

Original Article

Women's Understanding and Cultural Practices Related to Vaginal Discharge: A Qualitative Study

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ABSTRACT

Background: Vaginal discharge is a common gynecological complaint among women in the reproductive age group. **Objective:** The aim of this study was to explore cultural practices and health-seeking behaviors related to vaginal discharge among women living in a socially marginalized community in Colombo district, Sri Lanka. **Methods:** A descriptive qualitative design was used in this study. Three focus group discussions (FGDs) were conducted in an urban slum community among women who had a previous history with vaginal discharge. A total of 23 women of different ethnicities and religions were included. FGDs were audio recorded and field notes were taken. Verbatim transcripts were analyzed on the basis of qualitative content analysis. **Results:** Six themes emerged from the data, namely, confusion in differentiating normal from abnormal vaginal discharge, effects on day-to-day life, confusion toward the causative factors, difficulties in disclosing, neglecting behaviors, and socio-cultural influences toward health-seeking behaviors. Majority of women expressed that they use home remedies before consulting a doctor for abnormal vaginal discharge. **Conclusions:** Women are unable to differentiate normal from abnormal vaginal discharge. Thus, it is important for nurses and primary healthcare workers to plan health education activities for women to empower them with adequate knowledge and improve their health-seeking behaviors.

KEYWORDS: *Culture, Primary health care, Social marginalization, Vaginal discharge, Women*

INTRODUCTION

Abnormal vaginal discharge (leukorrhea) is a common gynecological complaint among women in the reproductive age group.^[1] It is a distressing and embarrassing symptom for many women.^[2]

The pathological causes for vaginal discharge can be reproductive tract infections, genital tract malignancy, fistulae, allergic reactions, and atrophic vaginitis associated with menopause.^[3] However, many women assume that vaginal discharge is due to a sexually transmitted infection (STI).^[2] Furthermore, Bates expressed the need of assessing for the possibility of a genital tract malignancy in women presenting with a persistent blood stained discharge.^[4]

Women having vaginal discharge present to primary care, family planning, genitourinary, or gynecology clinics.^[2] Most of the time, woman may have attempted self-treatment for vaginal discharge with over-the-counter preparations before consulting a doctor, and occasionally, women defer consultation because of fear or embarrassment.^[4]


There are a lot of social myths and traditional treatments for vaginal discharge. As an example, women consider

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that vaginal discharge leads to progressive body weakness.^[5] Further, some consider “woman’s fate”^[6] and “melting of the bones”^[7] as causes for vaginal discharge and that it is best treated with herbal and dietary therapy. Ilankoon *et al.* found in their review that women in the reproductive age group are not seeking health advice for their vaginal discharge and consider it as a normal condition due to many cultural factors.^[8] Due to different home remedies and cultural practices, there is a delay in seeking proper treatment for pathological vaginal discharge, leading to serious consequences.

The main source of health information for women in urban slums in Colombo district, Sri Lanka, is a public health midwife (PHM), and they have a close relationship with the community clinic.^[9] Understanding how women react to vaginal discharge in different social context will greatly increase the health care workers’ ability to provide holistic care for the patient.^[10] Published literature on the women’s understandings and their practices related to abnormal vaginal discharge in different cultures are rare. Therefore, qualitative research on the topic has the advantage of giving in-depth understanding about the sociocultural influences on health-seeking behaviors toward abnormal vaginal discharge.

Objective

The objective of the present study was to explore women’s understanding, cultural practices, and health-seeking behaviors related to vaginal discharge within a socially marginalized community.

METHODS

A descriptive qualitative study was conducted using focus group discussions (FGDs) among females living in a socially marginalized community. FGDs were conducted in three primary care institutions in a municipal council area in Colombo district, Sri Lanka. The selected urban slum community consists of Sinhala, Tamil, and Muslim ethnic groups having religions of Buddhist, Catholic, Hindu, and Islam.

Data collection

Participants were selected from the community with the help of PHMs who are the grass root-level healthcare workers in Sri Lankan health care system. Women aged 18–49 years living in the selected community for a continued period of not <6 months before the study were selected. All the participants had experienced episodes of vaginal discharge previously or at the time of FGDs.

Theoretical saturation was achieved after conducting three FGDs. A total of 23 women participated in the

FGDs (FGD1: 7, FGD2: 7, FGD3: 9). Majority of the participants were educated up to grade 11 which is similar to secondary sophomore in the USA (56.5%) and married (95.7%). Sixty-one percent of participants had an extended family type. There were participants from all the major ethnic and religious groups within the three FGDs. Time taken for the discussions varied from 45 to 90 min. Data were collected over a period of 2 months, February–March 2015.

The principal investigator acted as a note taker, and sociology graduate who was trained by the principal investigator facilitated the discussions. Notes were taken about nonverbal communication. Each FGD began with an introduction by a moderator to all the participants.

A guide was prepared to facilitate FGDs and was reviewed by community medicine experts to ensure face and content validity. There were eight open-ended questions in the guide as follows. What do you know about vaginal discharge? At what point do you think that vaginal discharge is excessive? What can be the reasons for vaginal discharge? What are the concerns you have in relation to vaginal discharge? Do you think women take treatment for excessive vaginal discharge? If not, why they do not take treatment? If yes, what type of treatment methods they practice? What do you think the first-line treatment women practice for excessive vaginal discharge? What are the factors associated with women’s decision on treatment for excessive vaginal discharge?

Ethical considerations

Permission to undertake this study in Colombo district was obtained from the Regional Director of Health Services, Colombo, and Chief Medical Officer of the relevant Municipal Council Area. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka (27/14, 24.07.2014). The purpose and their role in the study were explained to the participants. To avoid potential barriers in communication between the researcher and the participant due to the sensitivity and confidential nature of the topic to be discussed, the participants were informed of the fact that the principal investigator is a registered nurse who wanted to learn women’s experience of vaginal discharge. It created an environment which is conducive for the participants to disclose their experiences which are sensitive. They were requested to keep the information shared by individuals to the discussion time and not to disclose to others afterward. Recruitment of all participants was strictly voluntarily, and written informed consent was obtained from the participants before enrollment to the study. Anonymity and confidentiality of the information were maintained

by providing a code number for the participants and by maintaining accessibility for all the data collected only to the investigators. No personal identifiers were recorded or transcribed. Audio recordings were done, and consent for the presence of a moderator (sociology graduate) and an observer (principal investigator) doing the recordings was obtained. Participants were given a stipend for expenditure incurred in traveling. If any woman giving history or signs and symptoms suggestive of having a pathological vaginal discharge during the study was identified, she was referred to the nearest hospital with consent of the participant.

Data analysis

The interviews were transcribed verbatim, and the tone of voice, silence, or pauses was noted in the transcript to extract the authentic meaning. Finally, transcribed interviews were analyzed using manifest and latent content analysis.^[11] Transcripts were read carefully and codes that were relevant to each research question were identified. Codes then were sorted by similarities and dissimilarities and abstracted into subthemes. Finally, these emergent subthemes were used to create themes in a way to link the underlying meanings of the entire data material.

Trustworthiness of data and interpretation of the findings involved four categories, such as credibility, transferability, dependability, and conformability.^[12] The researcher conducted the FGDs in a place where the interviewer can establish good rapport with the participants which is to increase the credibility of the data. To ensure the transferability of the findings, the researcher provided detailed descriptions of the women's experiences, including context in their natural setting. Furthermore, to attain dependability and conformability, the analysis was reviewed by three researchers. Further, data analysis and the research process were discussed frequently to enhance dependability. Furthermore, researchers cross-checked each step of content analysis to establish authenticity and trustworthiness of the research and ensure that the line of thinking and interpretation are clear to the readers and true to the data.

RESULTS

The analysis comprised with six themes, namely, confusion in differentiating normal from abnormal vaginal discharge, effects on day-to-day life, confusion toward the causative factors, difficulties in disclosing, neglecting behaviors, and socio-cultural influences toward health-seeking behaviors with illustrating women's understanding about vaginal discharge in this urban slum community.

The findings are interpreted in this section with appropriate quotations. The numbers within brackets () refer to a particular woman's age and the relevant FGD.

Confusion in differentiating normal from abnormal vaginal discharge

Most of the women expressed that they had a previous history of vaginal discharge and it is a usual condition. Most judged normality by the characteristics of vaginal discharge: its quantity, color, odor, and consistency.

"If the colour of the vaginal discharge is white, it is a normal condition. If the colour changed, it might be due to an illness" (36 years, FGD 1). "I'm not aware about this. I don't know how much secretions should be there usually and what is the normal consistency of the secretion" (32 years, FGD 1). "... I didn't take treatment as I don't know whether it is normal or some illness" (29 years, FGD 3).

Women have discussed with friends and family regarding what was normal and some were concerned to discover that other women had different experiences from their own highlighting the inability of recognizing normal and abnormal vaginal discharge in this community.

"I was not sure about what is it. I had white vaginal discharge and sometimes it was yellow in colour. Sometimes there were some thickness and it was unpleasant. When it is near to menses, I had some brown colour discharge but I didn't tell anyone other than my best friend" (32 years, FGD2).

Some women questioned the interviewer,

"Miss, what do you mean by normal discharge? Is it normal to have wetness? Before I got married I didn't have any problem and after I got babies only that I started to have this problem" (20 years, FGD 3).

Effects on day-to-day life

Many women expressed difficulty in changing underwear frequently due to excessive vaginal discharge. Further, some women expressed their concerns about the vaginal discharge which occurs along with itchiness, burning sensation, and even some with ulcers.

"When I get the discharge, I have lower abdominal pain and itchiness. I'm worried about the delay in pregnancy and I feel that is due to vaginal discharge that I was unable to become pregnant" (34 years, FGD1).

Another woman explained,

"I had two abortions and finally I told doctors about this vaginal discharge and itching. They did a Pap test and it was normal. They gave me medicine for discharge and now I have two children" (38 years, FGD3).

Another woman explained dyspareunia while having excessive vaginal discharge and having problem with their intimate relationships. Further, one of them expressed that “It is very difficult to travel long distances due to discharge. Then I get yellow colored discharge and itchiness which make me uncomfortable” (20 years, FGD 2).

Confusion toward the causative factors

Respondents came up with a wide variety of possible causes for vaginal symptoms such as vitamin deficiency, cancer, melting veins, high body temperature, bone diseases, pregnancy, contraception, infections, cleanliness, and stress. Majority considered that body heat and hot food are the main reasons behind vaginal discharge. Few women explained that it can be due to infections and due to poor personal hygiene. Not even a single participant used the word STI as a cause.

“I think vaginal discharge increases due to high body temperature” (36 years, FGD1; 27 years, FGD2). “I get vaginal discharge if I ate hot food such as prawns and pineapple” (48 years, FGD3). “I took Ayurvedic treatments. They said that it is due to body heat and gave me some herbal drinks and tablets (Kalka) to drink. Then I did western medicine too. I ate food to reduce body temperature. Now I don’t take any treatment” (40 years, FGD 2). “One of my friends had vaginal discharge. She has another problem in bones and she thinks that vaginal discharge is due to the bone disease” (34 years, FGD 1).

Another woman expressed that allergy toward sanitary pads can be the reason.

“I changed the type of sanitary pads thinking that allergy to the sanitary pad is the reason for this” (43 years, FGD 3).

Few women explained that family planning methods can be a cause such as oral contraceptive pills and loop method as well as ligation and resection of tubes. Another woman was worried about cancer as a possible cause of vaginal discharge.

Difficulties in disclosing

A more typical pattern was to seek medical consultation after a variety of other options had been tried and had failed. Some women have tried various home remedies because of shame to disclose the symptoms.

“I did not tell anyone because I’m shy. Then later I went to a lady doctor to take medicine. Now I don’t have it” (22 years, FGD 3). “My husband is abroad and I don’t have anyone to tell. So I stayed silent. I’m afraid of telling it to a friend as they might think something else” (32 years, FGD 1). “I had discharge with itchiness which I managed by drinking herbal drink. I know that

it is due to body heat,... I did not tell anyone” (36 years, FGD 1).

Some women sought advice from family members or friends and majority disclosed this to their closest friend other than the family members.

“I have never taken treatment but my grandmother said to drink king coconut (Thembili.), sago (Sauw) Kanji and other foods which reduce body temperature” (36 years, FGD 1). “...my friends ... have had same experience. They advised me to use some creams they applied. We talked these things when we go to take our children to school” (27 years, FGD 2).

Some women expressed the need for lady doctors to discuss about their problems because of shyness in discussing it with male doctors. The need of privacy in their disease management was a major concern they had.

“I know that there are medicines for this, but can’t go to take treatment because I don’t like to tell anyone. If there is a lady doctor, I would prefer” (36 years, FGD 1).

“When I go to take treatment from a government hospital, there is big crowd surrounding the doctor. And I can’t tell this because there is no privacy. All are listening. How can I tell then?” (42 years, FGD 3).

Neglecting behaviors

Majority of participants explained the mothers’ role and spouse’s role at home and they have no time to consider their personal and health matters.

“Most of the time, we go to take treatment for our children, but ignore about our health” (44 years, FGD 3). “I have no time to go to take treatment. At the end of the day, I’m so tired by all work and by looking after younger children” (32 years, FGD 2). “We have responsibilities towards our children and we neglect taking treatment” (33 years, FGD 1).

Most of them highlighted the day-to-day responsibilities and they made priorities for those and ignore and postpone their health issues.

Socio-cultural influences toward health-seeking behaviors

Women engaged in a wide variety of preventative and self-treatment practices. Many women expressed difficulties in approaching healthcare personnel and found that the easiest way of treating is by their own methods. Majority had tried their grandmother’s advice and their friends’ advice to prevent and treat vaginal discharges.

“As home remedies I drink king coconut (Thembili.), sago (Sauw) Kanji and other foods which reduce body temperature” (36 years, FGD 1). “I eat lot of fruits

mango, papaw daily and even curd with honey to reduce it' (36 years, FGD 1). "My grandmother has told me to drink hot water with powdered Clove (karabunati) and I have done that. It reduces the secretions" (45 years, FGD 2). "When I have this, I boil cumin (Suduru) and drink it" (49 years, FGD 3). "I wash that area by using hot water. Then it reduces the scratching. Then I wash with hot water after adding some salt into it" (27 years, FGD 2).

Some women expressed recurrent use of over the counter products before consultation, often resorting to consultation when self-treatment did not work. Women often used medication left over from previous infections and used them frequently. Furthermore, women were engaged in various hygienic practices to both treat and prevent their symptoms.

DISCUSSION

The FGDs revealed a rich variety of information and provided an insight into understanding the health-seeking behaviors for vaginal discharge in the given community.

Majority of women had difficulty in differentiating normal from abnormal vaginal discharge in line with similar findings from the literature. Identification of vaginal discharge as a suspected symptom associated with the reproductive tract infections was poor among women in some studies.^[13,14] Identifying abnormal vaginal discharge at an early stage is very important to prevent associated consequences, as vaginal discharge is an early symptom of many gynecological conditions. Another important fact is that women living in low socioeconomic status are highly vulnerable in coming into contact with STIs, some of which are curable if detected and managed early.

Effect on day-to-day life was another theme that emerged in the present study. Similarly, women expressed embarrassment associated with the urge to scratch and the need for frequent changing of underwear^[15,16] and found it difficult to cope with.^[15] Other than that, according to Adolfsson *et al.*, women felt particularly vulnerable regarding their condition in a larger part because of the bad odor that they carried around with them as a result of their condition.^[17] They highlighted that women feel themselves closing off to social situations that involved being in proximity to others. Empowering women on knowledge on vaginal discharge will help treat them and avoid unnecessary complications.

In the present study, the majority of the participants were of the opinion that body heat and consumption of heat food as the reasons for abnormal vaginal

discharge. Similar to the present study, some Ayurvedic practitioners explain the reasons for vaginal discharge as excess humoral heat in the body.^[5] The confusion toward the causative factors was identified as they were not knowledgeable enough to give exact possible causes. Further, in most of the studies, women explained vaginal discharges as "a consequence of consuming specific categories of food (chicken, red meat)," "due to a weakness (after having children) water leaks from bone as discharge."^[5,18,19]

In the present study, women mentioned poor personal hygiene as a cause which was similar to many other studies as well.^[5,13,18-20] The misunderstandings, misinterpretations, and myths related to causes of abnormal vaginal discharge might lead to unhealthy practices among these cultural groups and cause delays in seeking medical advice and proper treatment for pathological causes. Few study participants identified the use of contraceptive pills, chemical used to wash toilets, and sterilization operation as causes which are comparable with other studies.^[19] In addition, other reasons such as frequent pregnancies and lifting heavy weight^[20] and tubal ligations^[18] were mentioned by the participants of the present study showing similar cultural views among women living in different parts of the world. Despite the confusion regarding causative factors, many women are with the idea that it spreads the illness to men during sex and that such women should not have sex.^[21] This attitude of avoiding sexual contact would be beneficial only if they could differentiate abnormal from normal vaginal discharge and seek help if they feel that they have an abnormal discharge.

Another important themes emerged from the present study were difficulties in disclosing and neglecting behaviors which can be the reasons for mismanagement of vaginal discharge. It has also been said that women living in low socioeconomic classes were not willing to disclose vaginal discharge to a doctor due to backwardness and bashfulness.^[20] Further, due to the intimate nature of the condition, women isolate themselves instead of sharing their experience and seeking proper treatment.^[17] This behavior led most of them to follow homeopathic or Ayurvedic treatment at home.^[20] Consequently, many home remedies have been used by the women in the present study that generally delayed their proper treatment-seeking behavior.

As Theroux *et al.* expressed, the cultural environment of woman can be the cause of her knowledge, beliefs, and choice of the type of treatment.^[22] This highlights the need of family health care worker's assistance to reach proper management strategies. At the same time, it requires healthcare workers such as nurses and

midwives to have a comprehensive understanding and sufficient knowledge on how women perceive vaginal infection to respond in an efficient and understanding manner.^[22]

This study had some limitations such as the small number of participants. However, researchers have tried to overcome this limitation by including many ethnic and religious participants. Further, it would be beneficial to add individual interviews to enhance the findings by overcoming modesty and shame associated with this topic.

However, to the best of our knowledge, this is the first Sri Lankan study exploring vaginal discharge and its associated cultural views and practices to facilitate the development of an effective health education program.

CONCLUSIONS

The present study found six themes which are highly important with regard to the management of abnormal vaginal discharge in this urban slum community.

These findings have important implications toward addressing women's health needs especially related to vaginal complaints. Importantly, the findings highlight the need to have comfortable and confidential care environments considering women's psychosocial concerns and distress which improve women's health-seeking behaviors. A more refined and sensitive reproductive and sexual health strategy can be developed, which will be in tune with the cultural beliefs and expectations of urban slum women in Sri Lanka. The cultural-specific health education strategies on the identification of normal and abnormal vaginal discharge could be incorporated into the existing reproductive health services at the community level. This will lead to the prevention of associated consequences of pathological vaginal discharge and promotion of women's health.

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Conflicts of interest

There are no conflicts of interest.

REFERENCES

- Patel V, Pednekar S, Weiss H, Rodrigues M, Barros P, Nayak B, *et al.* Why do women complain of vaginal discharge? A population survey of infectious and psychosocial risk factors in a South Asian community. *Int J Epidemiol* 2005;34:853-62.
- McCarthy R. Vaginal discharge: Common causes and management. *Curr Obstet Gynaecol* 2006;16:211-7.
- FSRH and BASHH Guidance. Clinical Effectiveness Unit-Management of Vaginal Discharge in Non-Genitourinary Medicine Settings; 2012. Available from: <https://www.guidelinecentral.com/summaries/management-of-vaginal-discharge-in-non-genitourinary-medicine-settings/>. [Last accessed on 2017 Aug 07].
- Bates S. Vaginal discharge. *Curr Obstet Gynaecol* 2003;13:218-23.
- Trollope-Kumar K. Cultural and biomedical meanings of the complaint of leukorrhoea in South Asian women. *Trop Med Int Health* 2001;6:260-6.
- Kulkarni R, Chauhan S. Socio-cultural aspects of reproductive morbidities among rural women in a district of Maharashtra. *J Fam Welf* 2009;55:27-33.
- Kostick KM, Schensul SL, Jadhav K, Singh R, Bavadekar A, Saggurti N, *et al.* Treatment seeking, vaginal discharge and psychosocial distress among women in Urban Mumbai. *Cult Med Psychiatry* 2010;34:529-47.
- Ilankoon IMPS, Goonewardena CSE, Perera PPR, Fernandopulle RC. Review article on vaginal discharge: Women's health seeking behaviours and cultural practices. *Int J Curr Res* 2015;7:17473-9.
- Ilankoon IMPS, Goonewardena CSE, Fernandopulle RC, Perera PPR. Public health midwives' role in health education regarding vaginal discharge: A cross sectional descriptive study. *Int J Sci Res Manage* 2016;4:4303-10.
- Karasz A, Anderson M. The vaginitis monologues: Women's experiences of vaginal complaints in a primary care setting. *Soc Sci Med* 2003;56:1013-21.
- Crowley J, Ball L, McGill AT, Buetow S, Arroll B, Leveritt M, *et al.* General practitioners' views on providing nutrition care to patients with chronic disease: A focus group study. *J Prim Health Care* 2016;8:357-64.
- Lincoln Y, Guba E. *Naturalistic Inquiry*. Newbury Park, CA: Sage Publication; 1985.
- Nielsen A, Lan PT, Marrone G, Phuc HD, Chuc NT, Stålsby Lundborg C. Reproductive tract infections in rural vietnam, women's knowledge, and health-seeking behavior: A cross-sectional study. *Health Care Women Int* 2014;37:392-411.
- Onal AE, Onoglu N, Babaoglu AB, Ozer C, Gungor G. Some hygiene behaviours and genital infection complaints among 15-49 aged women in a suburban area of Istanbul. *Nobel Med* 2011;7:96-100.
- O'Dowd TC, Parker S, Kelly A. Women's experiences of general practitioner management of their vaginal symptoms. *Br J Gen Pract* 1996;46:415-8.
- Binh NT, Gardner M, Elias C. Perceptions of morbidity related to reproductive tract infection among women in two rural communities of NinhBinh Province, Viet Nam. *Cult Health Sex* 2002;4:153-71.
- Adolfsson A, Hagander A, Mahjoubipour F, Larsson PG. How vaginal infections impact women's everyday life; women's lived experiences of bacterial vaginosis and recurrent vulvovaginal candidiasis. *Adv Sexual Med* 2017;7:1-19.
- Bhatti LI, Fikree FF. Health-seeking behavior of Karachi women with reproductive tract infections. *Soc Sci Med* 2002;54:105-17.
- Chapple A. Vaginal thrush: Perceptions and experiences of

- women of South Asian descent. *Health Educ Res* 2001;16:9-19.
20. Gul S, Qamar H, Jawaid W, Bukhari U, Javed Y. Women facing heavy vaginal discharge (leucorrhoea) by virtue of unhealthy life style. *Int Res J Pharm* 2013;4:258-61.
 21. Singh A. Vaginal discharge: Its causes and associated symptoms as perceived by rural North Indian women. *Indian J Community Med* 2009;32:22-6.
 22. Theroux R, Hawkins DJ, Kearney M. Bypassing the middleman: A grounded theory of women's self-care for vaginal symptoms. *Health Care Women Int* 2002;23:417-31.

