Research Article

INTERNATIONAL RESEARCH JOURNAL OF PHARMACY

www.irjponline.com

ISSN 2230-8407 [LINKING]

EXAMINING THE CLINICAL AND SOCIODEMOGRAPHIC PATTERNS IN VULVAL DERMATOME PATIENTS AND THEIR EFFECTS ON LIFE QUALITY

Dr. Mohammed Ibrar Alam

Associate Professor, Department of Dermatology, American International Institute of Medical Sciences, Udaipur, Rajasthan

Address for correspondence

Email: dribraralam@gmail.com

How to cite: Alam MI. Examining The Clinical And Sociodemographic Patterns In Vulval Dermatome Patients And Their Effects On Life Quality. International Research Journal of Pharmacy. 2019;10:1:151-155.

Doi: 10.7897/2230-8407.100125

==========

ABSTRCT

Background: Vulval dermatoses can appear in a variety of ways, ranging from no symptoms to a long-term handicap. Because vaginal dermatoses are complex diseases with physical manifestations that significantly impair the quality of life for those who are affected, they are challenging to diagnose and treat.

Aim: The goal of the current clinical investigation was to examine the clinical and sociodemographic patterns in vulval dermatomes and how they affected the DLQI (dermatology life quality index) for quality of life. Methods: vulval lesions in female participants of all ages were evaluated. Lesions were classified as oro genital and skin lesions, oro genital lesions, genital and skin lesions, and genital lesions alone, depending on the place of assessment.

DLQI questionnaire was used to assess DLQI scores and quality of life.

Results: Of the 260 participants, 33.8% (n=88) were between the ages of 31 and 40, 49.61% (n=129) were illiterate, 82.69% (n=215) were housewives, and 91.92% (n=239) of the participants were married. Itching was the most common complaint among the majority of research participants, accounting for 43.07% (n=112) of the total. The majority of research participants (n = 200) had vulval dermatoses identified as infections, with inflammatory and immunobullous diseases coming in second and third, respectively, with 15%, n = 39, and 1.53%, n = 4. Individuals with oral communication had significantly higher DLQI scores. Individuals with immunobullous diseases exhibited the greatest mean DLQI scores and skin and genital involvement ($p<0.05$).

Conclusion: According to the study's findings, individuals with genital, skin, and oral lesions had the highest DLQI ratings, which significantly affected their quality of life. Evaluating how a disease is affecting a person's quality of life is crucial since it promotes better disease management and shortens the course of the illness.

Keywords: dermatoses, Dermatology life quality index, orogenital lesions, vulval dermatoses.

INTRODUCTION

The vulva is what makes up the ladies' external genitalia. The vestibule, clitoris, mons pubis, labia minora, labia majora, and Bartholin glands are the external genitalia of a female vulva.1. Vulval dermatoses are a very common medical issue that affects women worldwide, including women in India. Due to their wide range of symptoms, which can range from total asymptomatic to chronic impairment, vulval dermatoses present as a challenging entity.2

Because of the vulva's frictional, moist, and warm environment, the classical characteristics of dermatoses that appear usually differ from those of dermatoses in the genitalia. In addition, the vulva is regularly exposed to things that irritate it, including as urine, faeces, and vaginal secretions. Since the vulva is a challenging examination location, it is typically not evaluated on its own.3. Additionally, patients with genital lesions typically hesitate to seek medical attention because they

are afraid or anxious. This might lower their quality of life due to impaired sexual functions and raise their risk of morbidity.4

The Dermatology Life Quality Index, or DLQI, is a questionnaire used to assess life quality. A dependable, quick, and proven method for assessing how dermatological illnesses impair a subject's quality of life is the Dermatological Quality Index (DLQI). In terms of scoring, a DLQI score of more than 10 indicates that the respondents' quality of life has been severely impacted.5 It is not unusual to discover vulval infections in Indian ladies. On the other hand, these illnesses' significance, prevalence, and reporting are all underappreciated. The evaluation and treatment of dermatoses on the genitalia are made more difficult by the disease's physical manifestation on the vulva and the multivariate character of its symptoms.6

Therefore, the purpose of the current study was to investigate the clinical and sociodemographic patterns in vulval dermatomes and how they affect DLQI (dermatology life quality index) quality of life. The current cross-sectional clinical investigation sought to investigate the clinical and sociodemographic patterns in vulval dermatomes and their relationship to DLQI (dermatology life quality index) quality of life. After receiving approval from the relevant institutional ethical council, the study was carried out at the Department of Dermatology, Venereology, and Leprosy. The female individuals with vulval dermatoses who reported to the Institute's Department of Dermatology comprised the study population. Following the acquisition of both verbal and written informed permission, the study evaluated females across all age categories.

After the inclusion of the study females, detailed history was recorded for all the subjects followed by socio-demographic data. This was followed by a detailed clinical examination of the external genitalia in the affected subjects. The examination was performed under appropriate privacy along with per speculum and vaginal examination. All the findings were recorded. The examination of the perianal, perineal, nail, hair, scalp, and oral mucosa was also done.

Any more sites where the dermatoses were present were evaluated further. Following a thorough evaluation of every afflicted region, the lesions were divided into four groups: skin lesions, genital and skin lesions, oro genital and skin lesions, and genital lesions alone. Adequate blood investigations and the documentation of the related comorbidities came next. Grammes stain, Tzanck smear, dark ground microscopy, wet mount, and KOH (potassium hydroxide) mount staining were used as needed to get the final diagnosis. When appropriate, a biopsy was carried out in these patients. The quality of life of each research participant was evaluated using the DLQI questionnaire, and scoring was conducted.

The data gathered were analyzed statistically using SPSS software version 20 (IBM SPSS, IBM, Armonk, NY, USA. 2018). One-way analysis of variance (ANOVA), Spearman's correlation test, and t-tests were the statistical methods utilised to examine the data. A p-value of less than 0.05 was used as the threshold for significance.

RESULTS

The current cross-sectional clinical investigation sought to investigate the clinical and sociodemographic patterns in vulval dermatomes and their effects on DLQI (dermatology life quality index) quality of life. 260 female individuals with vulval dermatoses were evaluated in the research. The age range of 31–40 years comprised 33.8% (n=88) of the subjects, followed by 28.84% (n=75) of subjects in the age range of 21–30 years, 22.69% (n=59) of subjects in the age range of 41–50 years, 8.07% (n=21) of subjects from the age range of more than 50 years, and at least 6.53% of the study's female participants were under the age of 20.

The majority of study females (82.69%; n = 215) were housewives, followed by study females who were employed (8.84%; n = 23); the least amount of study females (8.46%; n = 22) were students. In terms of education, the majority of the study's female participants were illiterate, comprising 49.61% (n = 129) of the sample, followed by 20.38% (n = 53) of the sample who had completed school, with graduation occurring in 11.53% (n = 30) of the sample, postgraduation in 10% (n = 26) of the sample, and primary schooling occurring in 8.46% (n = 22) of the sample, respectively. According to Table 1, the majority of study females—91.92% (n=239)—were married, whereas 8.07% (n=21) were single. After evaluating the distribution frequency of vulval dermatoses in the current investigation,

It was observed that 77.30% (n=201) of the study subjects had infectious dermatoses, followed by inflammatory ones in 15% (n=39), others in 3.07% (n=8), skin tags in 2.69% (n=7), immunobullous in 1.53% (n=4), and pigmentation in 0.76% (n=2) study subjects, in that order. In terms of infections, fungal infections were the most prevalent in 51.15% (n=133), viral infections in 18.07% (n=47), and bacterial infections in 8.07% (n=21) of the research individuals, respectively. Lichen sclerosus was the most prevalent infection among the research subjects, accounting for 8.46% (n=22). Lichen simplex chronicus was next, accounting for 5% (n=13), eczema for 0.76% (n=2), and Crohn's disease and lichen planus for 0.38% (n=1) of the individuals each.

In 0.38% (n=1) of the research patients, the immunobullous dermatoses pemphigus vulgaris, lichen planus pemphigoides, bullous pemphigoides, and Hailey-Hailey disease were identified. Regarding other dermatoses, 1.15% (n=3) of the

females had vulvodynia and vaginal discharge caused by foreign bodies, while 0.38% (n=1) of the research subjects experienced Lymphangiectasia and acute vulval edoema (Table 2). As shown in Table 3, the most common site of involvement for the genital alone was 78.84% (n=205) study subjects, followed by genital and skin involvement in 18.07% (n=47) study subjects, genital, skin, and oral involvement in 2.30% (n=6) study subjects, and genital and oral involvement in 0.76% (n=2) study subjects.

The participants with genital, skin, and oral involvement had the highest mean DLQI (17.85), followed by those with genital and skin involvement (132.22), those with genital involvement alone (13.14), and those with genital and oral involvement (12.98). Table 3 illustrates that the difference was statistically significant with $p<0.001$. In this current clinical investigation, 260 female participants with vulval dermatoses were evaluated. The age range of 31–40 years comprised 33.8% (n=88) of the subjects, followed by 28.84% (n=75) of subjects in the age range of 21–30 years, 22.69% (n=59) of subjects in the age range of 41–50 years, 8.07% (n=21) of subjects from the age range of more than 50 years, and at least 6.53% of the study's female participants were under the age of 20.

DISCUSSION

The majority of study females (82.69%; n = 215) were housewives, followed by study females who were employed (8.84%; n = 23); the least amount of study females (8.46%; n = 22) were students. In terms of education, the majority of the study's female participants were illiterate, comprising 49.61% (n = 129) of the sample, followed by 20.38% (n = 53) of the sample who had completed school, with graduation occurring in 11.53% (n = 30) of the sample, postgraduation in 10% (n = 26) of the sample, and primary schooling occurring in 8.46% (n = 22) of the sample, respectively. Of the study's female participants, 91.92% (n=239) were married, while 8.07% (n=21) were single. These features matched those of studies conducted by Shinde G8 in 2017 and Singh G et al9 in 2016, the authors of which evaluated participants using demographic information similar to that of the current investigation.

With regards to the frequency of distribution for vulval dermatoses in the current study, it was observed that 77.30% (n=201) of the study subjects had infectious dermatoses, while 15% (n=39) had inflammation, 3.07% (n=8) had others, 2.69% (n=7) had skin tags, 1.53% (n=4) had immunobullous dermatoses, and 0.76% (n=2) had pigmentation, respectively. In terms of infections, fungal infections were the most prevalent in 51.15% (n=133), viral infections in 18.07% (n=47), and bacterial infections in 8.07% (n=21) of the research individuals, respectively. Lichen sclerosus was the most prevalent infection among the research subjects, accounting for 8.46% (n=22). Lichen simplex chronicus was next, accounting for 5% (n=13), eczema for 0.76% (n=2), and Crohn's disease and lichen planus for 0.38% (n=1) of the individuals each.

In 0.38% (n=1) of the research patients, the immunobullous dermatoses pemphigus vulgaris, lichen planus pemphigoides, bullous pemphigoides, and Hailey-Hailey disease were identified. Within the various dermatoses, 1.15% (n=3) of the females had vulvodynia and vaginal discharge caused by foreign bodies, while 0.38% (n=1) of the research subjects experienced acute vulval edoema with lymphangiectasia. The present study's results were in line with those of Agarwal S et al. (2014) and Gokdemir G et al. (2005), who reported that fungal infections were the most prevalent cause of dermatoses, with infectious and inflammatory lesions being the most often detected dermatoses. When the sites involved were evaluated, the most often involved site was genital alone, which was involved in 78.84% (n=205) of the research individuals and skin involvement in 18.07% (n=47) study subjects, genital, skin, and oral involvement in 2.30% (n=6) study subjects, and Oral and genital involvement, the least often involved location, was present in 0.76% (n=2) of the research participants. These results were consistent with earlier research by Pathak D et al. (2011) and Stewart KMA13 (2012), which showed that genital regions were the most often involved location in vulvar dermatoses, followed by skin involvement and genital involvement as seen in the current study. The results showed that the participants with genital, skin, and oral involvement had the highest mean DLQI (17.85), followed by those with genital and skin involvement (132.22), those with genital involvement alone (13.14), and those with genital and oral involvement (12.98). With $p<0.001$, the difference was statistically significant.

These findings were consistent with studies conducted in 2019 by Sivayadevi P et al. and in 1999 by Sullivan AK et al., which also included oro-genital involvement and indicated higher quality of life in their individuals.

CONCLUSION

The current study finds, taking into account its limitations, that individuals with genital, cutaneous, and oral lesions have the highest DLQI ratings, which have a significant influence on their quality of life. Evaluating how a disease is affecting a person's quality of life is crucial since it promotes better disease management and shortens the course of the illness. However, in order to draw a firm conclusion, further lengthy longitudinal investigations including a larger sample size are required.

REFERENCES

1. Schlosser B, Mirowski G. Approach to the patient with vulvovaginal complaints. Dermatol Ther 2010;23:438–48.
2. Ponte M, Klemperer E, Sahay A, Chren M. Effects of vulvodynia on quality of life. J Am Acad Dermatol 2009;60:70–6.
3. Finlay AY, Khan GK. Dermatology life quality index (DLQI)—a simple practical measure for routine clinical use. Clin Exp Dermatol 1994;19:210-6.
4. Harlow BL, Wise LA, Stewart EG. Prevalence and predictors of chronic lower genital tract discomfort. Am J Obstet Gynecol. 2001;185:545–50.
5. Hansen A, Carr K, Jensen JT. Characteristics and initial diagnosis of women presenting to a referral center for vulvovaginal disease in 1996-2000. J Reprod Med. 2002;47:854–60.
6. Mirowski GW, Edwards L. Genital anatomy. In: Edwards L, editor. Genital dermatology atlas. Philadelphia: Lippincott Williams & Wilkins; 2004:1–8.
7. Beecker J. Therapeutic principles in vulvovaginal dermatology. Dermatol Clin. 2010;28:639–48.
8. Shinde G, Popere S. A clinical study of nonvenereal genital dermatoses of adults in a tertiary care center. Int J Biomed Adv Res2017;8:168-73.
9. Singh G, Rathore BS, Bhardwaj A, Sharma C. Non-venereal benign dermatoses ofvulvain sexually active woman: A clinical study. Int J Res Dermatol 2016;2:25-9.
10. Agarwal S, Ojha A, Gupta S. Profile of vitiligo in Kumaun region of Uttarakhand, India. Indian J Dermatol 2014;58:209.
11. Gokdemir G, Baksu B, Baksu A, Davas I, Koslu A. Features of patients with vulvar dermatoses in dermatologic and gynecologic practice in Turkey: Is there a need for an interdisciplinary approach? J Obstet Gynaecol Res 2005;31:427-31.
12. Pathak D, Agrawal S, Dhali TK. Prevalence of and risk factors for vulvar diseases in Nepal: A hospital-based study. Int J Dermatol 2011;50:161-7.
13. Stewart KMA. Vulvar dermatoses: A practical approach to evaluation and management. JCOM 2012;19:205-20.
14. Sivayadevi P, Anandan H. A study of patterns of non-venereal genital dermatoses in female patients at a tertiary care center. Int J Res Dermatol 2019;5:134-8.
15. Sullivan AK, Straghair GJ, Marwood RP, Staughton RC. A multidisciplinary vulval clinic: The role of genitor-urinary medicine. J Eur Acad Dermatol Venereol1999;13:36-40.

TABLES

Characteristics	Number (n)	Percentage (%)
Age range (years)		
<20	17	6.53
21-30	75	28.84
31-40	88	33.8
41-50	59	22.69
>50	21	8.07
Occupation		
Housewife	215	82.69
Student	22	8.46
Working	23	8.84
Education		
Illiterate	129	49.61
Primary schooling	22	8.46
Intermediate	53	20.38
Graduation	30	11.53
Post-graduation	26	10
Marital status		
Married	239	91.92
Unmarried	21	8.07

Table 1: Socio-demographic characteristics in study subjects having vulval dermatoses

Vulval dermatoses	**N=260**	**%**
Infections	201	77.30
Bacterial	21	8.07
Vulval tuberculosis	1	0.38
Bartholin cyst	7	2.69
Folliculitis	12	4.61
Viral	47	18.07
Molluscum contagiosum	13	5
Herpes genitalis	15	5.76
Genital warts	19	7.30
Fungal	133	51.15
Candidiasis	59	22.69
Tinea curis	74	28.46
Inflammations	39	15
Crohn's disease	1	0.38
Lichen planus	1	0.38
Eczema	2	0.76
Lichen simplex chronicus	13	5
Lichen sclerosus	22	8.46
Normal variants (skin tags)	7	2.69
Pigmentation (vitiligo)	2	0.76
Immunobullous	4	1.53
Hailey-Hailey disease	1	0.38
Lichen planus pemphigoides	1	0.38
Bullous pemphigoides	1	0.38
Pemphigus vulgaris	1	0.38
Others	8	3.07
Foreign body-induced vaginal discharge	3	1.15
Vulvodynia	3	1.15
Lymohangiectasia	1	0.38
Acute vulval edema	1	0.38

Table 2: Frequency of vulval dermatoses distribution in the study subjects

Involved site	**N**	**%**	**Mean DLQI**	**p-value**
Genital, skin, and oral	6	2.30	17.85	**<0.001**
Genital and oral	2	0.76	12.98	
Genital and skin	47	18.07	13.22	
Genital alone	205	78.84	13.14	

Table 3: DLQI scores based on the site involved in the study subjects