

Original article

Impact of Genital and Extragenital Viral Warts on Quality of Life Among Libyan Patients

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Email: ailaya_almajbr@proton.me**Keywords.**

Viral Warts, Human Papillomavirus (HPV), Quality of Life, Genital Warts, Extragenital Warts.

Abstract

Warts are caused by Human Papillomavirus (HPV). They can cause physical symptoms like pain and bleeding, in addition to psychological symptoms such as anxiety. Measuring the Quality of Life (QoL) is now considered crucial in dermatological research to evaluate the burden of the disease. This study aimed to evaluate the effect of genital and extragenital viral warts on the quality of life among Libyan patients and to identify the main demographic and clinical factors associated with worse perceived quality-of-life. A cross-sectional study was conducted among 50 patients attending the dermatology clinic at Al-Jamhoria Hospital in Benghazi, Libya. Data were collected from patients in two stages. First, patients underwent a full dermatological examination to document the type, location, number, and duration of warts. Second, participants themselves filled in the Quality-of-Life Index (QOLI) questionnaire. Sociodemographic information, including age, gender, and duration of disease, was recorded. Data were analysed using SPSS version 26.0. Most participants had extragenital warts (92%), and 56% had multiple wart sites. The most frequently affected site was the plantar surface (44%). The mean duration of the disease was 26.3 months. The average Quality of Life Index (QOLI) score was 28.7%. Nearly half of the participants reported embarrassment (50%) and fear of negative judgment (42%). A statistically significant correlation was found between genital localisation and higher QOLI distress ($p = 0.040$). Viral warts can affect multiple aspects of daily life and should not be underestimated. Psychological and social factors should be considered when managing patients with this condition.

Introduction

Warts are benign lesions characterised by benign proliferation of keratinocytes in the mucosa and skin. They are caused by Human Papillomavirus (HPV), which has around 120 recognised subtypes. Viral warts represent a common dermatological challenge globally [1]. Their transmission is via direct contact or autoinoculation, and the risk increases if there are breaks in the skin barrier. In Libya, patients often present with advanced lesions due to delayed consultation [2]. The impact of these lesions on a patient's life is significant. Warts cause physical symptoms like pain and bleeding, in addition to psychological morbidity such as social withdrawal and anxiety [3]. Measuring the Quality of Life (QoL) is now considered vital in dermatological research to evaluate the true burden of the disease [4]. This study aims to assess the impact of genital lesions on patients' lives and to determine the relationship between the quality-of-life index and disease epidemiological factors.

Materials and Methods

This study was a cross-sectional descriptive study conducted at the dermatology department of Al-Jamhoria Hospital in Benghazi, Libya. Fifty patients diagnosed clinically with viral warts were recruited during routine outpatient visits. Patients of both genders and different age groups were included after providing informed consent. Data were collected from patients in two stages. First, patients underwent a full dermatological examination to document the type, location, number, and duration of warts. Second, participants themselves filled in the Quality-of-Life Index (QOLI) questionnaire. This tool evaluates different aspects of life, including symptoms, feelings, daily activities, physical comfort, emotional well-being, social functioning and treatment-related issues. Sociodemographic information, including age, gender, and duration of disease, was recorded. Data were analysed using SPSS version 26.0. Statistical tests for significance, such as the Chi-square test, were used to determine the association between clinical variables and QoL scores. Statistical significance was considered at $p < 0.05$.

Results

A total of 50 Libyan patients with clinically diagnosed viral warts were included in this study. The age of participants ranged from 9 to 62 years. The mean age was 33.26 years with a standard deviation of 14.26 years. The 25th percentile was 21.25 years, the median (50th percentile) was 29.5 years, and the 75th percentile was 44.75 years. Regarding gender, 50% of participants were male ($n=25$), and 50% were female ($n=25$).

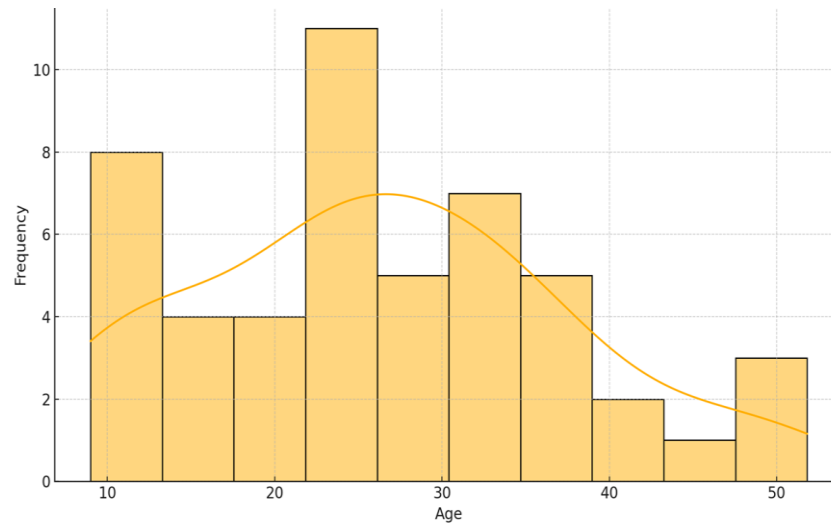


Figure 1. Histogram of Age Distribution

Table 1. Distribution of responses for Residence

Category	Frequency	Percent
Benghazi	45	90.0%
Outside Benghazi	5	10.0%

Most participants had extragenital warts (92%), and 56% had multiple wart sites. The most frequently affected region was the plantar surface (44%). The mean duration of wart presence was 26.3 months. The average Quality of Life Index (QOLI) score was 28.7%, indicating a mild to moderate impact on quality of life. Nearly half of the participants reported emotional and social challenges, including embarrassment (50%) and fear of negative judgment (42%). Regarding associated physical symptoms, many participants reported discomfort (68%) and pain (54%), particularly individuals with plantar warts. There were also reports of psychological effects, including embarrassment, anxiety about appearance, and fear of social judgment. The overall Quality of Life Index (QOLI) score pointed to a mild to moderate effect. However, significantly higher impairment scores were reported by patients with genital warts in comparison with individuals with extragenital lesions. While sociodemographic variables were not significantly associated with QOLI scores, wart site was a significant predictor, with genital wart cases reporting greater impairment ($p = 0.040$).

Table 2. Distribution of responses for Site of Wart

Category	Frequency	Percent
Genital	4	8.0%
Extragenital	46	92.0%

Table 3. Distribution of responses for Extragenital Site

Category	Frequency	Percent
Neck	6	12.0%
Palm	17	34.0%
Fingers	6	12.0%
Foot	4	8.0%
Forearm	5	10.0%
Plantar	22	44.0%

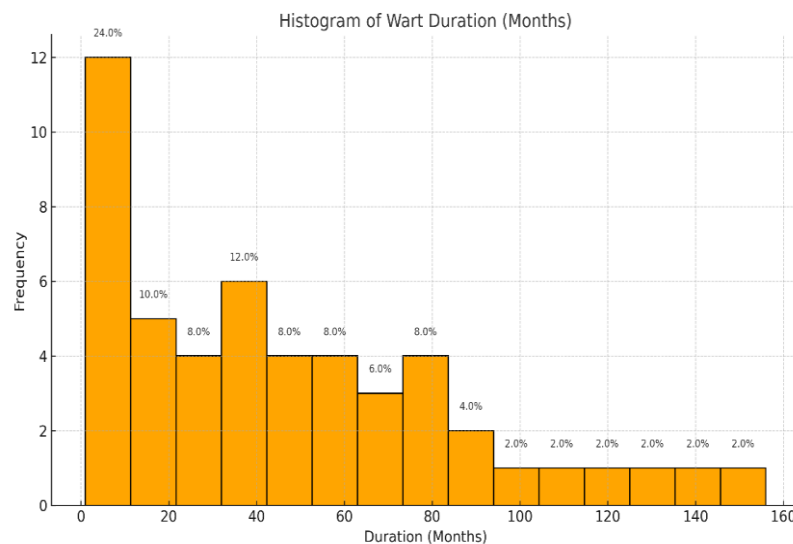


Figure 2. Histogram illustrating the distribution of wart duration (in months)

Table 4. Embarrassed or self-conscious

Response	Frequency	Percent
Yes	25	50.0%
No	25	50.0%

Table 5. Fear of negative judgment by others

Response	Frequency	Percent
Yes	21	42.0%
No	29	58.0%

Participants with genital warts scored higher than patients with extragenital warts, indicating a greater impact on quality of life. Fifty per cent of individuals with genital warts fell into the 41–50% score category. The remaining 50% were distributed equally into 21–30% and 51–60% categories, with 25% each. On the other hand, (39.1%) of the participants with extragenital warts were predominantly represented in the 31–40% score category, followed by (21.7%) in the 0–10% category. The association between wart site and QOLI scores was statistically significant ($p = .040$), suggesting that the anatomical site of the wart has an impact on the patients' quality of life.

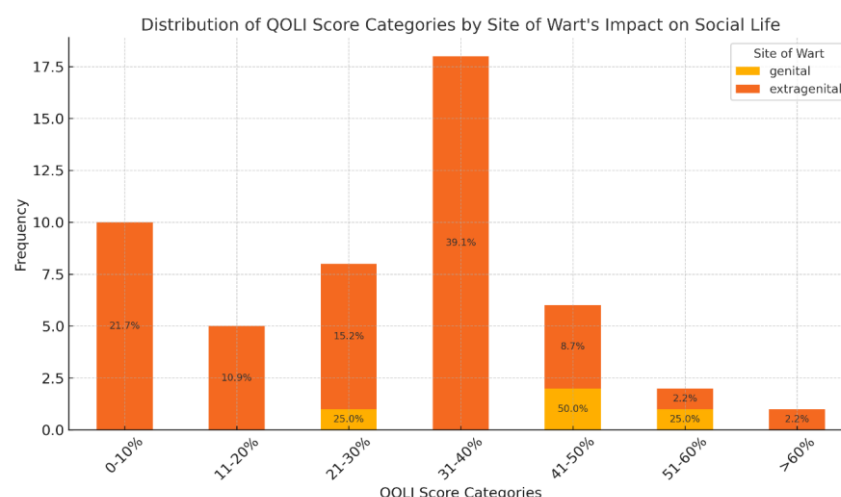


Figure 3. Stacked bar chart showing the distribution of QOLI score categories by wart site with percentage labels.

Discussion

This study found that the average QoL impairment in Libyan patients with warts (28.7%) is similar to other chronic dermatoses such as mild psoriasis or atopic dermatitis [4]. The high frequency of plantar warts in Benghazi (44%) reveals there is a role for environmental exposure, and it could be attributed to the use of shared footwear or facilities [5]. An

important finding in this study is the high impact of genital warts on perceived quality of life. While representing only 8% of the sample, these patients showed significantly higher QOLI scores ($p=0.040$) [6]. This psychological impact is often caused by the "stigma of sexually transmitted infections" and the fear of partner transmission, which is a major concern in conservative societies [2, 7]. Moreover, the long mean duration of infection (26.3 months) suggests a high rate of treatment failure or recurrence, which affects the patient's long-term well-being [3, 8]. The findings of this study indicate that viral warts can influence many aspects of patients' lives. Despite being regarded as a minor dermatological condition, the presence of visible lesions may cause emotional distress and may lead to reduced self-confidence. Based on these results, a holistic treatment approach where psychological counselling is integrated is highly advised. The results of this study confirm what previous literature has illustrated on the impact of dermatological disease on psychological wellbeing. In particular, genital lesions may cause greater distress due to cultural perceptions, stigma, and concerns related to sexual health. Therefore, healthcare providers should adopt a holistic approach when treating viral warts. Clinicians should consider the psychological and social needs of patients. This approach may involve patient education and counselling to reduce stigma and improve coping strategies.

Conclusion

Viral warts can cause a significant impact on the patients' quality of life. The overall Quality of Life Index (QOLI) score pointed to a mild to moderate effect. However, significantly higher impairment scores were reported by patients with genital warts in comparison with individuals with extragenital lesions. ($p = 0.040$). There were also reports of psychological effects, including embarrassment, anxiety about appearance, and fear of social judgment. Therefore, both treating the clinical condition and addressing the psychological impact are important for successful management.

Recommendations

We recommend that future studies use larger sample sizes that cover multiple centres across different regions of Libya. The integration of psychosocial assessment into dermatological practice is recommended. Also, health education of patients about the potential impact of viral warts on quality of life is essential.

References

1. Loo SK, Tang WY. Warts (non-genital). BMJ Clin Evid. 2009.
2. Woodhall SC, Ramsey T, Cai C, Crouch S, Jit M, Birks Y, et al. The psychosocial impact of genital warts: a qualitative study. Sex Transm Infect. 2008.
3. Al-Majbari A. Impact of Viral Warts on Quality of Life among Libyan Patients. Internal Study Report, Benghazi. 2024.
4. Finlay AY, Khan GK. Dermatology Life Quality Index (DLQI). Clin Exp Dermatol. 1994.
5. Sterling JC, Gibbs S, Haque Hussain SS, Mohd Mustapa MF, Handfield-Jones SE. British Association of Dermatologists' guidelines for the management of cutaneous warts. Br J Dermatol. 2014.
6. Gubbiotti M, et al. Physical and psychological impact of HPV-related lesions on quality of life. J Med Virol. 2013.
7. Basra MK, Finlay AY. The family impact of skin diseases: the Family Dermatology Life Quality Index. Br J Dermatol. 2007.
8. Maw RD, Reitano M, Roy M. Impact of anogenital warts on quality of life. Genitourin Med. 1998.