

A Study on role of socio demographic status of women in excessive vaginal discharge at teaching hospital

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Abstract

Introduction: The complaint of excessive vaginal discharge is very common in women attending the gynecology out-patient department. It is associated with considerable emotional stress, health seeking associated cost and has a substantial impact on female health and behavior

Objective: To find out socio-demographic variables associated with the complaint of vaginal discharge wherein no biomedical cause of leucorrhoea can be detected. Socio-cultural perspectives have an exaggerative effect on the normal vaginal discharge and in absence of pathological diagnosis, they create fear and anxiety in couples. The problem of vaginal discharge can be best understood not only in the biomedical perspective but also in the socio cultural perspective.

Materials and Methods: This is a hospital based study, conducted in out-patient department of obstetrics and gynecology department, AIIMS, Udaipur (Raj). Women with complaint of vaginal discharge without any evident pathological or infectious causes were counted in the study. The women with vaginal discharge which is non-infected, non-blood stained, non-purulent, without pruritus vulvae were interviewed with a pretested questionnaire. Socio-demographic details, personal and menstrual hygiene, obstetric history and contraceptive practices were noted and tabulated.

Conclusion: To mitigate the problem of vaginal discharge, socio-demographic status of women should be taken in consideration. Improvement of literacy rate, economic status and women's empowerment are the key areas of interventions. Proper understanding of this problem helps in initiating appropriate medical education programs and framing health policies.

Keywords: Excessive vaginal discharge, Socio-demographics, Somatic symptoms, Leucorrhoea, Pruritus tubectomy.

Introduction

Excessive vaginal discharge is one of the most common complaints in women attending the obstetrics and gynecology out-patient department. Every fourth woman coming to outdoor is present with agony of excessive vaginal discharge¹. After investigating, in most of women, causative underlying pathology or infection is detected and hence managed accordingly. But in few women, no cause is evident and in absence of definite diagnosis, it is very difficult to treat the women and to make her symptom free. Even after thorough counseling, unseen fears make them consult one and other gynecologist now and then. Hence excessive vaginal discharge affects the physical, sexual and social activities of women and also creates anxiety in couples.

The vagina is normally kept moist by transudation of fluid through the vaginal wall, which mixes with the exfoliated vaginal cells, aliphatic acid, microorganism and mucous from cervix². The quantity of vaginal & cervical secretions varies through menstrual cycle, peaking at ovulation, before & after menstruation, during pregnancy and by sexual excitement.³ This physiological excess may be explained on the basis of variation in endogenous hormonal levels, especially estrogen³ hence deviation in Hypothalamus-pituitary-ovarian axis of hormones can be causative factor for excessive vaginal discharge. Jeffcoate describes excessive amount of normal vaginal discharge, a running of white substance, as leucorrhoea.⁴ The term 'leucorrhoea' should be restricted to those patients in whom

the normal vaginal secretion is increased in amount. It should be non-infective, not purulent, non blood stained, never causes pruritus & never offensive.^{3,4} It is evident by persistent moistness of vulva or staining of underclothes. The amount and severity of complaint of excessive vaginal discharge depends on power of observation, understanding and hygiene of women and family. In absence of definite diagnosis, patient tends to exaggerate her complaint into something seriously pathological and it causes distressing alarm in family from fear of venereal diseases or cancer.⁴ It may restrict her domestic and occupational work resulting in social and economic implications.

Excessive vaginal discharge is referred as safedpanni, swedpradhar or dhattu in local language in North India. Medically it is labeled as Leucorrhoea. Studies conducted by Vishwanath S in India and Hawkes in Bangladesh shown that vaginal discharge had laboratory evidence of infection only in 60% & 30% women respectively and in other women no infectious cause was detected.^{6,7} Chaudhary V concluded that increasing age, illiteracy, low socio-economic status, high parity, induced abortion and place of delivery are all contributory for occurrence of vaginal discharge.⁸ Depression, sexual violence, verbal abuse, low social autonomy and integration have also been found to be associated with leucorrhoea. Psychosocial adversity and vaginal discharge has a strong association shown in study by Patel V in South Asian women.⁹ Mental tension can be a cause of any illness has also been described. There are

multiple vague somatic symptoms as weakness, leg cramps, backache, giddiness, pain abdomen etc associated with vaginal discharge. Most of women had one or more theories regarding causative origin of discharge as eating of hot food, warmth of some strong medicine or date back to some event as fever, abortion or tubectomy etc. So not only biomedical context is important in managing vaginal discharge but understanding of socio cultural perspective has a significant role.

Materials and Methods

This is hospital based, cross sectional study conducted in obstetrics and gynecology out-patient department AIIMS Udaipur (Raj). The study period was from Nov 2017 to April 2018. All married women attending the out-patient department with complain of excessive vaginal discharge were examined and investigated to find out any pathological or infectious cause. The patients with symptom of excessive vaginal discharge, which was non-purulent, not blood stained or fowl smelling and not associated with itching were included in the study. No organic pathology was detected in these women and no WBC found in discharge. A

pretested questionnaire was used to interview them. There socio-demographic details, menstrual history & hygiene, detailed obstetrical history, contraceptives used were noted. Details of vaginal discharge, their perception of causes and effect of discharge, any other associated morbidity and any other treatment taken were inquired and documented.

Results

Out of 3000 women attending gynecology outdoor patient department, 720 patients were having complaint of excessive vaginal discharge, i.e., 24% prevalence rate. After excluding all organic and infectious causes, 82 patients were left behind, in whom no definite pathological diagnosis could be reached. In these women, discharge was found to be non-infected, non-purulent, not blood stained and not associated with pruritus.

In this study, 59% women were in age group of 25-34 years, 30% women were in age group of 35-44 years. Before 25 and after 45 years, discharge was mostly associated with some underlying pathology (Table 1).

Table 1: Age Distribution of Study Population

Age Group (years)	Total Number	Percentage
15-24	07	09 %
25-34	48	59 %
35-44	25	30 %
> 45	02	02 %

Association of excessive vaginal discharge with socio-demographic characters shows 83% of women were from low socio-economic group, 87% women were belong to rural area, 71% women were illiterate, 61% women were working either in farms or at construction sites and 26% respondents were home makers (Table 2).

Table 2: Showing demographic characteristics of study women

Characteristic	Classification	No of Women	Percentage
Economic Status	Low	68	83%
	High	14	17%
Literacy Status	Literate	24	29%
	Illiterate	58	71%
Locality	Rural	71	87%
	Urban	11	13%
Occupational Status	Home-Maker	21	26%
	Farmer	23	28%
	Labourer	27	33%
	Skilled Worker	11	13%

On distribution of women according to their personal and menstrual hygiene, it was found that 70% women were used to open air defecation, may be because of old habits or scarcity of water. 82% women were not using the sanitary napkins and their menstrual hygiene was very pitiful. Few women can't afford and few even don't know about sanitary napkins (Table 3).

Table 3: Personal & menstrual hygiene

Group	Classification	No of Women	Percentage
Type of Toilet	Open air defecation	57	70%
	Commode	25	30%
Usage of Pads	Sanitary Pads	15	18%
	No Pads (using cloth)	67	82%

63% women were gravida three or more in this study. Home deliveries (52%) were more as compared to institutional deliveries (44%). In this study 65% women had undergone tubectomy while 28% women were not using any contraceptives. Interest in using temporary methods of contraception was very low as they had many types of fears (Table 4).

Table 4: Gravida, place of delivery & contraception

Group	Classification	No of Women	Percentage
Gravida	Nullipara	03	04%
	One	06	07%
	Two	21	26%
	Three	52	63%
Place of Delivery	Home	43	52%
	Institutional	36	44%
	Both	03	04%
Contraception	Nil	23	28%
	Temporary	06	07%
	Permanent	53	65%

Most of the women in this study were having some associated symptom, which cannot be explained on the basis of white discharge only. All these symptoms seem to be somatic rather than pathological. Majority of women were reported with associated complaint of weakness in 82%, leg cramps in 73%, backache in 51%, general body aches in 36% and pain abdomen in 17%. In few women visual problems like diminishing of vision, gastric problems like gas formation, distension of abdomen and infertility were also present along with vaginal discharge. 17% women had no symptom other than white discharge. There was a mass confusion in women, whether accompanied symptoms were cause or result of excessive vaginal discharge (Table 5).

Table 5: Perceived symptoms associated with vaginal discharge

Perceived Symptom	No. of Women	Percentage
Weakness	68	82%
Leg Cramps	60	73%
Backache	42	51%
Bodyache	30	36%
Pain Abdomen	14	17%
Weight Loss	06	07%
Visual Problem	03	03%
Gastric Problems	07	07%
Infertility	01	01%
No Symptoms	14	17%

Women prefixed multiple theories as regard to origin of vaginal discharge. Some date back to some event or happenings as tubectomy, fever, eating of hot food, strong medicine, previous abortion or bad delivery.

Table 6: Perceived causes of excessive vaginal discharge

Perceived Cause	No of Women	Percentage
Weakness	39	47%
Excess Body Heat	19	23%
Tubectomy	15	18%
Contraception	02	02%
Over Worked	09	10%
Food Induced	14	17%
Previous Delivery or Abortion	08	09%
Medicines	02	02%
No Known Cause	08	09%

Discussion

Prevalence rate of excessive vaginal discharge was 24% in this study, implies that every fourth women attending

gynecology out-patient department came with complain of excessive vaginal discharge. Similarly studies done by

ChaudharyV et al., SinghAJ et al., Kulkarni RN et al. and Guntoory et al. reported 24.6%, 29%, 27.4% and 28.99% prevalence rate respectively^{1, 7, 8, 11} while in community based survey done by BangRA et al. showed 13.5% rate.¹²

Out of 720 women suffering from excessive vaginal discharge, no definite diagnosis can be made in 82 women, i.e., 11% women were included in study. As there was no biomedical cause of discharge identified, hence correlation between their socio-demographic and excessive vaginal discharge was tried to be established.

In study done by DeepaLM et al. specific diagnosis was obtained in 89% cases only.¹³ SivaranjaniR had found infectious cause in 51.7% cases, physiological discharge in 18% and no specific diagnosis made in 24.2% cases.¹⁴ In this study maximum cases were in age group 25-34 years (59%) and next in group 35-44 years (30%). In this age group, most women were over burdened by children, husband and family liabilities. Studies by Guntoory, PatelV and GeethaM reported higher prevalence rate in age group of 15-24 year while ChaudharyV showed high prevalence in age group above 40 years.

In this study more cases belonged to illiterate group (71%), low socio-economic group (83%) and women living in rural area (87%). Guntoory, Kulkarni and Chaudhary also reported higher prevalence in low socio economic group. UmaD and JaspreetK reported higher prevalence in urban group may be due to high literacy and better facilities for reporting.^{15, 16} PatelV reported higher prevalence in illiterate group. Women who worked as farmers (28%), laborers (33%), or who were home makers (26%) suffered from excessive vaginal discharge more than who were skilled workers. Unhygienic surroundings, hard work and poor diet may be responsible. 70% women still goes for open air defecation although few women have toilets in their houses. Old habits do not die easily or scarcity of water may be the reason. 82% women were using cloths during periods and did not change them frequently. Most of women told that they can't afford to waste so much money on sanitary napkins. Similarly Guntoory and ManiG also noted a strong association between types of toilet and amount of vaginal discharge, i.e., high prevalence in respondents who had no toilet facility at home.^{1, 17} Guntoory found no association between discharge and use of sanitary pad while SinghAJ reported higher prevalence rate in women using rags as menstrual pads.

In study, higher prevalence was noted in gravida three or more and women who had home deliveries as compared to institutional deliveries. Chaudhary and Kulkarni found similar result in high parity group. Guntoory found no relation between parity and discharge but found high prevalence in home delivery cases. 65% women had undergone tubal sterilization in this study. Many women date back to tubal sterilization for their excessive vaginal discharge. May be tubectomy was done under compulsion or fear of some wrong happenings. Knowledge and interest in temporary methods of contraception is found to be very low. Not only women but whole family had unseen fears in

use of temporary methods rather they prefer tubal sterilization after completion of family.

Nearly 83% women related multiple somatic symptoms to vaginal discharge. The most common perception that was held among these women was internal weakness. It was commonly believed that leucorrhoea makes body weak and in turn internal weakness increases the white discharge, so it is a to and fro process; it is an agent-cause-effect tirade. Most frequently reported symptom was leg cramps, backache, pain abdomen and bodyaches. Anxiety and stress arise due to these somatic symptoms and vice versa. Similar perceived effects were reported by Guntoory, KaurP, SinghAJ and Chaudhary. The logical link between discharge and other symptoms was almost impossible to establish.

In this study, perceived causes of leucorrhoea were multiple and mostly overlapped. The main factors that emerged to be causatives agent for excessive discharge included consumption of hot foods, internal weakness, allopathic medicine, body heat, economic hardship, hard work, fever, tubectomy and past bad delivery or abortion. Similar perceived causes of excessive discharge were noted by KaurP, SinghAJ, ChaudharyV.

The uniformity of associated symptom and perceived causes of excessive vaginal discharge raises the doubt whether these manifestation are real or psychological. Frustration and hopelessness were visible in women after months of treatment without any definite organic diagnosis. Psychologically upset to a certain degree always overpowered the main complaint. Hence vicious cycle is created with fear of life threatening illness. Leucorrhoea may be both a discourse of distress or resistance, as well as a way of communicating about social and sexual concerns.

Conclusion

The study concludes that all vaginal discharge need not have any pathological or infectious basis hence biomedical diagnosis may not be possible in these cases. To avoid unnecessary lots of antibiotics, placebo treatments and unnecessary major surgical interventions, demographic status of these women should also be taken in consideration. Factors like age, illiteracy, low socio-economic status, poor personal and menstrual hygiene, high parity and place of delivery may not be causative but definitely contributory for occurrence of excessive normal vaginal discharge. So one of the most important part in management of these cases is proper counseling of women as well as of husband and family too. OommanNM et al. observed that poverty is the root cause which makes the women feel physiological weak.¹⁸

So to bring positive change in ameliorating the problem of excessive vaginal discharge, improvement in education, socioeconomic status of women, increasing awareness about personal and menstrual hygiene, small family norms and advantages of use of temporary methods of contraception is essential. Health education programs to educate women about variation in amount of normal vaginal discharge should be encouraged through different media. Social and economic empowerments of women are the key areas of

intervention to improve the socio-demographic status of women.

Declaration

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