# Comparison of self-esteem and irrational beliefs in women candidates and non-candidates for hair mesotherapy

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## Abstract

The purpose of the research is three Self - esteem and irrational beliefs in women candidates and non candidates for hair mesotherapy that a retrospective study method was used . The statistical population included women who were candidates and non - candidates for hair mesotherapy in the spring of2014 Kalinik Pwest and Moronik Qazouin visited . The sample . consisted of300 people who were selected as ilable sampling . To collect information from the questionnaire _ Respect Rosenberg himself And Jones - Ahvaz illogical beliefs test was used. The results showed that there is a statistically significant difference in the self-esteem of women candidates and non - candidates for hair mesotherapy , and the level of self-esteem in women who are candidates for hair mesotherapy is lower than that of women who are not candidates for hair mesotherapy, but the results are different . There was no significance in the . illogical beliefs of women candidates and non - candidates for hair mesotherapyP >0.05.

Keywords: self respect,irrational beliefs-hair mesotherapy

## Introduction

Androgenetic female alopecia or hair loss with a female pattern isone of the most common types of hair loss in women[1] .FPHL is characterized by progressive shrinking of hair follicles and reduction in hair density, mainly in the central parietal area of the scalp.[2] FPHL , One of the most common disorders is hair loss , but with increasing age55 of women over % 70 , years of age experience hair loss with a predictable pattern . They experience attention ,and the progression of the disease occurs in a small number of patients scence . Typically FPHL ] It reaches the first peak during the fertile years and the second peak after menopause 3 In a Brazilian study, it was found that . [68 of women between the ages of %20 and 29 suffer from hair loss[4-5] reported the prevalence of female pattern hair loss of .2.52 in % postmenopausal women with an average age of58 years. It is interesting to note that the objects FPHL varies by residce and ethnicity . _ For example , the breakdown and analysis of student population prevalence showed that the overall prevalenceFPHL ail28.6 Is That At areas % Rural is significantly more than urban areas. and is significantly related to family history6

To date, there are several non-surgical methods for hair regrowth, but the results vary. These include finasteride The position of It is oral , menoxidil , dexpanthenol treatment , PRP ] .microsozen treatment , laser treatment , etc ,7-8 For patients who do not respond to drug . [ treatment , surgical intervention can be considered . Various surgical techniques , including hair transplantation , hair growth microcrop , mesotherapy with growth factors , deep micron and engineered hair follicle stem cells . e available[9 Mesotherapy is a minimally invasive [ technique that involves injecting a mixture of agents It is an active drug in diluted doses intradermally[10 Patients in [ ,In addition to the potential reduction of systemic adverse effects this treatment achieves the effectiveness and durability of the treatment[11 The main [ criticisms related to mesotherapy are related to the lack of standardization regarding the form of application, factors It is actively used and the frequency of meetings[10 Pain can be a . limitation for this complementary therapy method be_ Options for reducing pain in patients undergoing scalp mesotherapy Non-drugs such as vibratory anesthesia devices are considered safe, effective and simple, which cause Tactile distractions are applied in situ and thus provide comfort during the procedure[12 In addition to local pain from punctures and mild [ headaches, complications such as persistent edema, infection Microbial, urticaria, skin necrosis, panniculitis, acromia and cicatricial alopecia have already been reported. ,However it is believed that part of these adverse effects are more related to the clinical indication Inadequate, insufficient asepsis, use of non-sterile materials and even performing this procedure by a specialist It is non-medical than mesotherapy itself[11 Although studies have [ shown that mesotherapy can be an auxiliary option for treatmentFPHL Considered that although it is minimally invasive, it is essential to be treated by a medical professional with Clinical and pharmaceutical experience, following aseptic regulations according to the method, with the aim of preventing complications mentioned should be done. [13 [[14] stated in the results of their research: the overall satisfaction of patients with female androgenetics on a scale between1 and 10 for performing mesotherapy after three treatment sessions was , 6.3

It seems that the psychosocial impact of hair loss is more severe in women compared to men be[15 And Hair loss is one of the most anxiety - provoking and uncomfortable skin . conditions2021 Alessandrini. Hair loss not only affects the beauty , but also strongly affects the psychological state of people[16 For women, thick and healthy hair signifies a sense of self-respect, self-confidence, and ability They involve change, security, and social interaction . These elements that become chronic and Treatment resistance is associated with it, it has an important negative effect on the quality of life of women[17 In society, a head full of hair is [ considered a key part of the ideal body image , and androgenetic alopecia can have a significant .effect on a person's appearance and dignity[18 Studies show that many sufferers of [ androgenetic alopecia suffer from feelings of anxiety, helplessness and reduced self-esteem [15 And self-respect is closely related to satisfaction in terms of appearance .[19-20] Highly . visible hair loss results in a greater negative impact on functioning, emotional.regulation, self-confidence, and feelings of stigma[21]

Another variable that can be investigated in women candidates for hair mesotherapy is .irrational beliefs[22] They believe that physical changes lead to the formation of a negative body image and subsequently cognition Negative thoughts involve the person's mind instrument d. Patients who have changes in their physical appearance experience many cognitive changes, including dissatisfaction with their appearance, running away from

themselves, and negative thoughts about themselves[23] Beliefs play an important role in . reducing mental health in people applying for cosmetic surgery , and it seems that people's dissatisfaction with their body image under the influence of personal and environmental factors .can lead to incorrect evaluations, negative thoughts and emotions in them[24] Hair loss, loss . of one or both breasts and visible scars in women with breast cancer are related to their thoughts and feelings[25-26] In the study .[27] it was reported that people applying for , ,cosmetic surgery scored higher in two indicators of body mass and irrational beliefs. Also some research findings showed that cosmetic surgery is related to negative descriptions of body appearance[28] The psychosocial impact of hair loss is often due to its nature Medically . benign , its annoying conditions are ignored Addressing the psychological aspects of androgenetic alopecia can take care Comprehensive , from the patient and improve patient outcomes[15] Based on this, the present study was conducted with the aim of comparing self . - esteem and illogical beliefs in women candidates and non - candidates for hair mesotherapy

## definitions

## Define your dignity

Among the meta-ethical characteristics, self-respect is the organization of a person between self-concept and ideal self. Self-esteem is a person's view of himself, and this view is neither magnified nor exaggerated, nor belittled and despised. True or healthy self-esteem is the final .judgment that a human has about himself and is made up of ability and value based on reality When a person has false self-esteem, he has an exaggerated sense of worth, which is caused ] by a misunderstanding of disabilities and is used as a defense mechanism29] Self-esteem . comes from a sense of value and confidence that a person has his own abilities Therefore, self-esteem is a kind of personal evaluation that causes a person to pay attention to himself will be [30 ,High self-esteem has signs that include efficient behavior, initiative, high empathy [ decision-making power, and problem-solving ability[31] During failure, these people will . have correct and realistic judgments about themselves and do not blame themselves for their nature and capabilities[32] .

## Definition of logical beliefs

Irrational beliefs are thoughts that dominate the human mind and affect the interpretation and giving meaning to events. give[33 Actually ; _ They are compulsive tendencies that lead [ to confusion and anxiety in people[34 Logical beliefs are beliefs that are desirable, useful [ and flexible are below These beliefs are based on reality and have been confirmed in practice . Irrational beliefs are thoughts and opinions that are not compatible with reality and are formed based on suspicion and personal opinions are These beliefs are forced, committed and absolute are accompanied[35 ,Irrational beliefs include the need for approval and support from others [ high expectations of oneself, tendency to blame oneself, reaction to failure, emotional irresponsibility, preoccupation with anxiety, avoidance From issues, dependence, despair towards change and perfectionism Such beliefs in dealing with external events and stimuli create emotional consequences such as fear, anxiety, anger, guilt, sadness, hostility and depression. slow In fact, these are human beliefs which determines the type, state and intensity of his emotions and behavior slow[36

## theories

The level of self - esteem is different in women candidates and non - candidates for hair mesotherapy

The amount of illogical beliefs in women candidates and non - candidates for hair mesotherapy is different

**materials and methods**

**research method**

In this research, the method of post- ¬event study (Ali-comparisons) was used

Statistical population and sample

The statistical population of this research includes Candidate women , etc He was a candidate for hair mesotherapy , which was performed in the spring of 1402 at the skin and hair clinic . They visited Qazvin city . Using the available sampling method, ¬300 people were selected as a sample, of which 150 were candidates for hair mesotherapy and the other 150 were candidates for hair mesotherapy Tools

**) Self Esteem ScaleRSES (**

Ronberg's self-esteem scale ( RSES ) [37] It was made in 2008. The scoring ¬of this scale is using a 4-point Likert scale, ¬in which the answer completely agree is given a score of 4 and completely disagree is given a score of 1 ¬. In the study [38], the reliability of this scale was reported as 0.84 using the internal consistency method and 0.84 with a two-week interval, and 0.67 at a 5-month interval. At Research They are also stated that This scale has a negative relationship with the neuroticism subscale Meaningful and small scale extroversions, Empiricism and task-oriented from Neo's personality questionnaire Positive and meaningful relationship It has and does not agree with the subscale, these results indicate the convergent and divergent validity of this scale. In the study [39] , for the reliability of this scale, the internal consistency coefficients of the items ¬in the entire student sample were 0.84, male students 0.87, and female students 0.80 . Obtained. The correlation coefficients between each of the items of ¬the scale with the total score of the items ranged from 0.56 to 0.72 and all At the P >0.001 level It was meaningful . At Research The analysis between the above scale and the death obsession scale in the whole sample was -0.34, in male students -0.44, And in Female students - 0.27, a significant negative relationship was seen, which indicates the divergent validity of Rosenberg's dignity scale. **Jones ' irrational** .

**beliefs test**

Jones Irrational Beliefs Test ( 4IBT -  A ) It was designed in [40] with 40 questions. Scoring ¬this questionnaire The use of a 5-point Likert scale ¬is used to respond strongly I strongly disagree with score 1 I agree , grade 5 will be rejected . [40] reported the internal consistency of the irrational beliefs test between 0.45 and 0.72, the test - retest coefficient as 0.92. In their research, the concurrent validity of irrational beliefs test with psychiatric problems was reported as 0.61. In the study [41] , the reliability of this test was reported as 0.86 for the whole test using Cronbach's alpha method. At Research they narrative A. N _ questionnaire With Use From Method convergent validity 0.81 ; P=<0.001 Report became . Also, the convergent validity coefficient of the test 4IBT-A and IBT equal to 0.87 were obtained

**Implementation method and statistical analysis**

according to the statistical population of this research , which included women candidates , and non- candidates for hair mesotherapy , who went to the skin and hair clinic inQazvin in

the spring of 1402 . were, the target population was identified, and the purpose of the research was explained to a number of them who were available, and those who were willing to participate in the research were invited to cooperate, and after obtaining informed consent, the ¬mentioned questionnaires were provided to them, so After completion, all the questionnaires were collected and scored according to the principles of information confidentiality, and using spss 26 software,  the data were compared to compare the averages of two independent groups  to determine the significance of the research hypotheses, and $p > 0.05$  was considered significant . was taken

**findings**

**Table1Descriptive statistics .**

| The standard deviation | Average | highest score | lowest score | Number | group | Variable |
|---|---|---|---|---|---|---|
| 566/4 | 20/22 | 36 | 14 | 150 | Candidate for hair mesotherapy | self respect |
| 501/4 | 09/25 | 34 | 12 | 150 | Not a candidate for hair mesotherapy | |
| 540/19 | 57/121 | 162 | 80 | 150 | Candidate for hair mesotherapy | Irrational beliefs |
| 710/19 | 05/120 | 161 | 78 | 150 | Not a candidate for hair mesotherapy | |

The results of the above table show that the average level of self-esteem in candidates for hair mesotherapy was 22.20 and in non-candidates for hair mesotherapy was 25.09. Also, the average amount of irrational beliefs in people who are candidates for hair mesotherapy is 121.57 and in people who are not candidates for hair mesotherapy It was 120/05

**Table2Smirnov Kolomogrove test related to research variables .**

| Result | Significance level | Amara Kolmogorov-Smirnov | group | changeable |
|---|---|---|---|---|
| It is normal | 0.071 | 0.063 | Candidate for hair mesotherapy | self respect |
| It is normal | 0.084 | 0.068 | Not a candidate for hair mesotherapy | |
| It is normal | 0.200 | 0.044 | Candidate for hair mesotherapy | Irrational beliefs |
| It is normal | 0.200 | 0.048 | Not a candidate for hair mesotherapy | |

According to the results of Table 2, it can be seen that for all the investigated variables in the two groups of hair mesotherapy candidates and non-candidates for hair mesotherapy, the P-

value is greater than 0.05. Therefore, the assumption of normality of the variables in the mentioned groups has been confirmed.

**Table 3. Test comparing the averages ¬of two independent groups**

| 95% interval difference | confidence of the | Difference of ¬means | Significance level | Degrees of freedom | t | Variable |
|---|---|---|---|---|---|---|
| upper line | lower limit | | | | | |
| 924/3 | 863/1 | 0.893 | 0.000 | 298 | 257/5 | **self respect** |
| 5/973 | 946/2- | 513/1 | 0.505 | 298 | 0.668 | **Irrational beliefs** |

Based on the results presented ¬in Table 3, since the significance level obtained from the study of the difference in the mean scores of self-esteem of two groups of candidates for hair mesotherapy and non-candidates for hair mesotherapy is smaller compared to the significance level of alpha 0.05 ¬, it can be concluded that there is a significant difference between candidates for hair mesotherapy and non-candidates for hair mesotherapy in terms of self-respect . According to the average scores of this variable presented in the table of descriptive statistics, it can be ¬said that the level of self-esteem in the candidate for hair mesotherapy is higher than the level of self-esteem in Non-candidates for hair mesotherapy are less.

On the other hand, based on the significance level obtained from the study of the difference between the mean scores of irrational beliefs of two groups of candidates for hair mesotherapy and non-candidates for hair mesotherapy , it can be concluded that between candidates for hair mesotherapy , the significance level of alpha is 0.05 ¬There is no significant difference between hair mesotherapy and non-candidates for hair mesotherapy in terms of the amount of irrational beliefs . According to the mean scores of this variable presented in the table of descriptive statistics, it can ¬be said that the amount of irrational beliefs in the candidate for hair mesotherapy is higher than the amount of irrational beliefs in There are more ¬non-candidates for hair mesotherapy , but this difference in scores is not statistically significant.

## Conclusion

The present study was conducted with the aim of comparing self - respect and irrational beliefs in women candidates and non - candidates for hair mesotherapy . In this research, the candidate and non- candidate women for hair mesotherapy , who had referred to K. P. Post and Moronic Qazvin clinic in the spring of 2014 , and the sample consisted of 300 people . which were selected as ¬available sampling . After data collection and statistical analysis, the results showed that there is a statistically significant difference in the self-esteem of women candidates and non - candidates for hair mesotherapy , and the level of self-esteem is lower in women candidates for hair mesotherapy . of women who are not candidates for mesotherapy , but the results did not show a significant difference in the illogical beliefs of candidates and non - candidates for mesotherapy , and in We will continue to review these results.

The first hypothesis of the research indicated that the level of self- esteem is different in women candidates and non - candidates for hair mesotherapy , and according to the obtained results, this hypothesis was confirmed . The result of this hypothesis is in line with the results of Okerman and Jafarni's research [42] . They concluded by examining androgenetic alopecia in women that postmenopausal women with hair loss experience loss of self-confidence and low self-esteem . Also, Muller et al. [1] confirmed the impact of this drop on the quality of life . Alessandrani et al [16] mentioned in their research results that people suffering from hair loss often lack self-confidence . Nilfroshan 2023, by examining the quality of life and self-esteem in hair transplant applicants, concluded that patients with androgenetic alopecia experience a significant decrease in self-esteem and quality of life. [43] Wen et al. [44] by studying people with Of the 58 participants who actively sought medical treatment, 88% reported androgenetic alopecia. Report they did That fall Hair the effect negative On Life everyday they Yes, 75 percent Report they did That fall Hair the effect It had a negative effect on their self-esteem, and 50 percent reported social problems because of their hair loss . Recent research has shown that in addition to increasing self-esteem, cosmetic surgery increases self-confidence and physical attractiveness[20] [45].

To explain this research finding, it can be stated that: Androgenetic alopecia is the most common cause of hair loss in men and women . In a society that values hair and does not associate it with attractiveness , its lack can have devastating psychological consequences. , the problem of hair loss in them can bring more destructive psychological consequences for them, among these consequences can be the loss of dignity in women with hair loss, because they lose a large part of their hair, They feel that they have also lost their beautiful appearance, and the fear of social acceptance and when others find out that their hair loss puts them at a disadvantage from a social point of view, can have a significant impact on their mentalhealth [15] and causes them to lose self-confidence and self-respect. On the other hand, it can be stated that those affected by hair loss often feel that they look older than they are, fear social rejection when looking for a romantic partner[46] and hair loss can satisfy Reduce body , image drastically[47] that these feelings and dissatisfaction with the appearance are seen more in women and can lead to a decrease in self-esteem in them, so it can be concluded that women who are candidates for hair mesotherapy have lower self-esteem than non-candidates. and maybe one of the reasons for the request for mesotherapy is this factor.

The second hypothesis of the research indicated that the amount of illogical beliefs in women candidates and non - candidates for hair mesotherapy is different . And according to the obtained results, this hypothesis was rejected. The results of the following studies are inconsistent with the results of the present study, in this regard, the results of Khabaz et al[48] showed that variables of negative body image and irrational beliefs mediate the cognitive regulation of emotion. Predictors of tendency to cosmetic surgery in women were and beliefs about The appearance of the relationship between body image and schema Hey appearance that of the attitude Inefficient and illogical things are made specifies to be slow down[49] .Wang et al[50] showed that irrational beliefs about appearance are only seen as a criterion of beauty in women applying for cosmetic surgery. to be Torani et al[51] The results showed that metacognitive therapy and emotion regulation skills have been significantly effective in reducing the trend towards fashion, irrational beliefs and fusion of thought-action compared to the control group in women applying for cosmetic surgery

,To explain the disparity between the results of this research and the aforementioned studies it can be stated that the majority of the population of the above research were women applying for facial cosmetic surgery, and minor defects on the face or body are more important than hair loss in the early stages in women. It has attracted from them that it can intensify their irrational beliefs about the appearance, but in the current study, women with hair loss who are candidates for mesotherapy, their hair loss is not in the final stages, which completely and compared to the rest of the body slow, so these women do not have. irrational beliefs about their hair loss

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