Advanced Medical Journal, Vol.7, No.2, P.30-35, 2022 /https://doi.org/10.56056/amj.2022.175

The Prevalence and Clinical Features of Genital Warts among a sample of Patients in Erbil Governorate

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Abstract

Background and objectives: External genital warts are currently the most common form of viral sexually transmitted disease found in the general population which occur as a direct result of infection with the human papilloma virus. Our aim was to study the clinical features of genital warts among populations of Erbil governorate.

Methods: A cross-sectional survey was conducted for 6 month's period from (September 2017 to March 2018) on 150 patients at the Erbil Dermatology Teaching Center; Erbil governorate. Participants were interviewed and examined individually, and diagnosis of the genital warts confirmed clinically.

Results: female to male ratio is 1: 2.9. Our data showed the highest prevalence (44.7% of our main sample size of external genital wart) was among age groups ranging from (28-37 years) of both genders. The second peak was noted at age groups (18-27years) which was about 26.7%. The range declines to less than 1.3% for the age group of 75 years and above. We found a slightly higher prevalence of external genital wart among males (54%) versus females (46 %). Higher prevalence of the disease was found among the married samples of both genders (74.7 %) versus singles (25.3%). No female patient; whether married or single, admitted having multiple partners while some male's patients were having multiple partners.

Conclusions: This study showed that genital warts are more common in male with multiple sex partner and who are married and it's also more common in lower educational levels of population.

Key words: Genital wart, clinical features.

Introduction:

Genital warts (GW), also termed condylomata acuminata (CA) are at present the most prevalent form of viral sexually transmitted disease found within the general population. External genital wart has been shown to occur as a direct result of infection with human papillomavirus (HPV).[1] There are mainly four types of external genital warts including; filiform, flat, papule, giant condylomata and mixed type.[1-2] There are over 100 types of HPV, other low- risk types that cause genital warts include 40,42,43,44,54,61,70,72...etc.[1] Although GW may present in both genders, there is thought to be a slight preponderance for females, with females accounting for 67% of the presenting population. Genital warts (GWs) are classified as a clinical form of human papillomavirus (HPV) infection because they are visible lesions in the form of single or multiple papules developing in the area of the vulva, perineum, anus, vagina, cervix, penis, scrotum and urethra.[1-2] The clinical symptoms of GWs include pruritus, burning sensation, vaginal discharge, and bleeding.[3] More than 90% of these lesions are associated with HPV types 6 and 11, which usually give rise to benign changes,

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though they are sometimes associated with malignancies.[4] from 20% to 50% of HPV-related lesions have revealed not only HPV-6 and -11, but also co-infections with other HPV types carrying a high oncogenic risk.[4-5] Genital warts are often not considered a serious problem as 2% of immune competent persons and in small proportion of persons with HPV infection cancer may develop. Few studies have been conducted on the quality of life of patients with these lesions. On the other hand, several reports have mentioned the negative psychological effects of this disease, such as stress, embarrassment and anxiety, which are sometimes persistent.[6-7] Genital warts with its high recurrence rates that contribute directly to increased medical costs, decreased productivity and the worst impacts on the overall wellbeing and psychological state of the suffering individual[8.-9] The literature suggests that GWs are widespread and the prevalence depends on study methodology as suggested by higher rates reported from routine genital examinations versus those from treatment records.[10] Oncogenic HPV infection has been linked to the development of a variety of malignant and premalignant lesions of the anogenital and oropharyngeal regions.[8] This helps to account for the tremendous economic burden imposed by HPV when considering both the direct costs of genital wart treatment as well as those associated with HPV-related invasive cervical cancer.[5] Our aim was to study the clinical features of genital warts among a sample of population in Erbil governorate.

Patients and methods

A cross-sectional survey was conducted on 150 individuals (patients) approached at the Erbil Dermatological Teaching Center, where they came seeking treatment. Children, patients on chemotherapy, immunocompromised and pregnant ladies were excluded in this study. Participants were examined and interviewed individually in a private specially prepared room in dermatology department .A self-administered anonymous printed questionnaire was offered to each participant. The questionnaire covered several lifestyle factors, including sociodemographic (e.g. marital status, formal education), condom use, sexual habits. Some investigations like virology screening for HIV, HbsAg and HCV and also for VDRL were done for every patient. For the analysis of our data we used SPSS (statistical package for social science/version 23) and Microsoft excel. Chi and level of significance was ≤0.5.

Result

In our study, total number of patients were 150, male 81 (74%) and female 69(26%) with male to female ratio of 1.17: 1, we noted that the highest prevalence of GW was among the age group (28-37) which is 44.7% and second the second peak was noted at age group (18-27). Concerning the educational status of our study sample, the highest prevalence of GW was observed in illiterate group (33.3%), followed by primary school graduates (31.3%) and the least was among higher education graduates (2%). The highest prevalence of EGW in male patients is among those that are in military section (16.7%), While in females most of them were housewives (28.7%) as shown in table (1). The 74.7 % of our study sample were married and 25.3 % are single. All the investigations that were done for patients, all were negative, as shown in Table (1).

Table (1): Socio-demographic characteristics of the studied sample

Characteristics		No.	%
Age	<18	15	10
	18-27	40	26.7
	28-37	67	44.7
	38-47	21	14
	48-57	5	3.3
	>57	2	1.3
Education	Illiterate	50	33.3
	Primary school	47	31.3
	Secondary school	40	26.7
	College	10	6.7
	Higher education	3	2
Occupation			
	Self-employee	31	20.6
	Military Forces	25	16.7
	Governmental Employee	18	12
	Unemployed	10	6.7
	Housewife	43	28.7
	Others	23	15.3
Marital status	Single	38	25.3
	Married	112	74.7

About 58 % of pattern of genital warts were filliform, followed by flat lesions (22%), papules (15.3%) and giant condylomata (2%) as shown in Table (2).

Table (2): Morphology of the genital warts.

Types	Frequency (%)
Filliform	87 (58)
Flat	33 (22)
Papule	23 (15.3)
Giant condylomata	3 (2)
Mixed	4 (2.7)
Total	150(100)

About 60.5 % of our study sample had multiple Sexual partners and 39.5 % had not have multiple sex partner. The proportion of multiple sex partners is more among married sample of our study which is 35.8 % as shown in Table (3). (Note: all female denied to have multiple sex partner)

Table 3: Multiple Sex Partner of study sample (male sample)

	Multiple Sex Partner (No.81)		Total
	Yes	No	
Single	20(74%)	7 (26%)	27 (100%)
Married	29(53.7%)	25(46.3%)	54 (100%)
Total	49(60.5%)	32(39.5%)	81 (100%)

Table (4): Condom usage by study population.

Gender	Use of condom		Total
	Yes	No	
Male	11(13.5%)	70(86.5%)	81 (100%)
Female	1 (1.5%)	68(98.5%)	69 (100%)
Total	12 (8%)	138(92%)	150 (100%)

The most common site in males was penile shaft in 38(46.9%) while the most common site in female was in mixed were all areas involved 14(20.3%), as shown in Table (5).

Table (5): Anatomical distribution of genital warts.

Anatomical sites(male)	Frequency (%)	Anatomical sites(female)	Frequency (%)
Penile shaft	38 (46.9)	Labia majora	11 (15.9)
Glans	1 (1.2)	Labia minora	14 (20.3)
Scrotum	2 (2.5)	Anal	12 (17.4)
Anal	6 (7.4)	Supra pubic	2 (2.9)
Supra pubic	8 (9.9)	Mixed	30 (43.5)
Mixed	26 (32.1)	Total	69 (100)
Total	81 (100)		

Discussion

The analysis of our data from general prospective showed the highest prevalence of GW among age groups ranging from (28-37 years) of both genders which was about 44.7% of our main sample size (67 patients out of total 150 sample size), and this can be clearly observed from Table (1) and could be easily justified by higher sexual activity among patients belong to this age group, the second peak was noted at age groups (18-27 years) which was about 26.7 % (40 patients of both genders) which also could be related to the sexual activity factor, the proportion declined to less than of 1.3 % (only 2 cases) who were older than 57 years old. In both genders we noted a higher rate in married samples than the single ones as shown in Table (1). No female patient (married or single) were having multiple sex partners while male participants of our study were having multiple sex partners, out of 81 cases 20 of the single and 29 of the married male patients stated that they had multiple sexual partners (49 cases total) as shown in table (30). The number of cases diagnosed in our governorate center(150) were almost if not entirely close to that reported in other neighboring countries like the Afshar(158).[16], Müzeyyen(147).[17] and other studies that has been conducted in middle east countries like Jordan. and Syria.[1,8] and this could be due to geographically associated factors, close cultural background, similarities in traditions and sexual behavioral pattern. Compared to estimates reported in a systematic review, our prevalence rates were lesser than those reported in other countries. like some remote and distant (considering our location) eastern European (236) and north American countries (223).[18] These diversities can be attributed to a number of reasons, such as: a different age range of the study population sample vs. larger age ranges in other studies, a different background of the study population (patients visiting a community centers in our study vs. general population or privately-diagnosed and treated in other

studies).[19-20] We noted that the vast majority of our study samples (about 92%) did not use condom, this could be related or linked to their occupation and/or educational level as follow; 33.3% of the samples were illiterate or merely an elementary school graduates (31.3%) going furhter19 % of the male samples were taxi and heavy machinery drivers, 33.7% of them were soldiers & military personals, it is probably due to lack of condom advantages and not accepting it. Interestingly 62.3% of the female samples were house wives while 18.9% of them were employees, it's probably due to minimum sexual education, lack of protection during sexual activities .[21-23] Although according to available literature using condom do not always prevent HPV transmission nevertheless using condom has been demonstrated to reduce risks of acquiring HPV by 70%.[24-25]

Conclusions

This study concluded that in our sample size genital warts are more common in male with multiple partners and who are married, it's also more common in lower educational levels of population

Conflict of interest

The author reports no conflicts of interest.

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