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# Affectation of the quality of life generated by vitiligo with genital compromise in adult women residing in the Colombian Caribbean

# Afectación de la calidad de vida generada por el vitiligo con compromiso genital en mujeres adultas residentes en el Caribe colombiano

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## ABSTRACT

**Introduction:** Female genital vitiligo affects the skin of the vulva and can be isolated or generalized. **Objective:** To identify the magnitude of the impact on quality of life (QoL), its consequences, the psychosocial burden, and the impact generated by vitiligo with genital involvement. **Method:** A descriptive study was designed with adult women with genital vitiligo and residents of the Colombian Caribbean. QoL, its consequences, psychosocial burden, and the impact of vitiligo were evaluated with the Dermatology Life Quality Index and Vitiligo Impact Scale. **Results:** 78 women participated, age: 46.8±12.5. 69.2% were "great" or "extremely great" in terms of QoL impairment in 79% because of the limitation in interpersonal relationships or sexuality, and in 97.4%, the psychosocial impact was high. The affectation of QoL. **Conclusions:** Vitiligo generates a high impact and great magnitude in affecting QoL in women.

**Keywords:** Vitiligo; Quality of life; Genitalia female; Psychosocial impact; Mental health; Skin diseases.

## RESUMEN

**Introducción:** el vitiligo genital femenino afecta la piel de la vulva y puede cursar aislado o generalizado. **Objetivo:** identificar la magnitud de la afectación de la calidad de vida (CV), sus consecuencias, la carga psicosocial y el impacto que genera el vitiligo con compromiso genital**. Método:** se diseñó un estudio descriptivo con mujeres adultas con vitiligo genital y residentes en el caribe colombiano. Se evaluó CV, sus consecuencias, carga psicosocial e impacto del vitiligo con Dermatology Life Quality Index y Vitiligo Impact Scale. **Resultados:** participaron 78 mujeres, edad: 46,8±12,5. El 69,2% fue "grande" o "extremadamente grande" en afectación de la CV y en el 79% a consecuencia de la limitación en las relaciones interpersonales o en la sexualidad y en el 97,4% fue alto el impacto psicosocial en la afectación de la CV. **Conclusiones:** el vitiligo genera alto impacto y gran magnitud en la afectación en la CV en mujeres.

**Palabras clave:** vitíligo; calidad de vida; genitales femeninos; impacto psicosocial; salud mental; enfermedades de la piel.

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## INTRODUCTION

The skin plays an essential role in the interaction of people with their environment, which can be affected by morbid conditions.[1] One of them is vitiligo, a benign non-venereal skin disease that causes physical deterioration and limitations in healthy psychosocial development due to the discrimination and stigma derived from the loss of natural skin pigmentation in some body regions.[2-10]

Vitiligo is a chronic autoimmune dermatosis associated with genetic, metabolic, traumatic, oxidative stress, and environmental factors, which causes selective destruction of melanocytes and dilution of melanocytic pigment.[2-5,11] Vitiligo has a global prevalence between 0.5 and 2.0%; it presents similarly in all races and sexes. This pathology begins between 10 and 30 years, is usually progressive, and is clinically characterized by non-scaly hypopigmented macules of chalky white color with marked margins and with the possibility of involving minor to extensive areas of skin, including or not the external genitalia.[4,12]

Female genital involvement can affect the skin of the vulva, the labia majora or minora, the clitoris, the perianal area, or simultaneously the skin and genital mucosa, presenting as generalized vitiligo or as an isolated condition.[2-4] In 2011, the "Vitiligo European Taskforce" (VETF) made an international consensus within the framework of the International Pigment Cell Conference (IPCC) and classified vitiligo into four primary forms: non-segmental vitiligo, segmental vitiligo, mixed and unclassified, which is of interest due to the prognostic implications.[11]

Although several studies have revealed a reduction in the quality of life (QoL) of patients suffering from vitiligo,[5,6,12] few studies assess the humanistic burden (perception of well-being, beliefs, opinions, comfort in carrying out activities). daily, satisfaction, behaviors, and feelings) that generates vitiligo with genital involvement in women. It is possible that, for sociocultural or psychosocial reasons, Colombian and Latin American women have a more significant impact on their QOL with a negative impact on their sexuality or relationships with other people.

The objective was to identify the magnitude of the QoL impairment, its consequences, the psychosocial burden, and the impact generated by vitiligo with genital involvement.

## METHOD

A cross-sectional study was carried out with part of the information housed in a database that belongs to the research project "Colombian Women and Skin," approved by the institutional committee of the University of Cartagena, Colombia, according to Resolution 01386 of 2021. The suggestions and recommendations of the STROBE initiative were considered when structuring the research report. [13]

### Participants

At convenience for twenty-two months, from May 2021 to February 2023, women between 20 and 60 years old, living in the Colombian Caribbean region and having a diagnosis of vitiligo proven with a skin biopsy were invited to participate in the study. The sample size was calculated with the OpenEpi program, a finite population was considered, a hypothetical prevalence of 2.0%, a confidence limit of 5%, and a confidence interval of 95%, and the sample size was estimated: 31 women with genital vitiligo. Women who did not wish to participate, those who needed help understanding the questions, and those who wished to withdraw, leaving their participation incomplete, were excluded.

## Instrument

A form was specially designed to record personal data (age, education, occupation, ethnicity by self-recognition, having a stable sexual partner, marital status) and clinical information related to vitiligo (age of diagnosis, family history, and geographic areas involved). Finally, it included the Spanish versions of the dermatological scales: Dermatology Life Quality Index (DLQI) and Vitiligo Impact Scale (VIS-22).

DLQI is a generic health QOL questionnaire specific for patients with dermatological disease, developed in 1994 by Finlay et al.[9,14] It consists of ten questions to answer: "not at all," "a little," "a lot" or "very much," assigning since zero to three points, respectively. Through six domains, it establishes the following consequences or situations about QoL impairment: symptoms (itching, pain, and irritation), feelings (embarrassment, anxiety, and anger), treatment for vitiligo, as well as limitations in daily activities (shopping and household chores), in recreation (type of clothing, social or leisure activities, physical exercise), at work or in educational activities and interpersonal relationships or sexuality. The global score ranges from 0-30; the higher the number, the worse the QoL. The percentage of QoL involvement due to a dermatological disease is established by multiplying these points by one hundred. At the same time, the QoL impairment can be ranked using the classification bands proposed by Hongbo et al.[15] “no effect at all" (0.00-1.99), "small effect" (2.00-5.99), "moderate effect" (6.00-10.99), "large effect" (11.00-20.99) and "huge effect" (21.00-30.00). A score higher than ten also indicates that the skin disease has a “large effect” on QOL involvement.[14-17]

The cross-cultural adaptation to Spanish carried out by De Tiedra et al.[18] was used. No validation studies were identified in Colombian women. The factor analysis has indicated Cronbach's alpha: 0.83 and high intercorrelation between the dimensions. [14] For the present study, a score above the average for each domain indicated a situation or limitation due to vitiligo. In the current sample, Cronbach's alpha was 0.71.

The VIS-22 is a specific scale for vitiligo that evaluates psychosocial burden and, with the global score, the impact generated by this disease. [12] It is an abbreviated version, made up of 22 questions that explore opinions, perceptions, and feelings regarding vitiligo, and are answered "not at all," "a little," "a lot," or "too much," giving 0, 1, 2 or 3 points, respectively. The global sum ranges between 0-66, and higher scores indicate a more significant impact generated by vitiligo. Five scoring bands have been proposed: 0-6, 7-21, 22-36, 37-51, and 52-66. [12] It has also been suggested that the impact on affectation be interpreted as low (0-21 points) and high (22 points and above).[19.20]

This instrument can be helpful in clinic and clinical trials and is a valid measure of the psychosocial impact of vitiligo. It has a test-retest reliability coefficient (Spearman rank correlation) of 0.80.[19,20] No studies or validation were identified in the Hispanic American population; the items were translated into Spanish by a health professional with bilingual training based on the proposal of Grupta et al.[12] In the study population, Cronbach's alpha was of 0.72. A Kappa index of 0.55 has been indicated when evaluating the agreement between the VIS-22 and DLQI scales.[12]

### Procedure

The invitations were made through social networks, press releases, and by telephone, taking data from lists of patients offered by doctors from different specialties, with prior approval from the patients. Women with vitiligo participated in an anonymous, voluntary, and unpaid telephone or in-person survey unrelated to health care. They declared that they carried out daily tasks, were active at a social level, and otherwise had a perception of good health and provided informed consent.

### Statistical analysis

Statistical analysis was performed with EPI-INFO-7 [Center for Disease Control and Prevention, Atlanta, USA]. Continuous variables were expressed as mean and standard deviation, while categorical variables were shown with absolute and relative values.

### Ethical considerations

The University of Cartagena, Colombia's institutional ethics committee approved the project. The women were informed of the research objectives, gave informed consent, and did not receive incentives in return. The Declaration of Helsinki on human research, the ethical principles of the Belmont Report, and Resolution 8430 of 1993 of the Colombian Ministry of Health were always taken into account.

## RESULTS

A total of 184 women diagnosed with vitiligo expressed interest in participating in the study; subsequently, 23 (12.5%) requested to withdraw. One hundred sixty-one women thoroughly answered the questions, of which 78 (29.8%) reported having vitiligo in the genital area and were considered for the analysis.

The mean age of the participants was 46.8±12.5; 79.4% had a sexual partner, all had previously had intercourse, 21.8% were of African descent, and 43.6% had technical or higher education. Seven out of ten women had vitiligo on the face or trunk, and eight out of ten had lesions on the extremities. In addition to genital vitiligo, all of them had involvement in other skin areas, and 75.7% had been diagnosed for ten or more years. See Table 1.

The DLQI score was 13.4±4.9. "Difficulties in sexual life" and "discomfort due to treatment" had the worst scores, affecting 55% and 32% of women "very much," respectively—more details in Table 2.

79% of the participants had QoL affected as a result of limitations in interpersonal relationships or sexuality due to vitiligo. See Table 3.

All participants had some percentage of QOL involvement due to vitiligo, ranging between 5.0 and 29.0%.

With VIS-22, a score of 35.2±8.7 was found. "Powerless over vitiligo" and "believing that it is the worst disease someone can have" were the psychosocial burdens with the worst scores. Details are in Table 4.

**Table 1.** Sociodemographic and clinical characteristics related to vitiligo.

| **Variable** | Frequency (%) |
|---|---|
| *Age, years* | |
| Age between 21-40 years | 29 (37.2) |
| Age between 41-60 years | 49 (62.8) |
| Ethnicity | |
| Mixed race | 61 (78.2) |
| Afro-descendant | 17 (21.8) |
| *Scholarship* | |
| Primary or secondary | 44 (56.4) |
| Technical or higher | 34 (43.6) |
| *Activity* | |
| Student | 3 (3.8) |
| Homemaker | 35 (44.8) |
| Work activity outside the home | 40 (51.2) |
| *Marital status* | |
| With a stable sexual partner | 62 (79.4) |
| Single or separated | 16 (20.5) |
| Vitiligo | |
| family history | 16 (20.5) |
| Age of onset, years | 25.6±11.2 |
| Evolution time (years) | 21.1±12.0 |
| Less than 11 | 19 (24.3) |
| Between 11 and 20 | 17 (21.7) |
| Between 21 and 30 | 25 (32.0) |
| Largest than 30 | 17 (21.7) |
| Location of lesions | |
| Only in unexposed areas | 6 (7.6) |
| Exposed and unexposed areas | 72 (92.3) |
| Expensive | 56 (71.7) |
| Trunk | 55 (70.5) |
| Superior members | 65 (83.3) |
| Lower limbs | 64 (82.0) |

**Table 2.** Health-related quality of life for patients with dermatological diseases. Dermatology Life Quality Index [DLQI].*

| In the last seven days | Punctuation | Nothing at all | A bit | A lot | Very much |
|---|---|---|---|---|---|
| Itching, inflammation, pain, or stinging of the skin | 0.71±0.97 | 45 (57.7) | 16 (20.5) | 11 (14.1) | 6 (7.7) |
| Discomfort due to your skin problems | 1.14±1.27 | 37 (47.4) | 14 (18.0) | 6 (7.7) | 21 (26.9) |
| Skin problems had interfered with her shopping and taking care of herself at home or in the garden. | 0.96±1.22 | 45 (57.7) | 5 (6.5) | 14 (17.9) | 14 (17.9) |
| Skin problems influenced the clothes I wore | 1.43±1.17 | 25 (32.0) | 13 (16.7) | 21 (26.9) | 19 (24.4) |
| Skin problems affect social or recreational activity | 0.97±1.26 | 45 (57.7) | 8 (10.3) | 7 (8.9) | 18 (23.1) |
| It has been difficult for him to play a sport because of his skin problems | 1.21±1.24 | 34 (43.6) | 12 (15.4) | 13 (16.7) | 19 (24.3) |
| Skin problems have prevented or caused any problems when working or studying | 1.16±1.06 | 33 (42.3) | 4 (5.2) | 36 (46.1) | 5 (6.4) |
| Skin problems have caused you problems with your partner, a close friend, or a relative | 1.55±1.37 | 31 (39.7) | 5 (6.4) | 10 (12.8) | 32 (41.1) |
| Skin problems have made your sex life difficult | 2.47±0.65 | 1 (1,3) | 4 (5.2) | 30 (38.4) | 43 (55.1) |
| Skin treatment has been a problem because it makes the house dirty or takes time. | 1.80±1.05 | 12 (15.3) | 16 (20.5) | 25 (32.1) | 25 (32.1) |

*Data are presented in mean ± standard deviation or frequency n (%)*

*(*) Overall scale score among participants: 13.4 ± 4.9*

**Table 3.** Affectation of quality of life in women with vitiligo.*

| | |
|---|---|
| Limitation in interpersonal relationships or sexuality (Items 8 and 9)[a] | 62 (79.4) |
| As a result of treatment for vitiligo (Items 10)[b] | 50 (64.1) |
| Limitation on recreational activities (items 5 and 6)[c] | 48 (61.5) |
| Limitation in daily or routine activities (Items 3.4)[d] | 48 (61.5) |
| Limitation at work or study (Items 7)[e] | 48 (61.5) |
| As a result of the symptoms and feelings about vitiligo (Items 1.2)[f] | 41 (52.5%) |

*Consequences established with the domains of the DLQI scale.Score above the average among the women in the study The score for each domain: (a)4.02±1.54. (b)1.80±1.05. (c)2.19±1.85. (d)2.39±2.12. (e)1.16±1.06. (f)1.85±1.79.

**Table 4.** Psychosocial burden generated by vitiligo. Vitiligo Impact Scale - 22 [VIS-22].*

| | Punctuation | No way | A bit | A lot | Too much |
|---|---|---|---|---|---|
| Believe it is an incurable disease | 2.08±0.99 | 5 (6.4) | 20 (25.6) | 16 (20.5) | 37 (47.4) |
| You have changed doctors in search of another concept | 1.79±0.98 | 7 (9.0) | 26 (33.3) | 21 (26.9) | 24 (30.8) |
| You are bothered by other people's suggestions and advice about the disease | 1.26±1.15 | 28 (36.0) | 17 (21.7) | 17 (21.7) | 16 (20.6) |
| Other people feel that this disease is transmitted by touching it | 1.07±0.83 | 19 (24.4) | 39 (50.0) | 15 (19.2) | 5 (6.4) |
| You have trouble wearing the clothes you want | 1.57±1.06 | 14 (18.0) | 25 (32.0) | 19 (24.4) | 20 (25.6) |

| | | | | | |
|---|---|---|---|---|---|
| You feel helpless in the face of the disease | 2.06±0.90 | 3 (3.9) | 20 (25.6) | 24 (30.8) | 31 (39.7) |
| She has difficulty adhering to treatment | 1.56±0.92 | 12 (15.4) | 21 (26.9) | 34 (43.6) | 11 (14.1) |
| His parents keep asking him to seek treatment | 1.43±0.94 | 11 (14.1) | 36 (46.2) | 17 (21.8) | 14 (17.9) |
| You feel that life is not worth living with this disease | 1.48±0.83 | 10 (12.8) | 27 (34.6) | 34 (43.6) | 7 (9.0) |
| You feel depressed by the illness | 1.98±0.96 | 4 (5.1) | 24 (30.8) | 19 (24.4) | 31 (39.7) |
| Think frequently about this illness | 1.67±0.91 | 6 (7.7) | 31 (39.7) | 23 (29.5) | 18 (23.1) |
| Has stopped or reduced going to parties or meetings | 1.12±1.22 | 36 (46.2) | 13 (16.7) | 12 (15.3) | 17 (21.8) |
| You feel that your friends or family avoid you | 0.75±1.21 | 54 (69.3) | 4 (5.1) | 5 (6.4) | 15 (19.2) |
| Have you thought about ending your life due to the disease? | 0.88±1.16 | 44 (56.4) | 12 (15.4) | 9 (11.6) | 13 (16.7) |
| You have restricted the consumption of some food because you feel that it increases injuries | 0.94±1.22 | 44 (56.4) | 10 (12.8) | 8 (10.3) | 16 (20.5) |
| You are bothered by the amount of money you have spent on treatments | 1.96±1.16 | 14 (18.0) | 12 (15.3) | 15 (19.2) | 37 (47.5) |
| She thinks this is the worst disease anyone can have. | 2.02±0.86 | 7 (9.0) | 7 (9.0) | 41 (52.5) | 23 (29.5) |
| Is embarrassed when meeting people | 1.56±1.06 | 15 (19.2) | 23 (29.5) | 21 (27.0) | 19 (24.3) |
| Worries if new injuries develop | 1.93±0.97 | 7 (9.0) | 18 (23.0) | 26 (33.3) | 27 (34.7) |
| For married women, in-laws worry about their white spots. For the unmarried: you will have problems getting married or living with a partner due to your white spots | 2.16±1.08 | 11 (14.1) | 7 (9.0) | 18 (23.0) | 42 (53.9) |
| Her coworkers treat her differently because of her illness. | 2.17±1.15 | 13 (16.7) | 7 (9.0) | 11 (14.1) | 47 (60.2) |
| Her fellow students treat her differently because of the illness. | 1.62±1.20 | 25 (32.1) | 1 (1,3) | 30 (38.4) | 22 (28.2) |

*Data are presented in mean ± standard deviation or frequency n (%)*

*[*] Global scale score among participants: 35.2 ± 8.7.*

In 69.2% of the participants, the impact on QOL was "large" or "huge," while in 97.4%, the impact that vitiligo had on said impact was high.

## DISCUSSION

In a group of women who reported residing in the Colombian Caribbean and presenting genital vitiligo, it was found that 69% had significant QoL involvement, and in 97%, the impact generated by said disease was high. Furthermore, in 79% of the participants, the QoL impairment was a consequence of the limitation in interpersonal relationships or sexuality generated by vitiligo. These findings are consistent with the statements of several authors[4,6,21-26] who have emphasized that vitiligo should not be considered only a cosmetic and insignificant pathology since it usually generates a significant burden of disease with an impact on daily life, which leads to a perception of loss of well-being and psychosomatic deterioration. A meta-analysis that included 1,799 people with vitiligo reported worse QoL when comparing patients with vitiligo with healthy controls, measuring the standardized mean difference (SMD=1.98; 95%CI 1.08-2.88].[27]

Among the participants, a score of 13.4±4.9 was found on the DLQI scale, similar to the 14.0±2.1 reported by Sarhan et al.[4] in Egyptian women with genital vitiligo. These authors indicated that QOL was worse in women who had genital vitiligo when compared to other women with vitiligo without genital lesions.[4] The above is supported by a systematic review that reported that QOL is substantially reduced in patients with vitiligo with visible lesions (neck, face, hands) or in sensitive areas (genital, anogenital).[5] On the other hand, using the VIS-22 found a significant presence of psychosocial burden, similar to what was pointed out by Picardo et al.[5] in a systematic review involving heterogeneous studies on vitiligo.

In the present study, eight out of ten participants reported limitations in interpersonal relationships or sexuality as a result of vitiligo, this being the most altered domain. The same was found among Egyptian women with genital vitiligo.[4] The presence of genital vitiligo has been related to dysfunction and failure in sexual satisfaction, affecting sexuality.[4,6,10,28] In turn, genital self-image (women's appreciation of their genital organs) and sexual function are positively correlated with vitiligo lesions in the genitals.[4,28] There is extensive information indicating that genital vitiligo can be related to feelings of shame, especially with a new partner; therefore, it is possible to expect a higher rate of sexual failure and the adoption of an avoidance attitude. [6,10] Desire, arousal, lubrication, orgasm, pain, and sexual satisfaction were worse in women with vitiligo of the genital area than in other women without genital involvement and when compared to controls without vitiligo.[4] Along the same lines, Sukan et al.[28] have indicated that vitiligo hurts sexual life. Also, Silverberg et al.[23] indicated that lesions in the genital area or chest are significantly associated with sexual dysfunction. Alteration of genital image and deterioration of sexual satisfaction are related to worse QoL.[10]

It was found that 53% of women thought "too much" that their in-laws worried about white spots or that, as a result of the disease, they had too many problems living as a couple. Likewise, we found that 24.3% were "too embarrassed" to meet people. In a study conducted by Fatani et al.[29] in a healthy population that went shopping in a shopping center in Saudi Arabia, it was found that 42.8% would not marry someone with the disease, 24.8% would not sit down to eat at the same table with a person with the disease, and 24.1% would avoid shaking hands with someone with vitiligo for fear of contagion. The above and other psychosocial repercussions of vitiligo have been pointed out.[2,4,6,9,23,24]

No studies were identified that explored psychological effects among women with genital vitiligo specifically. However, three meta-analyses have reported adverse psychological outcomes in people affected by vitiligo.[30-32] It is documented that mental health alterations are related to vitiligo.[5,9] Patients remain inhibited, limited, or avoid their interaction with the environment, experience subjective or objective social discrimination, and have perceptions of an unhealthy life.[5,9,22,33] Vitiligo has been described since ancient times, and for centuries, it was mistakenly confused with leprosy, which continues in the collective imagination of many communities. Today, people affected with vitiligo often experience social stigma, similar to what people living with Hansen's suffered in the past.[33] The degree of social stigmatization generated by vitiligo and genital vitiligo may vary according to cultural patterns.[4,34] Ignorance, fears, myths, the appearance of the skin, concern about the progression of the disease, self-perception of severity, and sociocultural reasons among affected women, as well as in the community in general, explain the findings of the present study.[2,3,24,35]

The presence of psychosocial burden was high, and the magnitude of QoL impairment found in women who had vitiligo lesions in the genital area was high. The finding is consistent with the psychosocial implications noted for the disease.[5,9,11,22,23] With educational campaigns for the community and affected people in which the public health implications are correctly dimensioned, it is possible to expect substantial changes in the individual and collective perception of skin disease. It is not contagious and should not generate limitations in interpersonal relationships or sexuality.

The strength of the study is that it is one of the first in Latin America to address aspects of QoL in women with vitiligo lesions in the genital area, with participants from non-hospital environments. Likewise, it makes visible the existence of important figures regarding the impact on QoL. Another strength was using universally applicable tools to identify QoL impairment and the impact of vitiligo on said impairment. It appears to be the first study to present information on the reliability of the DLQI and VIS-22 scales in Colombian women with genital vitiligo. The study has several limitations, including those of a descriptive study. The period for including women in the study was a matter of convenience, and finally, the number of women studied is small; therefore, the results are specific to the group evaluated, and extrapolations should be taken care of. It is also a limitation not to have questioned the participants about their mental health status or concurrent psychiatric pathologies since it has been pointed out that vitiligo is usually related to anxiety, feelings of inferiority (affected self-esteem), shame, perceived stress, depression, and social isolation.[2,3,4,6,21] Validation studies of both scales in the Colombian population and cross-cultural adaptation to Spanish of the VIS-22 scale are warranted.

It is recommended that governmental and non-governmental, health, informational, or educational bodies disseminate correct information to modify the social perception and that of affected people regarding vitiligo and genital vitiligo.[2,10] It is suggested to health personnel, whether dermatologists, general practitioners, gynecologists, sexologists, psychotherapists, or nurses who care for women with genital vitiligo, that they should be interested in evaluating the burden that the disease generates on their patient's QoL. Remember that besides the DLQI and the VIS-22, the Short Form-12, the Vitiligo-Specific Health Scale, and the Vitiligo Impact Patient Scale are available.[18-20,35-38] Remember that the generic scales, unlike the specific ones, offer a general framework of QOL involvement but do not specify the disease burden generated by vitiligo.[21.30]

It is emphasized to health professionals that the treatment of women with genital vitiligo should not be limited to the clinical severity of the disease; it should also address the magnitude of QoL involvement, explore related mental morbidities, and provide Psychological Support.[39] At the same time, it is recommended that more evaluations of the humanistic, sexual, and psychosocial burden of patients with genital vitiligo be carried out to increase treatment compliance and improve well-being and the perception of satisfaction.[2,4,5,10,25] Gynecologists who identify genital vitiligo in their patients must address the dermatological treatment, the urogenital repercussions, and the sexual impact, and guide towards the attention of added psychological morbidities and psychosocial stress, understanding that the latter condition may be a precipitating factor for the progression of vitiligo.[5] The approach to women with genital vitiligo involving the urogenital mucosa (mucosal vitiligo) may warrant a massive therapeutic effort.[9]

Finally, it must be emphasized that several authors indicate that people affected by vitiligo receive insufficient support from doctors, friends, and family.2,24,28 Therefore, there are pending or insufficient educational actions among health professionals and the community.

## CONCLUSIONS

In a group of women who reported residing in the Colombian Caribbean and having vitiligo with genital involvement, it was found that seven out of ten had central QoL involvement. The limitation in interpersonal relationships or sexuality generated by the disease was the most frequent consequence of QoL impairment. More extensive studies are needed to explore variables associated with these negative consequences.

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## DECLARATION OF CONFLICTS OF INTEREST

The authors declare that there are no potential conflicts of interest regarding the research, authorship, and publication of this article.

## AUTHOR CONTRIBUTIONS

AM-C (conceptualization, data curation, methodology, writing, workshop orientation, original draft, writing, review, and editing). IT-C and AC-C (members of the FEM-Salud hotbed participated in introductory scientific writing workshops, draft reviews, initial versions, and editing). All authors approved the final manuscript.

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