Impact of acne vulgaris on self-esteem, body image perception and quality of life among adolescents

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Abstract

Background Different aspects of one’s life like Self-Esteem, Body image perception and quality of life are adversely affected by Acne vulgaris. Although acne affects the majority of adolescents, but in order to check the impact of acne on self-esteem, body image perception and quality of life in this age group less data is currently available.

Methods This study comprised of 250 member, they were of 10 to 18 years old with the issue of acne vulgaris. At that point their sexual orientations, age, acne seriousness level, living arrangement were gathered as demographic variables; and respondent were chosen through purposive testing procedure. Three scales were used to assess the variable of the study Body Image State Scale developed by Cash, (2005), Rosenberg Self-Esteem Scale grew by Rosenbery, (1965) and Quality of life Index Developed by Basra et al., (2008). The universe of the present study was Nishtar Hospital Multan.

Results Significant positive correlation has been found between the body image perception and self-esteem among adolescents while the body image perception and quality of life among adolescents were also positively correlated. Results further revealed a significant positive correlation between the self-esteem and quality of life among adolescents. Self-esteem is moderate the body image perception and quality of life among adolescents.

Conclusion This study concluded that the level of acne severity is directly associated with quality of life among adolescent and it also blow the self-esteem and body image perception of adolescents.

Key words
Acne vulgaris, self-esteem, body image, quality of life, adolescents.

Introduction

Acne is common inflammatory dermatosis skin problem teenagers are largely affected by this disease and at the same time this skin disease is also found among adults. Acne patients experience mental burden under such situation and many investigations found that this skin problem effects life quality. Suicidal ideation and prevalence of depression was also revealed. Acne has a great impact on self-esteem of adolescents during developmental stages.

Acne Vulgaris does not cause any direct physical impairment, but psychological distress is common among the adolescent population. Different investigations found poor body image, low self-esteem, and social isolation among the patients with moderate-to-severe acne problems. Higher levels of anxiety, anger, depression, and frustration are some common emotional impacts of this problem. Psychological distress can affect social, vocational, and academic performance of
adolescents with acne problems. Mainly these studies were conducted among patient groups in the US and Europe.\textsuperscript{12,15-17}

Acne is caused by over activity of sebaceous glands under the influence of androgens. Hormone activity, heredity, oily substances, and certain medications are some common factors which may aggravate this problem.\textsuperscript{18} Almost all youngsters experience the occasional pimple\textsuperscript{19}. Adolescents experience symptoms of embarrassment, anger, shame, and depression because of acne.\textsuperscript{20,21} Severe acne problems have a negative impact on quality of life (QOL).\textsuperscript{22}

Adolescents experience different biological, physical, psychological, and interpersonal changes. Self and body images are some important dimensions throughout this developmental stage. Body image is a representation of one’s own body, and how desirable one feels in the context of peers, family, and other relationships. Discrepancy between a person’s self-perceptions and observed interpersonal experiences can create disturbances. Dermatological problems influenced body image\textsuperscript{23,24} or when adolescents have skin disease.\textsuperscript{23} For individuals with depression and obesity body image is also an important dimension.\textsuperscript{25} In light of these evidences in existing literature, it is to be expected that burden of acne may lead to psychological consequences like self esteem and body image among adolescents. The aim of our study was to explore the relationships, self-esteem, body image and quality of life among individuals suffering from acne problems.

**Significance of study**

Nowadays body image dissatisfaction is very high among adolescents. The image of beauty for men and women of all ages portrayed by our society is very twisted. Recently a study conducted on adolescents in Canada shows that 36%-50% children of Grade 6-10 are not satisfied with their body size. Due to extreme pressure and unrealistic expectations from peers, media and society; adolescents try their best to change themselves to what the media wants to make them. For the development of healthy and successful adolescents this study will provide implications for counsellors, parents and educators. Its practical significance is that counsellors in their daily counselling sessions should use various preventive, therapeutic and creative techniques. Instead of trying to find a quick solution to the problem, counsellors should adopt such programs which increase the chances of resiliency among them, emphasize the strengths of the adolescents and pre-adolescents and make them work better.

**Methods**

**Instruments** Following instruments were used in this research’

1. Body Image Scale
2. Assessment of Self-Esteem
3. Quality of life

1. **Body State Image Scale developed Cash, (2005)** The Body Image States Scale (BISS)\textsuperscript{26} comprises of six points: (1) dissatisfaction to satisfaction with adolescents physical general appearance; (2) dissatisfaction to satisfaction with adolescents shape and size of body; (3) dissatisfaction to satisfaction with adolescents weight; (4) ugliness to sentiments of physical attractiveness; (5) present emotions about adolescents looks in respect to how adolescents normally feels; and (6) assessment of adolescents appearance in respect to how the adolescents generally look. Like reactions to everything was measured through Likert scales which determined on 9-point. The lower score shows lower body image state and vice versa.
2. **Self-Esteem Scale** This Self-Esteem Scale was produced by Rosenberg in (1965). There are ten items which were on one-dimensional and self-report measure of self-esteem utilizing a Likert scale. The higher score showing the better self-esteem and vice versa, reliability of the scale was 0.82.

3. **Quality of life Index Developed by Basra et al, (2008)** To measure the life satisfaction the researcher utilized the Quality of Life Scale, an instrument by American clinician John Flanagan in 1970. It comprises of 10 things that intend to gauge how much your skin issue has influenced your life in the course of the most recent week. The higher the score, the more life-satisfaction is disabled.

**Participants**

This study was carried out in dermatology departments of Nishter Hospitals of Multan. In order to select the sample purposive procedure was used. The criterion group (N=250; M=125, F=125; age ranged from 13-20 years). The researcher read each statement and response categories for those patients who were unable to understand.

**Procedure**

Present study was designed to quantify the of impact acne vulgaris on the body-image, self-esteem and life-satisfaction among adolescents. The researcher took all the patients from Nishtar Hospital Multan. Researcher gets the permission from the participants, research purpose was briefly explained and some general guidelines were given to the respondent. Initially demographic information was gathered then all three scales were filled by respondents.

After data collection all responses were entered in SPSS for statistical analysis. The following results were found.

**Table 1** showed the result from Pearson Correlation on body image and self-esteem variables. The table indicates that there a significant positive correlation between the body image and self-esteem among adolescents. So the hypothesis of the study was accepted.

**Table 2** showed the result from Pearson Correlation on body image and quality of life variables. The table indicates that there is significant positive correlation between the body image and quality of life among adolescents. So the hypothesis is accepted.

**Table 3** showed the result from Pearson Correlation on self-esteem and quality of life variables. The table indicates that there is significant positive correlation between the self-esteem and quality of life among adolescents. So the hypothesis is accepted.

**Table 4** presented the results from independent sample t-test on body image, self-esteem and quality of life variable for the 13-15 and 16-20 year age group, respectively.

**Table 1** Correlation between body image and level of self-esteem among adolescents (N = 250)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Body Image</th>
<th>Self Esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Image</td>
<td>1</td>
<td>0.165**</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>0.165**</td>
<td>1</td>
</tr>
<tr>
<td>p&lt;0.01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2** Correlation between body image and quality of life among adolescents (N = 250)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Body Image</th>
<th>Quality of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Image</td>
<td>1</td>
<td>0.169**</td>
</tr>
<tr>
<td>Quality of Life</td>
<td>0.169**</td>
<td>1</td>
</tr>
</tbody>
</table>

**Table 3** Correlation between self-esteem and quality of life among adolescents (N = 250)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Self Esteem</th>
<th>Quality of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Esteem</td>
<td>1</td>
<td>0.146*</td>
</tr>
<tr>
<td>Quality of Life</td>
<td>0.146*</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 4 Mean, Standard Deviation and \( t \)-value of age group of adolescent on the scale of body image, self-esteem and quality of life (N=250)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Age</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>( t )</th>
<th>P</th>
<th>Cohen's d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Image</td>
<td>13-15</td>
<td>102</td>
<td>29.65</td>
<td>3.379</td>
<td>-.295</td>
<td>.768</td>
<td>-0.03747</td>
</tr>
<tr>
<td></td>
<td>16-20</td>
<td>148</td>
<td>29.77</td>
<td>3.150</td>
<td>-.295</td>
<td>.768</td>
<td>-0.03747</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>13-15</td>
<td>102</td>
<td>16.56</td>
<td>1.755</td>
<td>.622</td>
<td>.534</td>
<td>0.07899</td>
</tr>
<tr>
<td></td>
<td>16-20</td>
<td>148</td>
<td>16.41</td>
<td>2.020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of life</td>
<td>13-15</td>
<td>102</td>
<td>20.60</td>
<td>4.280</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16-20</td>
<td>148</td>
<td>21.75</td>
<td>4.478</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: N= 250,

Table 5 Mean, Standard Deviation and \( t \)-value of male and female adolescent on the scale of body image, self-esteem and quality of life (N=250)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Age</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>( t )</th>
<th>P</th>
<th>Cohen's d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Image</td>
<td>Female</td>
<td>125</td>
<td>30.19</td>
<td>3.159</td>
<td>2.213</td>
<td>.028</td>
<td>0.28105</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>125</td>
<td>29.30</td>
<td>3.186</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Esteem</td>
<td>Female</td>
<td>125</td>
<td>16.11</td>
<td>1.793</td>
<td>-2.987</td>
<td>.003</td>
<td>-0.37935</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>125</td>
<td>16.82</td>
<td>1.972</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of life</td>
<td>Female</td>
<td>125</td>
<td>20.65</td>
<td>4.649</td>
<td>-2.276</td>
<td>.024</td>
<td>0.28905</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>125</td>
<td>21.91</td>
<td>4.113</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: N= 250, \( p<0.05 \)

Table 6 Regression analysis on Quality of life, self-esteem and body image (N=250)

<table>
<thead>
<tr>
<th>Scales</th>
<th>( B )</th>
<th>S.E</th>
<th>( B )</th>
<th>S.E</th>
<th>( T )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Life</td>
<td>22.603</td>
<td>3.828</td>
<td>5.905</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Image</td>
<td>-.201</td>
<td>.087</td>
<td>-.145</td>
<td>.122</td>
<td>2.390</td>
<td>.0176</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>0.349</td>
<td>.146</td>
<td>.122</td>
<td>.122</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. \( R^2 = 0.042, F (5.401), *P<0.05 \)

It shows 16-20 year old adolescent (27.77) have more mean score compared to 13-15 years old adolescent (29.65) \( (p\text{-value} = 0.768) \) which indicate there are no significant difference between the two age groups.

Table 5 presented the results from independent sample \( t \)-test on body image, self-esteem and quality of life variable for the male and female adolescents, respectively.

The results represented in Table 6 explain body image and self-esteem. The impact of acne on self-esteem, body image and on quality of life was significant.

Discussion

The body image of adolescents, who are suffering from acne vulgaris, has some linkage with the level of self-esteem and quality of life. It was aimed to explore this relationship and impact of this problem on self-esteem and quality of life among adolescents. Furthermore it was another assumption to explore the relationship between body image and self-esteem and how they are the determinant of quality of life of adolescents. The hypothesis of the study was that there will be a significant positive relationship between the body image and self-esteem among adolescent. When
individuals have positive body image they have positive self esteem. Similar positive correlation was assumed with quality of life and it was also confirmed. The second hypothesis of this study was that there is a significant positive relationship between body-image and quality of life. The findings show that there is critical positive connection between body image and quality of life. When individuals have positive body image they have better quality of life. Harter (1999) found that young people's self-esteem has strong connection with physical appearance, trailed by academic capability, social fitness, behavioral behavior, and athletic skill. Developmental period of adolescence, physical appearance, body-image get a fundamental place to determine to the general mental self-image and self-esteem of an adolescent. These physical and passionate changes could affect discriminating results on general self esteem and life quality of adolescents.

Another assumption of the study was there will be lower level body-image fulfillment, self-regard and life-satisfaction among 10-14 years age adolescents. But the results have shown that there is no significant difference between both age groups on the body-image, self esteem and quality of life. Girman et al., investigated and found no relationship between age groups and life-satisfaction. Significant gender differences were found, as females have better or good body-image recognition as compared to male adolescents. These findings are in the line of previous work of Burg. Burg expressed that female adolescent oncology patients experience numerous physical changes all through treatment that have testing mental, enthusiastic, and social ramifications.

**Conclusion**

With acne girls and boys had particularly high level of depression, they have low self-worth and low self-attitude, and they feel less proud and more useless and not satisfied with their body image than those without acne. Boys with acne problem have very low attitude towards themselves whereas girls with acne problem have depressive symptoms and weight related problems.

**References**