

The Effectiveness of Compassion-Focused Therapy in Self-Esteem, Shyness, Comparative Self-Criticism, and Social Relationships in Vitiligo

Abstract

Vitiligo is an important skin and autoimmune disease having the main impact on different parts of the life of patients. This study aimed to determine the effectiveness of compassion-focused therapy in Self-Esteem, Shyness, Comparative Self-Criticism, and Social Relationships. The present study was a pre-test-post-test experimental study with a control group and a one-month follow-up. The statistical population included all patients with vitiligo skin disease referred to Razi Dermatology Hospital in 2019, from which 40 participants were selected using the convenience sampling method. The participants were randomly divided into two groups and responded to WHOQOL, LOCS, and ISS in three phases namely pre-test, post-test, and follow-up phase. The experimental group participated in 8 two-hour group sessions focused on compassion therapy based on the Gilbert therapy package, but the control group did not receive any intervention until the end of the follow-up phase. The results of the analysis of covariance indicated that compassion-focused therapy can increase Self-Esteem, Shyness, Comparative Self-Criticism, and Social Relationships in patients with vitiligo as a treatment. Compassion-focused therapy can be used to increase the Self-Esteem, Shyness, Comparative Self-Criticism, and Social Relationships of patients with vitiligo.

Keywords: Vitiligo, Compassion, Self Esteem, Shyness, Comparative self-criticism, Social relationship

Maryam Khesali¹, Mahsa Abdollahpur², Rogayeh Bahri³, Abbas Masjedi Arani⁴, Fatemeh Qasemitabeq⁵, Amir Sam Kianimoghadam⁶

Abbas Masjedi Arani is corresponding author

1. *Medical Doctor Student, School of Medicine, Religion and Health Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran. Email: mariamkhesali@gmail.com. ORCID: 0000-0002-6085-1056*
2. *Master of Science, Department of Clinical Psychology, School of Medicine, Shahid Beheshti University of Medical Science, Tehran, Iran. Email: M.abdollahpur1373@gmail.com ORCID: 0000-0001-6335-2423*
3. *Ph.D. student in general Psychology, Islamic Azad University Of Iran, Tabriz, Iran. E-mail: <mailto:Rg.bahry@yahoo.com> ORCID: 0000-0002-6498-63337*
4. *Associate Professor of Clinical Psychology, Department of Clinical Psychology, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran (Corresponding author). E-mail: dr.masjedarani@gmail.com. ORCID: 0000-0001-5521-0257*
5. *MSc. in Clinical Psychology, Faculty of Psychology and Educational Sciences, University of Tabriz, Tabriz, Iran. ORCID ID: 0000-0002-3645-1810. Fatemeh.qasemitabeq@gmail.com*
6. *Assistant Professor of Clinical Psychology, Department of Clinical Psychology, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran. E-mail: as.kianimoghadam@gmail.com ORCID: 0000-0001-8686-523X*

Introduction

Cutaneous conditions are among the 10 most common diseases in the world and can have a significant impact on psychological functioning. Skin disease can impair the quality of life[1]. This condition can cause patients to be dissatisfied with their body

image and this leads to depression, insomnia, fear of negative evaluations, suicidal thoughts, and low self-esteem[2].

Vitiligo is a chronic disease caused by the destruction of melanocytes and presents as depigmented macules and patches[3]. It is one of the best-known autoimmune diseases. Its reported prevalence rate is 1% to 2% of the population for

both sexes and all races[4]. Although vitiligo lesions are often asymptomatic, the psychosocial impact and physical disfigurement can be devastating to many patients and impose a significant burden on health care. Vitiligo is not life-threatening but can cause significant psychological problems and may lead to feelings of shame, anxiety, and embarrassment[3]. Various studies have shown that vitiligo hurts self-esteem and quality of life. Vitiligo is one of the most psychologically destructive skin diseases[5].

Visible skin problems may lead to labeling and social exclusion[1]. Vitiligo is stigmatized in some cultures. Cultures can be associated with psychiatric disorders such as depression[3]. Societies with a cultural preference for specific skin colors often know pigmentation as a passport to society, and perceived defects are often devastating[5]. Social misconceptions and white spots caused by vitiligo aggravate the problems of patients with this disease. In addition to social problems, these patients suffer from family problems and may not have enough family support[6].

There is evidence that negative psychological conditions can elicit or exacerbate skin disease either directly via psychoneuroimmunological pathways, or via behavioral reactions[1]. Studies have shown that people with vitiligo are five times more likely to be depressed[3]. Dermatologists and other specialists dealing with vitiligo patients should be able to envisage correctional interventions to alleviate the burden of psychological disorders[7]. They should consider a holistic approach to treating vitiligo that also takes into account psychiatric issues[3]. Psychological interventions have been developed along with drug treatment to manage this type of skin problem[2].

One of the major problems of people with vitiligo who have psychological disorders such as anxiety and depression is that they cannot easily engage in compassionate situations with other people and any kind of self-compassion becomes impossible[6]. Compassion can be understood in terms of the ability to be sensitive to the suffering of self and others combined with a commitment to try to alleviate or prevent it[8]. It has been described as a multidimensional process comprised of four key components: (a) an awareness of suffering (cognitive/empathic awareness), (b) sympathetic concern related to being emotionally moved by suffering (affective component), (c) a wish to see the relief of that suffering (intention), and (d) responsiveness or readiness to help relieve that suffering[1].

Self-compassion is an emerging therapeutic approach to managing body image problems[2]. It is an important factor for a person to adapt to challenging experiences such as chronic conditions and serious health problems[2]. It is an effective emotion regulation strategy for coping with negative emotions and difficult life experiences such as chronic illness. Self-

compassion is an important construct in moderating people's reactions to distressing situations such as failure, rejection, embarrassment, and negative events [9].

Compassion-focused therapy is one of the therapies that have emerged from the development of cognitive-behavioral therapy [6]. Compassion-focused therapy is designed for people with high levels of shame and self-criticism, and people with skin conditions can use this method to change the way they relate to themselves and others by cultivating compassionate qualities such as empathy, distress tolerance, and non-judgmental attitudes[1].

Studies show that self-compassion is effective in reducing psychological distress and increasing psychological well-being. A more time-intensive self-compassion-focused training intervention was effective in improving psychosocial and emotional functioning and reducing shame among people with acne[2].

Researches suggest that higher self-compassion is associated with lower anxiety and depression. Several studies have shown the effectiveness of compassion-focused therapy on anxiety and depression in women with MS, patients with irritable bowel syndrome, and women with fibromyalgia[6].

A study by Arab et al. on 40 people with psoriasis showed that self-compassion therapy can be used as a complementary treatment to reduce psychological distress and increase the quality of life of patients with psoriasis[9]. Linardon et al. studied 992 men and women and found that self-compassion as a moderating variable could attenuate the relationship between shape and weight overvaluation and eating disorders, psychosocial impairment, and psychological distress[10]. Another study in this field was done by Khoshvaght et al. on 45 mothers of children with cerebral palsy. They showed that compassion-focused therapy can be employed to reduce anxiety in mothers of children with cerebral palsy[11].

Due to the growing problems of vitiligo and the lack of research in this field, the purpose of this study is to evaluate the effectiveness of compassion-focused therapy in self-esteem, shyness, comparative self-criticism, and social relationship in patients with vitiligo.

Methods

Participants

The present research statistical population consisted of all patients with vitiligo referred to Razi Dermatology Hospital in Tehran in 2019. The sample of this research included 40 patients. After a preliminary interview and based on the inclusion and exclusion criteria of the study, they were selected by using a convenience sampling method and randomly assigned to experimental and control groups (20 people in each subgroup). Regarding sample selection, it should be noted that in experimental designs, each subgroup should be at least 15

people and for the selected sample to be a real representative of the society and the research to have high external credibility, a sample size of 20 people was considered for each group (Delavar, 2015). Inclusion criteria of the study included diagnosis based on clinical evidence such as the appearance of skin lesions and if necessary by skin sampling and confirmation of vitiligo by a dermatologist, Age range 20 to 45 years, having at least primary education, at least six months of history of the disease, complete the informed consent form stating that the study is voluntary and not receiving psychological services outside of treatment sessions.

Inclusion criteria of the study included: Having diagnostic criteria for obvious psychiatric disorders based on the clinical interview, addiction or alcohol consumption, history of hospitalization in psychiatric wards, consumption of psychiatric drugs, and a history of participating in compassion-focused treatment programs over the past six months.

Measure

1) World Health Organization Quality of Life Questionnaire: There are 26 items on this questionnaire (from 1998) that assess a person's overall quality of life. Generally, there are four subscales in this questionnaire, each with seven items (3-4-10-10-15-16-17-18), mental health with six items, and physical health with three (5-6-7-11). 19-26), 3 items (20-21-22), and 8 items for social connections and living environment (8-9-12-12-13-14-23-24-25). Each item's score ranges from 1 (extremely low, never, extremely dissatisfied) to 5 (extremely high, always, extremely satisfied)(13). In this survey, questions 3, 4, and 25 are scored backward. Physical health had a Cronbach's alpha of 0.79, mental health had a Cronbach's alpha of 0.82, social interactions had a Cronbach's alpha of 0.81, and the living environment had a Cronbach's alpha of 0.83. (13). Nasiri standardized the short version (26 items) of the World Health Organization quality of life questionnaire in Iran in 2006, and it has been judged to have excellent reliability and validity.

2) Self-criticism levels scale: The self-criticism level scale was designed by Thomson and Zarof (2004) and its validity and reliability have been achieved. This scale has 22 items and the two comparative self-critical components include 12 items (2-4-6-8-10-12-14-16-18-20-21-22) and the internal self-critical component includes 10 items (1-3-5-7-9-11-13-15-17-19). This scale is scored on a Likert scale from 0 to 6. Items 21, 20, 16, 12, 11, 8, 6 are scored in reverse. The validity and reliability of the Self-Criticism Level Scale were evaluated by Thomson and Zarov (2004) on a sample of 144 students. Factor analysis was a scale for indicating both comparative self-criticism and internal self-criticism. There was a significant relationship between the subscales and the neurotic subscale of

the Personality Traits Questionnaire (Shariati, Hamid, Hashemi, Bolshideh, and Marashi, 2016). In Iran, the validity and reliability of the Critical Level Scale, in Mousavi and Ghorbani's (2006) research, Cronbach's alpha method for the internal self-criticism subscale was 0.87, and the comparative was 0.55. The relationship between the components of the self-critical scale and the subscale of interpersonal problems was positive and significant. In Shariati et al.'s (2016) Cronbach's alpha, the critical level scale was calculated to be 0.88 for the comparative self-critical subscale and 0.89 for the internal self-critical, respectively. In Bahadori Khosroshahi's research, Cronbach's alpha coefficient of the whole questionnaire was obtained at 0.89.

3) Internalized Shame Scale: This scale was developed by Cook in 1993 and includes 30 items and two subscales of shyness with 24 items (1-2-3-4-5-6-7-9-10-11-12-15-16- 17-18-20-21-22-23-24-25-27-28-30) and self-esteem with 6 items (8-13-14-19-26-29). The answer to each substance on this scale is 5 degrees of Likert type. Scoring is done in reverse; So high scores on this scale indicate worthlessness, inadequacy, feelings of inferiority, emptiness, and loneliness, and low scores indicate high self-confidence (Hojjatkhah and Mesbah, 2016). Cook (1993) reported the Cronbach's alpha reliability coefficient of the shyness and self-esteem subscales as 0.94 and 0.90, respectively. Rajabi and Abbasi (2011) reported Cronbach's alpha reliability coefficients of the internalized shame scale in the whole sample of 0.90, in men 0.89, and women 0.91. In the research of Fathollahzadeh, Majlisi, Mazaheri, Rostami, et al. (2017), Cronbach's alpha coefficient of the whole questionnaire was 0.91.

Procedure

The present study was quasi-experimental with a pre-test, post-test design, and a control group. In this plan, therapeutic intervention (compassion-focused therapy) was considered an independent variable, and self-criticism, internalized shame, resilience, and quality of life were considered dependent variables.

The method of conducting this research was as follows: First, a letter of introduction was obtained from the relevant faculty to present to the deputy director of education at the Razi Dermatology Hospital. After obtaining the consent of the education department, the researcher attended the hospital and provided the necessary explanations to the hospital officials about the need for the study, the implementation process, and the benefits of the interventions that will be provided to patients. After obtaining the consent of the hospital authorities and making the necessary arrangements, among the patients applying to participate in the treatment sessions, 40 people were selected by the available sampling method based on the criteria for entering and leaving the study. And were randomly

assigned to experimental and control groups of 20 people. After random replacement of patients in the experimental and control groups and taking pre-tests from both groups, compassion-focused treatment was held in 8 two-hour sessions in a group and weekly manner for the experimental group. Patients in the control group did not intervene during the presentation of the treatment package to the subjects in the experimental group and were placed on a waiting list. At the end of the treatment sessions, both groups answered the research questionnaires (post-test).

Since the observance of ethical principles in any research is very important, in the present study, the following items were considered: 1) The researcher introduced himself to the research units and explained the research objectives 2) Research units were reassured to keep personal information confidential 3) Beliefs, culture, religion, etc. were considered respected units 4) It was emphasized that the research units were free to participate in the continuation of the research 5) Patients' privacy was maintained and they were assured that the intervention was safe 6) In recording information and statistics

obtained from the research at the time of collecting information and analyzing them and using sources of scientific accuracy and trustworthiness. Also, for the subjects of the control group to observe ethical and professional issues in the research and thank and appreciate them for their cooperation in the research process, treatment sessions were held after the end of the post-test phase. Descriptive statistics including mean indices, standard deviation, graphs, and tables were used to analyze the data. At the inferential level, according to the confirmation of the hypotheses, univariate analysis of covariance (ANCOVA) and multivariate analysis (MANCOVA) were used to test the research hypotheses. The statistical software used in this study was SPSSV 24.

Compassion Treatment Therapy Package: The ideas, foundations, and practices of compassion-focused treatment were covered in 8 two-hour sessions based on Gilbert's book on compassion-focused therapy (15). Table 1 summarizes the procedure for performing therapy sessions.

Table 1. A summary of the content of compassion-focused treatment sessions

sessions	Targets	Content of the sessions	Homework	Expected behavior
Session 1	Introduction with the general principles of treatment	Perform pre-test, Familiarity of the therapist and group members with each other, and Talk about the purpose of the meetings and their overall construction. Examining expectations from the treatment plan, Grouping, An overview of the structure of the meetings, Introduction with the general principles of compassion-focused therapy; Evaluate and assess the degree of shame, Self-criticism, and self-interest of members, Conceptualizing self-directed education.	Recording cases of shame and self-criticism in daily activities and challenges	Identifying and being aware of self-criticism
Session 2	Recognition of the components of self-critical compassion	Identify and introduce the components of compassion, Examine each component of compassion in members and identify its characteristics, Familiarity with the characteristics of people with compassion, and review of self-compassion of members.	Record the components of self-care in daily activities	Identify and be aware of the Components of self-compassion
Session 3	Education self-compassion of members	An overview of the assignments of the previous session, Cultivate a feeling of warmth and kindness towards yourself, Cultivating an understanding that others also have flaws and problems (cultivating a sense of human commonality In the face of self-destructive feelings and shame, Learn to empathize with yourself, Forming and creating more emotions, In connection with people's issues, increase care and attention to their health.	Record the components of self-compassion in daily activities	Self-compassion training

Session 4	Self-knowledge and identification of self-criticism factors	Review and practice the previous session, Encouraging subjects to self-knowledge and examine their personality as a "compassionate" or "non-compassionate" person, Identification and application of "cultivating compassionate mind" exercises (The value of self-compassion, empathy, and compassion for oneself and others, teaching the physiotherapist metaphor), Accept mistakes and forgive yourself for mistakes to speed up to change.	Record daily mistakes and identify causes	Breeding Self-compassion
Session 5	Correction and expansion of compassion	Review and practice the previous session, Identification and application of "compassionate mind cultivation" exercises (Forgiveness, acceptance without judgment, teaching the metaphor of the flu and teaching the patient), Acceptance training issues, Accepting the changes ahead and enduring difficult and challenging conditions due to the changing nature of life and people facing different challenges	Forgiveness and acceptance without judgment in challenging daily activities and recording these cases	Improve and develop self-compassion
Session 6	Teach styles and methods of expressing compassion	Review the practice of the previous session, Practical practice of creating compassionate images, Teaching styles, and methods of expressing compassion (Verbal compassion, practical compassion, intermittent compassion, and continuous compassion) Applying these methods in daily life and to family and friends, Training to develop valuable and transcendent emotions	Apply compassion in daily activities	Feelings of worth and self-compassion
Session 7	Techniques and expression of compassion	Review the practice of the previous session, Learn to write compassionate letters for yourself and others, Teaching the method of "recording and daily recording of real situations based on compassion and performance of the person in that situation	Write compassionate letters to yourself and those around you	Improving self-compassion and self-worth
Session 8	Evaluation and application	Training and practice skills; Review and practice the skills presented in the previous sessions to help the subjects cope with different life situations in different ways. Strategies for maintaining and applying this treatment method in daily life, Summarizing, concluding, and answering members' questions, and evaluating all sessions, Thanks and appreciation to the members for participating in the meetings, Post-test run, Coordinating a follow-up meeting over the next month.	recording and noting the self-compassion in daily challenges	Breeding and growing Self-compassion

Results

Subject characteristics

In the present study, 40 patients with vitiligo participated. The number female (percent) and male (percent) in experimental group 14 (0.700), 6 (0.30) and in control group were 13 (0.65) and 7 (0.35) respectively.

The maximum age range in the compassion-focused therapy category was 29-36. The age range of participants in the study was from 20 to 45 years. Table 1 presents the demographic details about the age, education, marriage, job, and sex of the subjects in both groups. There was no significant difference between the age, education, marriage, job, and sex of the two groups at a 0.05 significance level.

Table 1: Demographic information of the research subjects

*Standard deviation

Variable	CFT		Control	
	Mean	SD*	Mean	SD*
Age	31.35	6.515	32.5	6.501
education	3.95	1.432	3.85	1.424
marriage	1.80	0.616	1.90	0.641
Sex	1.32	0.465	1.34	0.475
Job	1.72	0.451	1.65	0.479

As seen in Table 2, the scores of the subjects in the experimental group compared to the control group are associated with changes in the post-test.

Table 2: Descriptive indicators of the experimental and control groups

Variable	Level	pre-exam				post-exam			
		Mean	SD	Skewness	Kurtosis	Mean	SD	Skewness	Kurtosis
Self-esteem	Experiment	18.20	1.936	0.175	-0.875	10.60	1.789	-0.181	-0.825
	Control	18.15	1.663	-0.187	-0.869	18.85	1.725	-0.495	0.076
Shyness	Experiment	38.60	2.604	0.192	-1.061	29.75	2.447	0.418	-0.619
	Control	38	2.675	-0.147	-1.588	38.70	2.473	-0.243	-1.099
Social Relations	Experiment	4.75	1.773	-0.020	-0.730	8.45	1.849	-0.245	-0.121
	Control	11.25	1.618	-0.119	-0.327	13.05	1.538	-0.574	-0.242
Comparative self-criticism	Experiment	44.00	2.534	0.000	-1.599	37.15	3.133	-0.177	-1.038
	Control	44.45	1.820	0.351	-0.956	45.15	1.663	-0.35	-0.484

According to the results of Table 2 for all variables, the mean pre-test to post-test experimental group improved. The improvement in the shyness, self-esteem, and comparative self-criticism variables included a decrease in the mean, and the social relations variable included an increase in the mean, therefore, it is observed that the difference between the two groups in the post-test stage is in favor of the experimental group. The skewness and Kurtosis test was used to check the assumption of data normality. The results indicated that variables self-esteem, shyness, social- relations, and

comparative self-criticism are normal in the pretest and posttest. Levin test was used to evaluate the homogeneity of variances of the two groups in the post-test stage, the results were not statistically significant. Therefore, the assumption of homogeneity of variances for all four variables was confirmed. To determine the effectiveness of compassion-focused therapy on shyness, self-esteem, social relationships, and comparative self-criticism in patients with vitiligo test multivariate analysis of covariance was used.

Table 3: Results of analysis of covariance on the effect of compassion-based therapy

Variable	Sum of squares	d.f	Mean square	F	P	Effect size
Self-esteem	683.894	1	683.894	262.789	0.000	0.877
Shyness	838.616	1	838.616	175.829	0.000	0.826
Social Relations	1.132	1	1.132	0.587	0.448	0.016
Comparative self-criticism	599.017	1	599.017	113.285	0.000	0.754

According to Table 3 of F-statistics, after adjusting the pre-test scores, the two groups of control and experiment are significantly different in the variables of self-esteem, shyness, and comparative self-criticism in the post-test stage, but there is no significant difference in social relations in the pre-test and post-test stages.

Bonferroni post hoc test was used to determine the difference between variables or in other words, the pairwise comparison of variables. The self-esteem in the experimental group ($M = -7.562$, $SD = 0.510$) and shyness in the experimental group ($M = -8.885$, $SD = 0.712$) and comparative self-criticism in the experimental group ($M = -8.740$, $SD = 0.752$) was significantly less than in the control group. The social relations in the experimental group and the control group did not differ significantly.

Discussion

This study aimed to evaluate the effectiveness of compassion-focused therapy on self-esteem, shyness, comparative self-criticism, and social relationships in patients with vitiligo. The results showed that compassion-focused therapy has a significant effect on reducing comparative self-criticism and shyness as well as increasing patients' self-esteem. These results are consistent with the research of Arabi et al (2021) and Linardon, et al (2020) (1, 2). Marshall found in a study that compassion increases self-esteem and mental health (3). Studies have shown that people with high self-compassion show more psychological health than people with low self-compassion because the feeling of failure that everyone experiences is not sustained by cruel self-criticism, feeling of isolation, and extreme assimilation with thoughts and emotions (4). Vitiligo has psychological effects on a person's individual and social life, disrupting his/her social functioning. In addition, skin disease and the feeling of shame it brings affect the self-concept and self-esteem of the patient resulting in self-criticism. In compassion-focused therapy, people are taught not to avoid or suppress their painful feelings, so they can recognize their experience in the first place and feel compassion about it, finally have a loving attitude towards themselves. The subjects accept their disease as a result of the intervention and quit strict judgment. They find it better to consciously accept it as an experience of their life. They feel compassion for the unpleasant feeling they have experienced. Feeling shame results in a negative evaluation of oneself, affecting the patient's self-esteem and making them fragile. Self-criticism is widely associated with a variety of psychological problems. It is considered a form of internal harassment that is stressful and debilitating and has a significant relationship with shame (5). Muris et al (2016) showed a positive relationship between self-compassion and self-esteem, efficiency, and a negative relationship with

anxiety and depression (6). Compassion-focused therapy can be effective in reducing anxiety and increasing self-esteem by creating self-love, fair judgment, and giving up cruel self-criticism. Increased compassion acts as a shock absorber against the effects of negative events. People with high levels of self-compassion are less likely to expose themselves to evaluation. They have a calm attitude and easily cope with problems and negative life events. They also react to problems mainly based on facts, because their judgment is neither in self-defense nor in self-criticism and self-blame. Studies have shown that people with high levels of self-compassion are not only kind to themselves but also responsible for their problems. They are more comfortable with events and therefore experience lower levels of anxiety (7). One of the characteristics of a human being is to accept that everyone has flaws. Compassion-focused therapy protects people from negative states and reinforces positive emotional states by motivating compassion. As compassion increases, people become more motivated to confront and reconstruct negative thoughts (6). In these interventions, people accept their feelings but do not seek immediate relief or avoidance. Although people cannot change their living conditions, they can change the intensity of their emotional reactions to stressful situations. On the other hand, in the present study, there was no significant difference in social relations between the experimental group and the control group. In other words, compassion-focused therapy did not have a significant effect on the social relationships of patients with vitiligo. Karelson, Silm, and Kingo (2013) in a study examining the quality of life of patients with vitiligo concluded that vitiligo has a greater effect on emotions in women and a greater effect on interpersonal relationships in men, and the results show that vitiligo has less effect on the quality of life than psoriasis (4). The research of Arabi et al (2021) and Saif et al (2013) which examined the quality of life of patients with vitiligo is not consistent with our result (1, 8). In the present study, the World Health Organization quality of life questionnaire was used to measure social relations. This questionnaire has four scales. One of these scales is for the evaluation of social relations which has only three items. The results of present study showed that self-compassion-focused therapy can be used as a complementary therapy to reduce shyness, comparative self-criticism and increase self-esteem in patients with vitiligo. The present study had some following limitations: Some environmental and family factors, such as the economic and social status of the participants, were not examined and controlled. Meanwhile, we did not classify the patients according to sex. On the other hand, this study was performed only on the population of patients in Tehran. Therefore, caution should be exercised in extrapolating the results to other communities. It is recommended that in future studies, another

questionnaire with more items be used and the sex of the patients be considered.

Conclusion

Based on the results of this study, it is concluded that compassion-focused therapy is an effective psychological intervention that can be used by mental health professionals and people active in the field of health and wellness to reduce shyness, self-criticism and improve patients' self-esteem.

Acknowledgment

The protocol of this study has been approved by the Medical Ethics Committee of Shahid Beheshti University of Medical Sciences with the code of ethics IR.SBMU.MSP.REC.1399.312.

Conflict of interest:

The authors of the article have not reported any conflict of interest about this research.

Financial support

According authors of the article, Medical Ethics Committee of shahid beheshti university of medical sciences has been responsible for the financial support of the research.

Ethical considerations

This research was approved by the Ethics Committee of the Shahid Beheshti University of Medical Sciences with the code of ethics IR.SBMU.MSP.REC.1399.312 and Iranian Registry of Clinical Trials with the code of ethics IRCT20201103049252N1.

References

1. Hudson, M.P., A.R. Thompson, and L.M. Emerson, *Compassion-focused self-help for psychological distress associated with skin conditions: a randomized feasibility trial*. Psychol Health, 2020. **35**(9): p. 1095-1114.
2. Sherman, K.A., T. Roper, and C.J. Kilby, *Enhancing self-compassion in individuals with visible skin conditions: randomized pilot of the 'My Changed Body' self-compassion writing intervention*. Health Psychol Behav Med, 2019. **7**(1): p. 62-77.
3. Stiegler, J. and S. Brickley, *Vitiligo: A Comprehensive Overview*. Journal of the Dermatology Nurses' Association, 2021. **13**(1): p. 18-27.
4. Bae, J.M., et al., *Phototherapy for Vitiligo: A Systematic Review and Meta-analysis*. JAMA dermatology, 2017. **153**(7): p. 666-674.
5. Grimes, P.E. and M.M. Miller, *Vitiligo: Patient stories, self-esteem, and the psychological burden of disease*. International journal of women's dermatology, 2018. **4**(1): p. 32-37.
6. Ahmadi, R., I. Sajjadian, and F. Jaffari, *The effectiveness of compassion-focused therapy on anxiety, depression and suicidal thoughts in women with vitiligo*. Dermatology and Cosmetic, 2019. **10**(1): p. 18-29.
7. Kussainova, A., et al., *Vitiligo and anxiety: A systematic review and meta-analysis*. PloS one, 2020. **15**(11): p. e0241445-e0241445.
8. Sommers-Spijkerman, M., et al., *Exploring compassionate attributes and skills among individuals participating in compassion-focused therapy for enhancing well-being*. Psychology and psychotherapy, 2020. **93**(3): p. 555-571.
9. Arabi, A., et al., *Effectiveness of Self-Compassion Therapy on Psychological Distress and Quality of Life of Psoriasis Skin Patients*. Journal of Research in Behavioural Sciences, 2021. **18**(4): p. 605-615.
10. Linardon, J., et al., *Self-compassion as a moderator of the relationships between shape and weight overvaluation and eating disorder psychopathology, psychosocial impairment, and psychological distress*. Body Image, 2020. **33**: p. 183-189.
11. Khoshvagt, N., et al., *Comparison of the Effects of Metacognitive Therapy and Compassion-Focused Therapy on Anxiety in the Mothers of Children with Cerebral Palsy*. Women's Health Bulletin, 2021. **8**(1): p. 1-9.
1. Arabi A, Hasani J, Akbari M, Hatami M, Zadeh MS. Effectiveness of Self-Compassion Therapy on Psychological Distress and Quality of Life of Psoriasis Skin Patients. Journal of Research in Behavioural Sciences. 2021;18(4):605-15.
2. Linardon J, Susanto L, Tepper H, Fuller-Tyszkiewicz M. Self-compassion as a moderator of the relationships between shape and weight overvaluation and eating disorder psychopathology, psychosocial impairment, and psychological distress. Body Image. 2020;33:183-9.
3. Marshall S, Parker P, Ciarrochi J, Sahdra B, Jackson C, Heaven P. Reprint of "Self-compassion protects against the negative effects of low self-esteem: A longitudinal study in a large adolescent sample". Personality and Individual Differences. 2015;74.
4. Karelson M, Silm H, Kingo K. Quality of life and emotional state in vitiligo in an Estonian sample: comparison with psoriasis and healthy controls. Acta dermato-venereologica. 2013;93(4):446-50.
5. Gilbert P, Procter S. Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. Clinical Psychology & Psychotherapy. 2006;13:353-79.
6. Muris P, Meesters C, Pierik A, de Kock B. Good for the Self: Self-Compassion and Other Self-Related Constructs in Relation to Symptoms of Anxiety and Depression in Non-clinical Youths. Journal of child and family studies. 2016;25:607-17.
7. Hudson MP, Thompson AR, Emerson LM. Compassion-focused self-help for psychological distress associated with skin conditions: a randomized feasibility trial. Psychol Health. 2020;35(9):1095-114.
8. Bin Saif GA, Al-Balbeesi AO, Binshabaib R, Alsaad D, Kwatra SG, Alzolibani AA, et al. Quality of life in family members of vitiligo patients: a questionnaire study in Saudi Arabia. American journal of clinical dermatology. 2013;14(6):489-95.