bacterial vaginosis among women in Delhi, India. *Indian J Med Res* 2007;125:167-72.
- Srivastava A, Nandan D, Mehrotra AK, Maheshwari BB, Mishra SK. A Comparative Study of Perception about Reproductive Tract Infections among Married Women in Rural, Urban, and Urban Slum Areas. *Indian Journal of Community Medicine* 2004; 29.
- Chaudhary V, Kumar R, Agrawal VK, Singh A, Narula R, Sharma M. Prevalence and Determinants of Vaginal Discharge among Women of Reproductive Age Group in Tertiary Care Hospital of Northern India. *National Journal of Community Medicine* 2012; 3: 661-5.
- Narayan N, Srinivasan S. Some experiences in the rapid assessment of women's perceptions of illness in rural and urban areas of Tamil Nadu. In: Gittelsohn J, Bentley M, Pelto PJ, et al (eds.). Listening to Women Talk about Their Health: Issues and Evidence from India. New Delhi: Har-Anand Publications. 1994; 97-108.
- Bang R, Bang A. Women's perceptions of white vaginal discharge, ethnographic data from rural Maharashtra. In: Gittelsohn J, Bentley M, Pelto PJ, et al (eds.) Listening to Women Talk about Their Health: Issues and Evidence from India, New Delhi: Har-Anand Publications 1994;109-24.
- Ramasubban R, Rishyasringa B. Weakness (Ashaktpana) and Reproductive Health among Women in a Slum Population in Mumbai. In: Carla MakhoulObermeyer Cultural Perspectives on Reproductive Health. United States: Oxford University Press; 2001: 13-37.