



RESEARCH PAPER

Body Image, Stigmatization, and Life Quality among Young Women with Acne Vulgaris

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ABSTRACT

This study examines the relationship between body image, stigmatization, and quality of life among women diagnosed with acne vulgaris. Acne is very commonly occurring chronic inflammatory skin disease affecting people of different ages worldwide. It can affect many parts of the body, mostly the face, chest, and back, and can have a substantial negative impact on a person's quality of life. 150 women were approached from dermatology departments of hospitals in Lahore. Measures included Demographic Sheet, Body Image Scale, Stigmatization Scale, and Dermatology Life Quality Index Questionnaire. The results showed that Body image, stigmatization, and quality of life were significantly correlated in females diagnosed with Acne vulgaris. Secondly, body image and stigmatization predicted the Quality of life in females with Acne vulgaris. This study can be helpful for psychologists and counselors in planning interventions for individuals with acne vulgaris who experience poor body image, poor quality of life, and stigmatization.

KEYWORDS Acne Vulgaris, Body Image, Perceived Stigmatization, Quality of Life, Stigmatization, Young Women

Introduction

Appearance plays a vital role in one's social life. When people meet someone, the first perception others have about them is based on their appearance, their face being the most prominent and visible part of their body. Acne vulgaris can affect the way others perceive the person with acne.

Acne may cause direct physical discomfort, pain, or marks along with psychological distress. Negative aspects of acne may include low self-esteem, social anxiety, and low quality of life. People with severe acne face a very negative impact on their Quality of Life (Thomas, 2004).

The social stigma resulting from their social circle's negative response to their skin issues may impact their perception of their body. Acne vulgaris is mostly found in the facial area, making people more conscious about their appearance. This is especially true about women who are more conscious about having a clear skin and meeting stereotypical standards of beauty.

The mental description of our bodies that we maintain in our minds represents our body image. Research reveals that a range of factors including biological, psychological, cultural, historical, and social have a major influence on body image (Cash & Smolak, 2011).

Stigma can be understood as a quality that refers to prejudices that aren't respected and therefore has a negative connotation. Erving Goffman (1963) defined stigma as an "attribute that is severely disparaging". Stigma is attached to some obvious traits for instance person's skin color and body size. Such traits may not be very obvious but if exposed they may also be discreditable for example in case of a person's criminal past or suffering from mental disorders.

Since there are so many psychological and psychosocial effects of acne, the quality of life of acne patients is also low. The general well-being of people is their quality of life. According to the World Health Organization (2020), a person's perspective of their place in life in terms of goals, perceptions, norms, and concerns, as well as the culture, society, and value systems in which individuals live, is referred to as their quality of life".

A person's positive body image is linked with the quality of their life which may have frequent positive affect and occasional negative affect. Body image may have a major impact on one's quality of life. Body appreciation, approval, and affection, as well as broadly conceptualizing beauty, internal positivity, and protecting filtering information in a body-protective manner, are all important aspects of positive body image. Negative body image beliefs are more likely to lead to mental health issues which further leads to lower quality of life.

Acne is caused when your hair follicles are filled with excess sebum and dead skin cells. Mainly, acne causes whiteheads, blackheads, and pimples. It can appear in different types such as pustules, papules, nodules, and cystic acne. Acne is caused by plugged pores or hair follicles that are blocked. A clog develops when hair follicles contain an excessive amount of material. Pore blockage can be caused because of excess sebum, bacteria, or dead skin cells. There are many triggers for acne vulgaris for example the polluted atmosphere and weather conditions; in particular high humidity, can worsen an acne breakout or cause it. High levels of stress, androgenic hormones, and eating oily or foods that contains high amounts of sugar, etc. also have a role to play.

Literature Review

Many of the skin - -related diseases are not fatal, but they do pose a distinct psychological challenge. The dermal disease has a distinct psychological and social strain on those patients who frequently struggle to shield their condition from criticism by the public. One common condition that has such kind of potential to be criticized about is acne vulgaris.

Acne vulgaris, in particular, is a commonly occurring skin disease with the potential to have significant mental consequences. Acne affects 50.9 percent of women in their twenties and can persist in later years. Acne causes psychological problems in 30 to 50 percent of adolescents, including body image issues, social withdrawal, anxiety, distress, and indignation. A negative spiral results from acne because it not only causes emotional distress but can also make the skin condition worse due to psychological issues (Bowe et al., 2011)

Acne impacts the quality of life of adults more than that of the younger generation. In adults, acne can be divided into two types according to the period of onset. These are persistent and late onset. People with persistent acne have a relapse of this disease. They are affected by it in adolescence and then the disease returns in middle age or adulthood. Late-onset includes patients that are older than 25 years and were never before affected by acne. Persistent onset is more common type of acne. A cross-sectional study by Schmitt et al. (2009) revealed that 80 percent of women with acne at a general dermatology clinic had persistent acne.

A research was conducted by Zakir et al. (2019) at Quaid-e-Azam University, Islamabad. This study looked at patients with acne vulgaris' quality of life (related to dermatology) and their anxiety about their appearance in public, psychological distress, and other areas. These variables were each measured using the Social Appearance Anxiety Scale, the Kessler Psychological Distress Scale, and the Dermatology Life Quality Index, respectively. The findings revealed a significant positive correlation between the three variables (a higher dermatology life quality index score indicates a lower quality of life). Social anxiety positively predicted Quality of life. Thus, the study explained that acne

vulgaris causes high psychological distress and social appearance anxiety which as a result causes impaired quality of life.

In order to evaluate the effects of acne vulgaris on young people's self-esteem, a study was carried out at the Civil Hospital in Karachi. This study consisted of 158 participants with acne vulgaris. Self-esteem was measured using Rosenberg's self-esteem scale. According to the results the self-esteem was low for these participants and for one third of the participants the self-esteem was significantly low (Shaikh et al., 2020).

A person's life quality can be negatively impacted by low self-esteem in a variety of ways. Babar and Mobeen (2019) conducted a study on female undergraduate medical students to assess the pervasiveness and mental influence of acne vulgaris. The study included medical students from universities of Rawalpindi and Islamabad. 216 participants diagnosed with acne were asked to fill out the questionnaires. The results revealed that 66.7% of participants were embarrassed because of their acne and 60% of participants said that their life has been affected in negative ways because of the acne vulgaris as they have embarrassment feelings about their appearance.

Syed et al. (2020) conducted a cross sectional research to investigate psychological morbidity and self-esteem in patients with Acne vulgaris. Males and women (N=156) were taken from a hospital in Islamabad, Pakistan. The results revealed that people suffering from acne had lower self-esteem and a higher rate of psychological morbidity.

A study on Vitiligo and Acne patients was conducted to assess their social anxiety and quality of life. 37 patients with Vitiligo and 37 patients with acne above age 18 were taken in the study. 74 matched healthy individuals were also taken in the study. The results revealed that social anxiety, anxiety, and depression level of acne and vitiligo patients was much higher than the healthy control group. Quality of life was also lower in Acne and Vitiligo group (Salman et al., 2016).

A cross-sectional and longitudinal study was carried out by Lasek and Chren (1998) on 60 adult dermatology patients to determine the impact of acne on quality of life. The results revealed that acne significantly affected the patient's quality of life. However, the severity of acne didn't have significant effect on quality of life.

A research was conducted on adults above twenty years of age to assess the prevalence of acne. The adults were split into four different groups according to the ages. Out of 1013 participants, 744 patients had acne. The results revealed that women were affected by acne more than men in all different age groups (Collier et al., 2008).

Acne vulgaris disease is a long-term, inflammatory, and dermatological illness characterized by observable skin inflammation and scars. This can affect many regions of the body; mostly face, chest and back and it can have a substantial negative impact on person's quality of life (Rzeszutek et al., 2021).

A study was conducted in Bahauddin Zakariyya University, Multan, Pakistan, to see the psychological consequences of acne vulgaris. This research goal was to look into the relationships, self-esteem, body image, and QoL of people who have acne problems. Patients of acne vulgaris were taken from a local hospital in Multan. A purposive sample comprising 125 males and 125 females aged 13 to 20 years was studied. According to the results, body image perception and self-esteem in adolescents have strong positive correlation, and also strong relationship was found between body image perception and quality of life in adolescents. Self-esteem in adolescents influences how they feel about their bodies and how happy they are. This study came to the conclusion that adolescents' quality of life and self-esteem, as well as their perceptions of their bodies, are directly impacted by how severe their acne is (Yoqub et al., 2020).

Hypotheses

- Stigmatization is correlated with body image and quality of life in women diagnosed with acne vulgaris.
- Body image and stigmatization predict the quality of life in women diagnosed with acne vulgaris.

Material and Methods

In this study, a correlational research design was used to find out the relationship between body image, stigmatization, and quality of life among young women with acne vulgaris.

Pearson Product Movement Correlation Analysis was carried out to determine the association between body image, quality of life, and stigmatization among young women with acne vulgaris.

Participants

The approval to collect the data from the participants was taken from the concerned authorities i.e., hospitals. The sample included 149 women aged 18 years to 30 years, diagnosed with acne vulgaris and having at least 10 years of education.

Measures

The following assessment measures were used to collect data:

Demographic Sheet

A demographic information sheet was designed to collect data. It covered participant's age, gender, marital status, and education. Additionally, screening questions for the diagnosis of acne included questions about the site of most concerning acne symptoms, having any skin disease other than acne vulgaris, history of any physical illness, and the severity of acne symptoms. Participants were requested to rate their severity of acne from five acne grades.

Body Image Scale (BIS)

The body image scale (BIS) developed by (Hopwood et al., 2001) measures body image quickly and thoroughly. This was created for cancer patients and since then it has been used for many conditions.

It uses a four-point response scale. It has good psychometric properties including adequate reliability (Cronbach's alpha .93) and validity.

Perceived Stigmatization Questionnaire

The Perceived Stigmatization Questionnaire (PSQ) includes 21 items separated into three sub-scales: lack of friendly behaviors, confusing/staring behaviors, and hostile behaviors. It is a 5-point Likert scale. A Cronbach alpha value of 0.93 has been reported for the complete PSQ score (Lawrence et al., 2006).

Dermatology Life Quality Index

Finlay and Khan (1994) developed the Dermatology Life Index to assess the health-related quality of life for adults who are diagnosed with skin conditions. The DLQI consists

of 10 questions that examine patient's perceptions of how different aspects of their quality of life linked to their health have altered over the past week as a result of their skin condition.

Procedure

Firstly, approval was obtained from the University to conduct this research. The research was carried out after getting approval by BOS, ERC, and IRB. Data was collected from two hospitals of Lahore. Permission was taken from the Dermatology department. Participants' consent was obtained, and they were assured of the confidentiality and privacy of the data. The above-mentioned measures were used for data collection. Data was analyzed by SPSS 25.

Ethical Considerations

- Permission was taken from concerned authorities before conducting the research.
- The authors of the scales used in the study were contacted and their permission was taken.
- The informed consent was taken from the participants for their voluntary involvement.
- The importance, purpose of the research, and also the nature of the measures to be used in this study was explained to the participants.
- Participants were given the right of withdrawal.

Results and Discussions

The purpose of this study was to investigate the relationship between body image, stigmatization, and quality of life among women diagnosed with acne vulgaris. Furthermore, the aim was also to look into the influence of body image and stigmatization on individual's quality of life.

Pearson Product Moment Correlation Analysis was applied to find out the nature of association between body image, quality of life, and stigmatization among young women with acne vulgaris. Regression analysis was conducted to explore body image and stigmatization as predictors of quality of life in women diagnosed with Acne Vulgaris.

Table 1
Descriptive Statistics of Demographic Characteristics of the Sample (N=149)

| Variables | Levels | f | % |
|--------------------------------|---------------|-----|------|
| Marital Status | Unmarried | 131 | 87.9 |
| | Married | 13 | 8.7 |
| | Divorced | 4 | 2.7 |
| | Widowed | 1 | 0.7 |
| Education | Matric | 8 | 5.4 |
| | FSC | 25 | 16.8 |
| | Undergraduate | 103 | 69.1 |
| | Postgraduate | 13 | 8.7 |
| Skin Disease | Yes | 13 | 8.7 |
| | No | 136 | 91.3 |
| History of Physical Illness | Yes | 22 | 14.8 |
| | No | 127 | 85.2 |
| Place of Acne Symptoms | Face | 103 | 69.1 |
| | Chest | 3 | 2.0 |
| | Back | 9 | 6.0 |
| | Other | 14 | 9.4 |
| Grade to Rate Severity of Acne | More than one | 20 | 13.4 |
| | Grade I | 10 | 6.7 |
| | Grade II | 18 | 12.1 |
| | Grade III | 44 | 29.5 |

| | | |
|----------|----|------|
| Grade IV | 39 | 26.2 |
| Grade V | 38 | 25.5 |

Table 2
Psychometric Properties of Scales; Dermatology Life Quality Index, Perceived Stigmatization Scale, and Body Image Scale

| Scale | M | SD | items | Potential Range | Actual Range | Cronbach's α |
|--------------------------------|------|------|-------|-----------------|--------------|---------------------|
| Dermatology Life Quality Index | 25.1 | 11.4 | 10 | 10-50 | 10-50 | 0.89 |
| Perceived Stigmatization Scale | 2.2 | 0.7 | 21 | 1-5 | 1.1-4.1 | 0.94 |
| Body Image Scale | 10.8 | 9.2 | 10 | 0-30 | 0-30 | 0.94 |

Table 2 lists the psychometric properties of all three scales. All three scales have good Cronbach Alpha indicating high reliability with values of 0.89, 0.94 and 0.94.

It was assumed that there is a relationship between three variables; body image, quality of life, and stigmatization among young women with acne vulgaris. Pearson Product Moment correlation analysis was employed to find out the nature of association.

Table 3
Correlation between the variables Body Image, perceived stigmatization, and quality of life among women diagnosed with acne vulgaris.

| Variable | Mean | N | 1 | 2 | 3 |
|----------|-------|-----|---|---------|---------|
| 1) DLQI | 25.14 | 149 | - | 0.603** | 0.522** |
| 2) PSS | 2.21 | 149 | | - | 0.653** |
| 3) BIS | 10.84 | 149 | | | - |

Note: **p<0.01

Significant positive correlation was observed between the scores on Dermatology Life Quality Index, Perceived Stigmatization Questionnaire and Body Image Scale. This reflected that as people score higher on perceived stigmatization scale and body image scales their life quality scores also increase. Since life quality scale is inverted, a higher score on that scale will imply a bad/poor life quality and vice versa.

Regression analysis was conducted to explore body image and stigmatization as predictors of quality of life in women diagnosed with Acne Vulgaris.

Table 4

| Predictors | B | 95%CI for B | | Relationship Satisfaction | |
|--------------------------|---------|---------------|----|---------------------------|---------|
| | | LL | UL | SE | β |
| Intercept | 4.6 | [-0.83,10.07] | | 2.8 | |
| Perceived Body Image | 0.3 | [0.07,0.48] | | 0.1 | 0.2 |
| Perceived Stigmatization | 7.9 | [5.02,10.87] | | 1.5 | 0.5 |
| R ² | 0.384 | | | | |
| F | 47.13** | | | | |

Note: Dermatology Life Quality Index is an inverted scale; a higher score indicates a poor quality of life.

A regression analysis predicted the Life Quality of women suffering from Acne vulgaris using two independent variables i.e., Perceived Body Image and Perceived Stigmatization of skin issues. Both of the independent variables shared a positive significant relationship with the Dermatology Life Quality Index. The table reflected that with a unit increase in the perceived body image score, DLQI will also increase on an average by 0.3 [0.07,0.48] [t=2.62, p<0.01].

Significant levels of correlation were observed between Dermatology Quality of Life Index, Perceived Stigmatization Scale, and Body Image Scale. It was observed that both perceived stigmatization scale and body image scale showed moderate positive correlation with body image. Both of the independent variables i.e., Perceived Body Image and Perceived Stigmatization share a positive significant relationship with the Life quality scale. Based on the results, we can say that as the Body Image score rises, the Dermatology Life Quality Index scores rises as well. Likewise, as the Perceived Stigmatization score rises, Dermatology Life Quality Index scores rises as well.

Discussion

The impact of acne vulgaris on women transcends the physical symptoms. It can lead to psychological and emotional consequences, wielding considerable influence over how one perceives and values oneself in addition to overall wellbeing and life satisfaction. Suffering from acne, women may suffer with a spectrum of emotions including feelings of embarrassment and compromised sense of self-worth.

The study aimed to examine the relationship between body image, stigmatization, and quality of life in women having acne vulgaris. In addition, researcher wanted to explore if Body Image and Stigmatization can predict the quality of life in women diagnosed with acne vulgaris.

The first hypothesis of this study was that stigmatization is correlated with body image and quality of life in women diagnosed with acne vulgaris. The study's results supported the hypothesis. The result of Pearson product-moment correlation showed that there is a correlation between the Dermatology Quality of life index, perceived Stigmatization Scale and Body Image scale. According to the results, both the Perceived Stigmatization Scale and Body Image Scale have a moderate but positive correlation with Body Image. This means that as people score higher on the two scales i.e., body image and stigmatization, their life quality scores also increase. Since life quality scale is inverted, a higher score on that scale implies a bad life quality and vice versa. The correlation being described is characterized as "moderate but positive."

The correlation points to the likelihood that the higher the individuals perceive stigmatization directed at them, the less positive their view of their physical form becomes. This suggests an association in which amplified perceptions of societal stigma correspond with a diminished sense of body image.

Similar findings have been reported by Salman et al., (2016) who studied body image and quality of life in patients with acne vulgaris and vitiligo. Their findings showed that social anxiety, depression, and anxiety were high in these patients as compared to healthy controls. The quality of life was found to be low in the patients as compared to healthy controls. In a study reported by Zakir et al. (2019), it was reported that body image was correlated with Quality of life.

The second hypothesis of this study was that Body image and stigmatization predict the quality of life in women diagnosed with acne vulgaris".

This hypothesis is supported by the results of the study. The results from the regression analysis reveal that both perceived body image and perceived stigmatization are significant predictors of quality of life in women diagnosed with acne vulgaris, as measured by the Dermatology Life Quality Index (DLQI). Notably, perceived stigmatization has a stronger impact on life quality than body image dissatisfaction. This highlights the importance of addressing both psychological factors in interventions aimed at improving the well-being of women experiencing acne.

The significant findings of this research point towards the unfortunate reality that when a woman internalizes harsh societal judgments about her physical appearance and experiences stigmatization her overall sense of life quality and ability to thrive become considerably compromised. It is likely that a woman's dismal view of her physical being (for instance, feeling distressed, insecure or negatively evaluating her appearance owing to her acne flare-ups), coupled with her conviction that she is largely stigmatized in society (such as feeling underappreciated or discriminated against due to her acne), may have negative consequences on her general quality of life and happiness in life.

By stating that body image and stigmatization “predicted” the quality of life, it suggests that these variables were identified as important factors that can help explain or determine the level of quality of life experienced by women with acne vulgaris. Women’s body image, perception of own appearance, and the stigma related to not having (or having less than) a perfect body and the internalization of societal prejudices correspond with women’s psychological well-being.

Similar findings have been reported by Farshi et al., (2013). Self-esteem was found to be effective in predicting the quality of life in people with skin diseases.

Conclusion

The result shows that body image, perceived stigmatization, and quality of life have a significant correlation. Secondly, the results reveal that body image and perceived stigmatization predict quality of life in females diagnosed with acne vulgaris. This suggests that the higher the score in body image and stigmatization, the poorer the quality of life and vice versa. Body image and perceived stigmatization can predict life quality of women diagnosed with acne vulgaris. All these findings are also supported by previous literature.

Recommendations

- Further studies should include a larger sample to get more in-depth data.
- The data can be made more generalizable if the sample is collected from different cities of Pakistan.

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