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Original Research Article

To study the Relationship and Management of Sexually Transmitted Diseases and Vaginitis

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Abstract

Background & Methods: The aim of the study is to study relationship and management of Sexually Transmited Diseases and Vaginitis. The vaginal fluid was smeared on a glass slide and stained with gram stain and reported for the presence of vaginosis.

Results: Direct Diagnoses of Vaginits Patient, the chi-square statistic is 8.8017. The *p*-value is .00301. The result is significant at $p < .05$. Risk factors for STD, the chi-square statistic is 6.1707. The p-value is .012988. The result is significant at $p < .05$.

Conclusion: Considering the lack of short and long term efficacy of standard of care in decreasing Vaginitis prevalence and recurrences, it seems that every effort must be done during the next years to control "microbioma modifications related to Vaginitis": selected biotherapeutic agents, using for long-term course, could be an interesting and cost-effective treatment to prevent STDs acquisition. Our study calls for urgent control measures against STD, including improved diagnostic and treatment facilities, and appropriate case management. Health education should be directed particularly to adolescents, and should also empower women to recognize symptoms and signs related to STD as early as possible.

Keywords: relationship, management, sexually and vaginitis.

Study Design: Observational Study.

Introduction

Sexually transmitted diseases (STDs) constitute a major public health problem for both developing and developed countries. Measures to manage sexually transmitted diseases have become more crucial with the introduction of HIV infection [1]. Planning and implementing STD management programs effectively requires a thorough grasp of the patterns of STDs that are prevalent in various geographic regions of a nation.

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The number of sexually transmitted infections (STIs) has alarmingly increased in Asia and Africa's third world countries. HIV, herpes simplex virus, and hepatitis B virus are examples of viral diseases that can be prevented but are nevertheless incurable, while gonorrhea, chlamydia, syphilis, trichomoniasis, and chancroid are examples of curable STIs [2].

According to estimates from the World Health Organization (W.H.O.), there are 333 million new cases of treatable STIs worldwide each year [3]. The lack of adequate diagnostic resources, suitable medications, and a sufficient number of STI clinics to meet population demands hinder efforts to manage STIs in poor nations. The most common infectious cause of vaginitis, which affects 35% of women with vaginal discharge, is bacterial vaginosis. Another study identified genital herpes, gonorrhea, genital warts, and nongonoccocal urethritis as serious STIs [4].

Treatment of vaginitis may include sitz baths and instruction regarding proper toilet and hygiene techniques. Many women assume vaginal symptoms are the result of a sexually transmitted disease (STD), which is often not the case[5]. A patient’s idea of vaginal normality may be inaccurate and result in increased or unnecessary treatment seeking.

Intravaginal imidazoles (see Pharmacologic Therapy) can be purchased over the counter and have proven efficacy for vaginal candidiasis. Patients may purchase and utilize these medications without a doctor’s advice or prescription and the choice of treatment can be based on personal preference since they appear to be equally effective. Vaginal anti-itch creams provide only symptomatic relief. Homeopathic treatments for vaginitis (boric acid, tea tree oil, live acidophilus, garlic) have not been well studied but may have some efficacy[6-7].

Material and Methods

All women aged 18 to 49 years were participate in the study. Up to date information on the number of women of reproductive age were obtained from the local community health agents who assist the government Family Health Program. In order to maintain confidentiality on sexual life, all women, independently from their sexual history, were asked to come to the gynaecological examination, so that bystanders could not infer the sexual status of a woman from non-participation. However, only women who had initiated sexual life were eligible for the study.

They were pre-tested on individuals. A woman disclosed that she had not initiated sexual life, only vaginal swabs were collected to identify BV or candidiasis. All clinical investigators were female. Peripheral blood was obtained from each woman using disposable needles and vacutainer tubes, and sera were separated on the same day and stored at –20°C.

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Result

Table No. 1: Demographic Characteristics

S. No.	Age	No. patients	Percentage
1	18-30	04	22
2	31-45	13	69
3	46-60	03	09
1	Single/widow/divorced	05	23
2	Married/living together	15	77

Table No. 2: Direct Diagnoses of Vaginits Patient

S. No.	Diagnosis	No. patients	Percentage	P Value
1	Bacterial vaginosis	07	37	.00301
2	C. albicans	05	26	
3	T. vaginalis	02	13	
4	C. alb. /T vag.	01	02	
5	None	05	22	

The chi-square statistic is 8.8017. The *p*-value is .00301. The result is significant at $p < .05$.

Table No. 3: Pattern of STDs

S. No.	Pattern of STDs	No. of Patients	Percentage	P Value
1	GUDs	12	63	.61209
2	Gonorrhea	02	11	
3	NGU	01	03	
4	Condyloma acuminatum	03	15	
5	Others	01	02	
6	Mixed infections	01	06	

The chi-square statistic is 0.2571. The p-value is .61209. The result is not significant at $p < .05$.

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Table No. 4: Risk factors for STD

S. No.	Risk factors for STI	No. of Patients	Percentage (N=20) in each parameter	P Value
1	Occupation of Husband (labourer or jobless)	13	68	.012988
2	Smoking in Women (both past and current)	16	83	
3	Vaginal douching	09	47	
4	Contraceptive practice	06	32	
5	Ethnicity	11	56	
6	Multiple sex partners or history of extramarital sexual encounter	01	02	

The chi-square statistic is 6.1707. The p-value is .012988. The result is significant at $p < .05$.

Discussion

Male patients were more likely to be married than female patients, and vice versa. In the case of male patients, the ratio of married to unmarried patients varied over the years, but no clear trend emerged [8]. Just 9.7% of male patients reported a history of marital exposure alone, compared to 67.6% of female patients. According to this research, the primary cause of infection for female patients was their spouse, but the primary sources for male patients were extramarital and premarital encounters. Over the course of ten years, there was a consistent pattern in both sexual orientation and the type of sexual intercourse. Low prevalences of LGV, chancroid, and gonorrhea were also found in a few studies. Despite the fact that this investigation only identified three instances of hepatitis B, another study reported rates as high as 12%. While the National AIDS Control Programme reported 1735 HIV infections, including 199 instances of AIDS, no HIV cases were found [9].

The three most frequent causes of vaginal discharge are vulvovaginal candidiasis (20–25% of cases), BV (40–50% of cases), and T. vaginalis (15–20% of cases); only trichomoniasis is an STD, whereas BV is a "borderline" pathology that affects both women who have never engaged in sexual activity and those who have a high rate of STDs [10].

Other sexually transmitted diseases (STDs) that cause vaginal discharge include C. trachomatis infections, Gonococcal infections (N. gonorrhea), and pelvic inflammatory disorders (PIDs). The most prevalent viral sexually transmitted disease (STD) in the world is human papillomavirus (HPV); genital warts caused by HPV are thought to affect 1% of sexually active individuals in the United States between the ages of 15 and 49.

STI screening should focus on high-risk groups, such as immigrants, grand-multipara, smokers, and those from lower socioeconomic strata whose spouses are members of the labor class and have poor hygiene and STI awareness, in a resource-poor setting like the one used

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in this study. Gram staining is an easy, affordable, and accurate way to check for STI symptoms. Complete bacteriological and serological testing should be performed on women who have been diagnosed with one STI in order to screen for additional STIs. Wherever possible, partners should be screened, treated, and subjected to follow-up cure tests [11]. The usage of barrier contraceptives, STI awareness campaigns, blood transfusion and intravenous drug misuse risks, and labor movement trends both domestically and internationally should all be supported.

Awareness about HIV and fear of contracting the STDs are likely to have influenced the risk-taking behavior of people, thereby reducing the likelihood of being infected with STDs. The highliteracy rate of the people and the surrounding areas is a factor favoring this heightened awareness of modified sexual behavior. In addition, the popularization of condoms as a means for preventing HIV and other STDs is likely to have reduced the occurrence of infections. Another factor to be considered is the widespread use of antibacterials, including quinolones and the new macrolides, for the treatment of other diseases[12]. This can result in partial treatment or modified course of the bacterial STDs, thereby leading to apparent reduction in the total number of cases of STDs attending STD clinics as well as a decrease in the proportion of bacterial to viral STDs. The evident decline of the bacterial STDs with an apparent increase of the viral STDs, whatever the reason, is a feature to be noted.

Conclusion

Considering the lack of short and long term efficacy of standard of care in decreasing Vaginitis prevalence and recurrences, it seems that every effort must be done during the next years to control “microbioma modifications related to Vaginitis”: selected biotherapeutic agents, using for long-term course, could be an interesting and cost-effective treatment to prevent STDs acquisition. Our study calls for urgent control measures against STD, including improved diagnostic and treatment facilities, and appropriate case management. Health education should be directed particularly to adolescents, and should also empower women to recognize symptoms and signs related to STD as early as possible.

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