

## A Study Of Abnormal Vaginal Discharge Among Married Women Of Reproductive Age Group Attending Urban Health Centre

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**Abstracts:** Background: Worldwide leading cause of ill health among women is mainly due to reproductive health problems. An initial symptom of all reproductive tract diseases is abnormal vaginal discharge. Objectives: to assess the magnitude of abnormal vaginal discharge, its factors, social correlates among the married women of reproductive age group. Methodology: Cross sectional study was conducted among married women of reproductive age group attending General OPD at Urban Health Centre. They were selected by systematic random sampling. Results: Among total of 400 respondents screened for the presence of abnormal vaginal discharge 136(34%) were found to have abnormal vaginal discharge. 26% were from age group of 25-29 years. More than half Muslims, 43% educated upto primary and 2/3<sup>rd</sup> from nuclear family. Most common colour of vaginal discharge & symptom was curdy white and backache. Statistically significant association was found between abnormal vaginal discharge and age, education type of family. Also between abnormal vaginal discharge and few Maternal factors: duration of married life, history of abortion, parity, number of children, birth spacing, use of IUCDs. Conclusion: There is a need to educate women about reproductive health issues and encourage them to seek treatment for their problems at the earliest. [Patil S NJIRM 2016; 7(2):66-72]

**Key Words:** Abnormal vaginal discharge, Married women, Reproductive age.

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**Introduction:** Women & children are our Nation's greatest assets.<sup>1</sup> A healthy woman can have good reproductive health and can procure healthy baby for the family as well as for the Nation. Reproductive health is the ability of married women to reproduce as well as regulate their fertility. The target B of Millennium development Goal 5 is — "Achieve, by 2015, universal access to reproductive health." World Health Organization has identified that increased attention to sexual and reproductive health is one of the prerequisite for achieving Millennium Development Goal 5 and advised targeted approaches to accelerate progress & to strengthen policies for improving sexual and reproductive health<sup>2</sup>

Worldwide in developing countries the leading cause of ill health among women of reproductive age group are reproductive health problems accounting for 21.9% disability-adjusted life years lost by women aged 15–45 years.<sup>3</sup>

Reproductive Tract Infections (RTIs) affect the reproductive tract and can be endogenous infections (resulting from the organisms normally existing in the vagina), iatrogenic infections (resulting from abortions, insertion of IUD, child birth, and so on), and sexually transmitted infections<sup>4</sup>. An initial symptom of all reproductive tract diseases is abnormal vaginal discharge, which can be physiological or pathological.

**Material and Methods:** This cross sectional study was conducted among married women of reproductive age group attending General Outpatient Department at Urban Health Centre, Dharavi during Jan 2015 to Dec 2015. As per last year's record of General Outpatient Department Dharavi, total 4,000 females of reproductive age group were found to attend the Outpatient department.

Sample size: According to Kulkarni R<sup>6</sup>, Nagpur, Chaudhary V<sup>7</sup>, Uttarpradesh and Thekdi K<sup>8</sup>, Gujrat prevalence of abnormal vaginal discharge is 27.47%, 24.6% and 26.3%. Hence, average prevalence was considered as 27%. Therefore,  $P = 27\%$  and  $Q = (100 - P) = 73\%$ ,  $Z$  is the value of  $Z$  score at 95% confidence interval = 1.96,  $d$  = Absolute precision required on either side of the proportion (in percentage points) = 5 percentage points

Sample size  $n = Z^2_{1-\alpha/2} P(1-P)/d^2$   
 $n = (1.96)^2 27 \times 73 \div (5)^2$  Hence,  $n = 315$

After adding the 10% extra sample considering non-response =  $315 + 31.5 = 346$  Therefore, the round figure of 400 was decided to be the sample size of the study.

Sampling unit: It was individual married woman of reproductive age group.

Sampling technique: Systematic random sampling method was used to choose the desired number of study subjects. In this study, the study population was women attending General Outpatient Department at Urban Health Centre Dharavi. So as per last year's record of General Outpatient Department Dharavi, total 4,000 females of reproductive age were found to attend the Outpatient department. Thus, sampling interval was calculated as follows:

$$K = \text{population size} \div \text{sample size } K = N/n$$

Where, K= sampling interval. N= population size. n= sample size as calculated above.

Thus, sampling interval (K) = 4000 ÷ 400 = 10

Every day first woman fulfilling inclusion criteria were selected at random and thereafter every K<sup>th</sup> i.e. 10<sup>th</sup> woman from the first was selected to include in the study. If the 10th woman was not fulfilling the inclusion criteria, she was omitted and subsequent woman completing the inclusion criteria was included in the study. Thereafter, sampling interval of 10 from this subsequent woman was maintained.

Inclusion Criteria:

- Married women in the age group of 18 to 49 years visiting for seeking health care at General OPD at Urban Health Centre, Dharavi for other complaints except gynecological problem.
- Those who give consent to participate

Exclusion criteria:

- Pregnant women.
- Person with known physical disability or psychiatric illness.
- Those women who got menopause during defined age group.

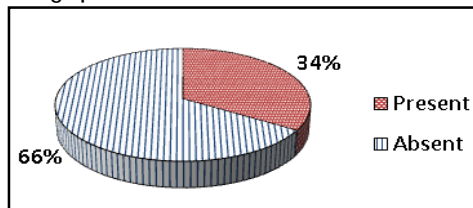
A pilot study was carried out among 40 married women of reproductive age group attending general Out Patient Department at study area. Some necessary modifications were made after analysing the responses. The questionnaire was thus finalized. Respondents who were interviewed in pilot study were excluded from main study. After taking their valid informed consent pre structured questionnaire was administered among the participants. Questionnaire included socio-demographic profile, details of their present complaints, health related information, examination: general, systemic, & gynaecological. The approval of ethical clearance was sought from the Institutional Ethics Committee.

**Results: Table 1: Distribution of participants according to their age, religion, type of family, education, occupation socio economic status.**

Age Group (years)	Frequency (N=400)	Percentage (%)
18-24	64	16
25-29	104	26
30-34	95	23.8
35-39	76	19
40-44	50	12.5
45-49	11	2.8
Religion		
Muslim	210	52.5
Hindu	168	42
Christian	13	3.3
Others	9	2.3
Type of Family		
Nuclear	283	70.8
Joint	94	23.5
Extended	23	5.8
Education		
Illiterate	77	19.3
Primary	165	41.3
Secondary	117	29.3
Higher Secondary	20	5.0
Graduate	20	5.0
Postgraduate	1	3
Occupation		
Housewife	358	89.5
Unskilled Worker	24	6
Semiskilled Worker	9	2.25
Skilled Worker	2	0.5
Semi-professional	7	1.75
Professional	0	0
Total	400	100
SE Class		
Upper (I)	2	0.5
Upper Middle (II)	39	9.8
Lower Middle (III)	108	27.0
Upper Lower (IV)	251	62.7
Lower (V)	0	0
Total	400	100

**Table 1:** Maximum i.e.104 (26%) respondents were from the age group of 25-29 years followed by 95(23.8%) from the age group of 30-34 years. More than half of the respondents were Muslims followed by Hindu religion 168(42%). More than 2/3rd of the respondents belonged to nuclear family followed by joint family. More than one third of the respondents i.e. 41.3 % were educated up to primary school, while 19.3% were illiterate. More than three fourth were housewives while 6% involved in unskilled / labour work. No respondent was professional. More than half of the respondents belonged to Upper lower socioeconomic i.e. class IV. Whereas, 36.8% were from middle class (Upper middle: 7% & lower middle: 19%) and very few were from upper socioeconomic class.

**Pie Chart 1:** Among the total of 400 respondents screened for the presence of abnormal vaginal discharge 136 i.e. 34% were found to have abnormal vaginal discharge complaint. Among those 136 women who had abnormal vaginal discharge, 52 i.e.38.3% reported on their own while 84 i.e. 61.7% reported after leading questions.



**Table 2:** According to table shown above, among the women who were experiencing abnormal vaginal discharge, commonest colour of the discharge was curdy white i.e.42.6 followed by yellowish white (36.8%) & white (16.2%). Greyish white colour was described by only 4.4% women. 36% of women reported their discharge to be odourful. 80.1% women reported to be having sticky discharge and 3.7% were having discharge with blood tinge. More than two third i.e.69.85% were experiencing discharge for less than 6 months ,followed by 17.64% who were experiencing the discharge for 6 months to 1 year. 12.51% women reported the presence of discharge for more than 1 year. More than 50% of the women were having recurrent complaint of discharge.

**Table 3:** The most common symptom reported by women was backache. More than half of the women had reported discomfort, pain in abdomen and itching in genital area. 46.3% of the women reported burning micturition and 27.2% dyspareunia. Bleeding during the inter menstrual period was reported only by 1.5% of the women.

**Table 2: Distribution of respondents according to characteristics of abnormal vaginal discharge**

Characteristics of vaginal discharge	Frequency (N=136)	Percent (%)
<b>Colour</b>		
White	22	16.2
Yellowish white	48	36.8
Greyish white	6	4.4
Curdy White	58	42.6
<b>Odour</b>		
Fishy	3	2.2
Foul	45	33.0
Not Identified	88	64.7
<b>Consistency</b>		
Sticky	109	80.1
Non sticky	27	19.9
<b>Blood tinge</b>		
Yes	5	3.7
No	131	96.3
<b>Recurrence</b>		
Yes	75	55.1
No	61	44.9
<b>Duration</b>		
<6 Months	95	69.8
6 Months to 1Yr	24	17.6
>1 Year	17	12.5

**Table 3: Distribution of respondents according to symptoms associated with abnormal vaginal discharge.**

Associated Symptoms	Frequency	Percentage
<b>Itching</b>		
Yes	73	53.7
No	63	46.3
<b>Discomfort</b>		
Yes	79	58.1
No	57	41.9
<b>Bleeding</b>		
Yes	2	1.5
No	132	98.5
<b>Dyspareunia</b>		
Yes	37	27.2
No	99	72.8
<b>Pain in abdomen</b>		
Yes	77	56.6
No	59	43.4
<b>Burning Micturition</b>		
Yes	63	46.3
No	73	53.7
<b>Backache</b>		
Yes	122	89.7
No	14	10.3

**Table 4: Association of abnormal vaginal discharge with socio-demographic variables**

Age Group	Vaginal Discharge		Total	Chi Square value	df , p value
	Present(136)(%)	Absent (264)(%)			
	Present(N=136)(%)	Absent (N=264) (%)			
18-24	28(43.7)	36(56.3)	64	16.08	df=5 0.007 Significant
25-29	43(41.4)	61(58.6)	104		
30-34	27(28.4)	68(71.6)	95		
35-39	26(34.2)	50(65.8)	76		
40-44	7(14)	43(86)	50		
45-49	5(45.5)	6(54.5)	11		
Religion					
Muslim	71(33.8)	139(66.2)	210	1.46	df=2 0.47 NS
Hindu	60(35.7)	108(64.3)	168		
Christian & others	5(22.7)	17(77.3)	22		
Education					
Illiterate	30(38.9)	47(61.1)	77	6.35	df=2 0.04 Significant
Primary	61(39.1)	95(60.9)	156		
Secondary & above	45(26.9)	122(73.1)	167		
Occupation					
Home Manager	121(33.8)	237(66.3)	358	0.06	df=1 0.80 NS
Working women	15(35.7)	27(64.3)	42		
Socio- Economic Class					
Middle & Upper	49(32.9)	100(67.2)	149	0.13	df=1 0.71 NS
Lower	87(32.3)	164(65.7)	251		
Type of Family					
Nuclear	80(28.3)	203(71.7)	283	14.16	df=1 <0.001 Strongly Significant
Joint/ Extended	56(47.9)	61(52.1)	117		
Total	136	264	400		

\*NS: Not significant df: degree of freedom.

**Table 4:** There was statistically significant association observed between age, education, type of family and presence of abnormal vaginal discharge. There was no statistical significant association between religion, occupation, socioeconomic class and presence of abnormal vaginal discharge.

**Table 5:** Association between duration of married life, history of abortion, parity, number of children, birth spacing, use of contraceptives, type of diet, presence of constipation and presence of vaginal discharge was statistically significant. While there was no association of age at first pregnancy, history of any complications during last pregnancy, history of any addiction, and presence of abnormal vaginal discharge.

**Table 5: Association of abnormal vaginal discharge with variables associated with maternal factors, personal habits.**

	Vaginal Discharge		Total	Chi Square value	df , p value
	Present (%)	Absent (%)			
Duration of married life (years)					
<=5	31(40.8)	45(59.2)	76	9.80(with Yates correction)	df=3 0.02 Significant
6 to 15	64(38.0)	104(61.0)	168		
16 to 25	40(28.4)	101(71.6)	141		
>=26	1(6.7)	14(93.3)	15		
Age at first Pregnancy( years)					
≤18	45(40.0)	67(59.0)	112	2.97	df=1 0.08 NS
>18	85(30.5)	194(69.5)	279		
H/O Abortion					
Yes	45(41.7)	63(58.3)	108	3.84	df=1 0.049 Significant
No	91(31.2)	201(68.8)	292		
Parity					
0	10(66.7)	5(33.3)	15	8.92	df=3 0.03 significant
1	24(32.4)	50(67.6)	74		
2	35(28.7)	87(71.3)	122		
≥3	67(35.4)	122(64.6)	189		
Birth spacing (years)					
≤2	62(39.3)	96(60.7)	158	7.39	df=1 0.006 significant
>2	38(24.8)	115(75.2)	153		
H/O complications in last pregnancy					
Yes	19(39.6)	29(60.4)	48	0.98	df=1 0.32 NS
>2	38(24.8)	115(75.2)	153		
Type of contraceptive used					
Barrier	21(19.1)	89(80.9)	110	41.86	df=3 <0.001 significant
IUCD	23(79.3)	6(20.7)	29		
OC pills	7(50)	7(50)	14		
TL	32(27.8)	83(72.2)	115		
Type of diet					
Vegetarian	21(24.4)	65(75.6)	86	4.48	df=1 0.03 significant
Mixed	115(36.6)	199(63.4)	314		
H/O Addiction					
Yes	9(56.3)	7(43.7)	16	3.67	df=1 0.055 NS
No	127(33.0)	257(67.0)	384		
H/O Constipation					
Yes	18(78.3)	5(21.7)	23	21.30	Df=1 <0.01 Significant
No	118(31.3)	259(68.7)	377		
Total	136	264	400		

**Conclusion:** This prospective study was conducted at the Urban Health Centre, Dharavi. Total 400 respondents were screened for —abnormal vaginal discharge at General Outpatient Department. They were studied for prevalence of abnormal vaginal discharge and its determinants. In the present study mean age of women was 31.23(±6.705) years, maximum belonged to Muslim religion, nearly half were educated up to primary school and 89.5% were home managers by occupation. Nearly three fourth(70.8%) of the respondents were living in nuclear families, 62.7% belonged to Lower socioeconomic status. The prevalence of abnormal vaginal discharge was 34%. The commonest colour of discharge was curdy white and backache was common symptom. Statistically significant association was found between abnormal vaginal discharge and age, education type of family. No statistical association was found between other socio-demographic parameters and abnormal vaginal discharge. Statistically significant association was found between abnormal vaginal discharge and few

Maternal factors such as: Duration of married life , History of abortion ,Parity , Number of children the women has ,Birth spacing , Use of Intrauterine Contraceptive Device as method of family planning. Statistically significant association was found between abnormal vaginal discharge and personal habits like type of diet, history constipation However, no significant association was found with age at first pregnancy, history of complications in last pregnancy.

**References:**

1. Kotecha P, Patel S , Baxi R , Shah S, Mehta K , Diwanji M. Treatment seeking pathway of pelvic inflammatory disease patients attending government hospital Vadodara, India. National Journal of Community Medicine.Sept 2011; 2; ( 2):186-190. Available at <http://www.njcmindia.org>
2. World Health Organisation, Universal Access to Reproductive Health, Accelerated actions to enhance progress on Millennium Development Goal 5 through advancingTarget5B World Health Organization 201. Available at [www.who.int/reproductivehealth](http://www.who.int/reproductivehealth)
3. Abraham A, Varghese S, Satheesh M, Vijayakumar K, Gopakumar S, Mendez AM. Pattern of gynecological morbidity, it's factors and Health seeking behavior among reproductive age group women in a rural community of

- Thiruvananthapuram district, South Kerala. Indian Journal of Community Health 2014;26(3); 230-237
4. Hegde SK, Agrawal T, Ramesh N, Sugara M, Joseph PM, Singh S, Thimmaiah S. Reproductive tract infections among women in a peri-urban under privileged area in Bangalore,India: Knowledge, prevalence, and treatment seeking behaviour. Ann Trop Med Public Health 2013; 6(2) : 215-220
5. Yasmin S and Mukherjee A: Cyto-epidemiological Study on Married Women Regarding RTI. Indian Journal of Public Health; 2012;56 (3) available at <http://www.ijph>
6. Kulkarni RN, Durge PM.A study of leucorrhoea in reproductive age group women of Nagpur city. Quarterly Journal of Indian Public Health Association.2005;49(2): 238-239.
7. 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(4):661-5.
8. Thekdi K, Patel K, Patel N, Thekdi P, A cross sectional study on the prevalence of reproductive tract infections amongst married women in the rural area of Surendranagar district. International Journal of Research in Medical Sciences 2014;2(1):215-221. Available at [www.msjonline.org](http://www.msjonline.org)
9. Pant B Singh J Bhatnagar M Garg S Chopra H, Bajpai S Social Correlates in Reproductive Tract Infections among Married Women in Rural Area of Meerut. Indian Journal of Community Medicine,2008 ;33(1):52-53.
10. Singh A. Vaginal Discharge: Its Causes and Associated Symptoms as Perceived by Rural North Indian Women. Indian Journal of Community Medicine, 2007; 1(1):22-26.
11. Tewari, P.V.Neelam, Kulkarni K.S. A Study of Leucorrhoea , Pelvic Inflammatory Diseases and Dysfunctional Uterine Bleeding. Ancient Science of Life,2001; XXI (2): 139-149 available at [http://www.himalayahealthcare.com/pdf\\_files/lukol008.pdf](http://www.himalayahealthcare.com/pdf_files/lukol008.pdf)
12. Balamurugan S. Bendigeri N. Community Based Study of Reproductive Tract Infections Among Women of the Reproductive Age Group in the Urban Health Training Centre Area in Hubli, Karnataka. Indian Journal of Community Medicine; 2012; 37(1) :34-38.

13. Philip P, Benjamin A, Sengupta P Prevalence of symptoms suggestive of reproductive tract infections/sexually transmitted infections in women in an urban area of Ludhiana. Indian journal of Sexually Transmitted Diseases and AIDS, 2013 ; 34(2): 83–88.
14. Kazi Y., Shenoy A, Velhal G. Suryawanshi S. Reproductive and Sexual tract Infections among married female youth in an urban slum of Mumbai. National Journal of Community Medicine; 2013; 4(1):10-14.
15. Study of Syndromic Management Among the Women with Leucorrhoea attending Malwani Urban Health Centre, Mumbai Rajurkar S. Sapkal P. Raut M. JogeU .Malkar V, Wagh S. International Journal of Medical and Health Sciences; 2014;3(1):14-17.

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