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# Comparison of the Effectiveness of Self-Care Training and Self-Compassion Training on Hope in Kidney Transplant Patients

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A B S T R A C T

The aim of this study was to compare the effectiveness of self-care training and self-compassion training on hope in kidney transplant patients. The research design was a quasi-experimental pretest-posttest design with a control group and follow-up. The statistical population included all kidney transplant patients who visited Razi Hospital in Rasht during the first quarter of 2024 to consult with urology and dialysis physicians for treatment follow-up. The total number of patients was 176. The study sample consisted of 45 individuals (15 in the self-care group, 15 in the self-compassion group, and 15 in the control group). The instrument used in this study was the Hope Scale by Snyder et al. (1991). The self-care training sessions were conducted in 8 weekly 60-minute sessions, and the self-compassion intervention was administered in 8 weekly 60-minute sessions based on Gilbert's protocol (2014) in the experimental groups. Repeated measures ANOVA and Bonferroni post-hoc test were used for data analysis. The results indicated that the overall hope scores in both the self-care and self-compassion groups were higher in the posttest and follow-up phases compared to the pretest, in contrast to the control group. Comparison of means showed that self-compassion training was more effective than self-care training in increasing the level of hope. Moreover, a statistically significant difference was found between the self-care group and the control group ($p < 0.01$), and between the self-compassion group and the control group ($p < 0.05$), indicating the effectiveness of both self-care and self-compassion training on hope. Overall, it can be concluded that both interventions—self-care and self-compassion—had positive effects on hope, quality of life, and self-confidence in kidney transplant patients. However, differences were observed in the effectiveness of the two interventions. In general, the findings suggest that combining self-care and self-compassion interventions is recommended for achieving optimal outcomes in improving the condition of kidney transplant patients.

***Keywords:*** *Self-care, Self-compassion, Hope, Kidney transplantation*

## 1. Introduction

The incidence and prevalence of chronic kidney failure are increasing globally (Aburto et al., 2020). In most countries, approximately 40 percent of patients suffer from chronic kidney disease. Hemodialysis, peritoneal dialysis, and kidney transplantation are the primary treatment methods for renal failure (Bai et al., 2023). Although hemodialysis and peritoneal dialysis improve the health and survival of kidney patients, they do not alter the course of the disease and cannot replace kidney function. Moreover, they may lead to further complications such as dependency, low self-confidence, low self-esteem, psychological and social disorders, depression and anxiety, sexual dysfunction, sleep disorders, long-term reduction in quality of life, hypotension, muscle cramps, and headaches (Bilal et al., 2021).

Kidney transplantation is another treatment method. Studies have shown that kidney transplantation improves the quality of life and survival of these patients (Bravo et al., 2021). Despite these advantages, many complications and problems associated with transplantation have been reported, including post-transplant hyperglycemia, infections, graft rejection, depression, high medication and treatment costs, anxiety about graft rejection and organ loss, frequent follow-up visits, anxiety and stress, rigid medication regimens, sexual dysfunction, low self-efficacy, as well as ocular and dermatological complications (Chen et al., 2018). Nevertheless, due to its lower cost and increased longevity and quality of life, transplantation is considered a more accepted and superior treatment method compared to others.

Side effects of medications, post-transplantation challenges, and numerous follow-ups have reduced the level of hope in these patients. However, many studies emphasize that the best type of care only occurs when patients are actively involved in the process (Chuang et al., 2021). Hope is a crucial component of mental health that can significantly contribute to the quality of life in kidney patients (Costa et al., 2021). Changes in body appearance following treatment, limitations in physical functioning and daily activities, restricted performance in previous roles, and disease-related stigma and lack of acceptance may all lead to alterations in a patient's level of hope. Advances in the diagnosis and treatment of kidney diseases, along with the pathophysiological differences of this disease compared to other chronic conditions in transplant patients, the emergence of negative emotions, daily life challenges in the workplace and human relationships, and increased anxiety may result in changes in hope among kidney transplant patients (Dabuke et al., 2023).

Given the importance of kidney transplantation and its complications, various psychotherapeutic methods are employed in psychological care, notably self-care and self-compassion approaches (Barnett & Homany, 2022). Since treatment is a long-term process, patients must use strategies to manage their condition. Patients who believe in their ability to perform self-care behaviors are more likely to actually engage in those tasks. Therefore, individuals with higher levels of self-care are better able to manage their disease (Callan et al., 2021). This can reduce the emotional distress caused by illness and improve quality of life. Self-care in patients with chronic kidney disease is positively related to health outcomes and quality of life. Disease-specific self-care is essential for the successful management of chronic illnesses, including kidney disease (Chen et al., 2018). Self-care acts as a mediator in changes in quality of life. Increased self-care is associated with greater adherence to treatment, engagement in health-promoting behaviors, and reduced physical and psychological symptoms. Individuals who are confident in their abilities engage in activities that promote health. A patient's inability to adapt to illness may lead to negative consequences such as treatment non-adherence and decreased quality of life (Chuang et al., 2021).

Self-compassion is another important psychological factor that warrants investigation in patients, as it is defined as a positive attitude toward oneself that enhances mental health (Bratt & Fagerström, 2023). People who treat themselves more kindly are less likely to blame themselves and more likely to engage in self-care and value their health (Borjali & Naseri Nia, 2019). A distinctive feature of self-compassion is its orientation toward personal pain and suffering, and it is considered a key element of the positive psychology approach. Self-compassion involves caring for oneself in the face of difficulties or perceived inadequacies, such that painful and distressing emotions are not avoided but approached with kindness, understanding, and recognition of shared human experience (Chukwuorji et al., 2024). In other words, self-compassion is a healthy form of self-acceptance that reflects the degree to which one accepts the undesirable aspects of oneself and life. It comprises three core components: first, when individuals recognize their inadequacies and suffer because of them, they still love and understand themselves; second, they acknowledge the shared human nature of pain and failure as inevitable aspects

of the human condition; and finally, self-compassion involves balanced awareness of one's emotions and the ability to face distressing thoughts and feelings (rather than avoid them) without exaggeration or self-pity, while understanding one's shortcomings. This self-kindness fosters feelings of safety, enhanced social connection, and reduced self-criticism, rumination, thought suppression, and anxiety (Bratt & Fagerström, 2023). Self-compassion training is a recent therapeutic intervention that, by promoting kindness toward oneself and others, can increase social support and improve individuals' social adaptation. Furthermore, this approach is effective in reducing stress and enhancing psychological well-being. It can improve distress tolerance and reduce psychological distress. Self-compassion includes three components: self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification. The integration of these components characterizes an individual high in self-compassion (Bedir & Eliüşük-Bülbül, 2024).

Since this study employed both self-compassion and self-care therapeutic methods, understanding the relationship and differences between these two interventions is crucial. Self-care refers to conscious maintenance of one's health, especially mental health, and involves activities that ensure physical, mental, and emotional well-being. Self-compassion, on the other hand, is the practice of being kind and understanding toward oneself rather than critical, especially when experiencing failure or pain (Barnett & Homany, 2022). Life can sometimes be overwhelming and cause stress and anxiety, which—if not properly managed—can lead to mental health issues. Regular self-care practices help reduce the negative effects of stress on the body and mind. Self-compassion is equally important in mitigating the impacts of mental health challenges. It promotes a healthier emotional response to stress, enhances resilience, and supports mental well-being. Patients need skills in compassion and self-compassion to care for themselves better (Barnett & Homany, 2022). During times of hardship, rather than judging and criticizing themselves for various shortcomings, they should practice self-compassion—being kind and understanding when facing personal failures. Emotion regulation is critical, as research in neuroscience and psychology has shown that people who can manage their emotions well recover from stress more quickly and, in a calm and alert state, are better able to listen deeply and connect compassionately with themselves and others (Bedir & Eliüşük-Bülbül, 2024). Therefore, the use of therapeutic methods to improve hope in patients, especially kidney transplant patients, is essential. Considering the high prevalence of kidney transplantation, the lack of studies in this area according to literature reviews, and the importance of achieving higher quality of life alongside increased hope and long-term survival in kidney transplant patients—and based on what has been discussed as well as the significance of the subject—this study aims to examine the effectiveness of two approaches, self-care and self-compassion, on hope in kidney transplant patients and compare the effects of these two therapeutic approaches. Accordingly, the main research question is: Is there a significant difference in the effectiveness of self-care training and self-compassion training on hope in kidney transplant patients and the two-month follow-up of treatment?

## 2. Methods and Materials

### *2.1. Study Design and Participants*

The present study employed a quasi-experimental design with a pretest-posttest control group and a follow-up.

The statistical population consisted of all kidney transplant patients whose surgeries were performed at Razi Hospital in Rasht and who were under the supervision of a specialist for follow-up and recovery. According to data obtained from the hospital's treatment unit and dialysis department, approximately 176 kidney transplant surgeries were performed between spring 2019 and spring 2023, and these patients continued to consult with their specialists for follow-up.

The research sample consisted of 45 individuals (15 participants in experimental group 1, 15 in experimental group 2, and 15 in the control group). Initially, using a convenience sampling method, 80 individuals were selected and screened based on their status and level of hope. From this pool, 45 participants were chosen and randomly assigned into three groups of 15—two experimental groups and one control group.

Inclusion criteria included: a minimum education level of high school diploma, at least 12 months since the kidney transplant, no prior psychological or psychiatric intervention within the past year, low levels of hope, quality of life, and self-confidence, absence of severe infectious or debilitating diseases, having a medical record with the Kidney Patients Support Association of Gilan Province, no record of transplant rejection since surgery, no psychiatric disorders as per the patient's medical records, and being between 20 and 50 years old. Exclusion criteria included missing more than two intervention sessions.

In this study, after obtaining an introduction letter from Islamic Azad University, Tonekabon Branch, necessary coordination was made with the directors of Razi Hospital in Rasht and the Rasht branch of the Iranian Kidney Patients Support Association to collect information about transplant patients. In coordination with hospital medical staff and the support association, a list of patients who had undergone kidney transplantation from spring 2019 to spring 2023 was compiled.

Then, through phone calls and in-person visits, information regarding the patients' transplantation status and their follow-up locations was gathered. Patients were informed about the purpose and procedures of the study, and their specialists were also consulted to confirm the safety of participation. After assuring the patients that the sessions posed no risk and explaining the study's objectives and safety protocols, they were invited to participate voluntarily. Thanks to the support of medical staff and specialists, a number of patients volunteered to participate. After selecting the final sample, informed consent forms were obtained from them.

The participants were then given an overview of the intervention and asked to participate actively in all sessions. After signing the consent forms, participants were matched and assigned into three groups—two experimental and one control group, each with 15 individuals. A convenience sampling method was used. The Hope Scale questionnaires were distributed among all three groups, and participants were asked to complete them.

The intervention sessions were conducted in the conference room of the dialysis and nephrology ward at Razi Hospital in Rasht, with prior arrangements made with hospital authorities. Before the start of the group interventions (self-care and self-compassion), a 30-minute orientation session was held separately for each group (experimental and control), during which general principles, rules, and goals of the sessions were discussed.

After the pretest, the therapy sessions were conducted over two months. The self-care intervention was delivered in 8 weekly group sessions, each lasting approximately 60 minutes. The self-compassion intervention was also conducted in 8 weekly group sessions, each lasting about 60 minutes. A research assistant was present during all sessions to distribute materials and assist participants.

Following the completion of the intervention sessions, the Hope Scale was administered again. The control group participants were contacted and invited to return to the hospital to complete the post-test questionnaires. Finally, two months after the post-test, the follow-up phase was conducted by administering the questionnaire once more.

### *2.2. Measures*

#### *2.2.1. Hope*

The Hope Scale was developed by Snyder et al. in 1991. It consists of 12 items scored on a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." The scale is designed for individuals aged 15 and above. Four items assess agency thinking (items 2, 9, 10, and 12), four assess pathways thinking (items 1, 4, 7, and 8), and four are distractor items (items 3, 5, 6, and 11). Total scores range from 12 to 60, with scores from 12 to 24 indicating low hope, 24 to 36 indicating moderate hope, and scores above 36 indicating high hope. The scale has been widely used globally as a standardized measure of hope. In Iran, the scale has been translated, validated, and factor-analyzed. For example, Babelan et al. (2011) reported an internal consistency of 0.73 in a sample of 137 patients in Mashhad. Masoudzadeh et al. (2008) reported a reliability coefficient of 0.95 (Hashemi et al., 2024; Sharifian, 2024).

### *2.3. Interventions*

#### *2.3.1. Self-Care Intervention*

The self-care intervention was conducted over 8 weekly group sessions, each lasting 60 minutes. The program began by introducing participants to the concept of self-care and its importance in enhancing physical and mental health, along with the benefits of post-transplant care such as reduced complications and improved quality of life. The second session focused on educating patients about appropriate dietary practices after kidney transplantation, including recommended and restricted foods, fluid intake, electrolyte balance, and the use of physician-recommended supplements. The third session addressed medication management, emphasizing the importance of adherence to immunosuppressive therapies, awareness of potential side effects, and communication with healthcare providers. The fourth session concentrated on infection prevention through personal hygiene, wound care, and recognizing infection warning signs. In the fifth session, stress management and emotion regulation techniques, including deep breathing, meditation, and cognitive reframing, were taught to help patients cope with emotional challenges. The sixth session covered safe physical activity post-transplant, introducing mild exercises such as walking and stretching, with guidance

aligned with medical professionals' recommendations and emphasizing consultation with one's specialist. The seventh session explored common post-transplant complications and the importance of routine medical follow-ups and laboratory evaluations, along with strategies to prepare for physician visits. Finally, the eighth session aimed to enhance patients' overall quality of life and foster future planning by encouraging realistic goal setting, social engagement, and participation in support groups, while reviewing and summarizing the content of previous sessions.

### *2.3.2. Self-Compassion Intervention*

The self-compassion intervention was implemented in 8 weekly group sessions, each lasting 60 minutes, based on Gilbert's (2014) compassion-focused therapy protocol. The first session introduced the core concept of self-compassion, defined as kindness toward oneself in the face of failure or suffering, and outlined its three components: self-kindness, common humanity, and mindfulness, with relevance to kidney transplant patients. In the second session, the focus was on cultivating self-kindness, distinguishing it from self-criticism, and practicing kind internal dialogue, including body scanning and breathing exercises rooted in mindfulness and compassion-based brain systems. The third session emphasized recognition of common humanity, encouraging patients to understand that human imperfection and struggle are universal, and included exercises reflecting on shared human experiences of adversity. The fourth session introduced mindfulness as non-judgmental awareness of the present moment, with practical exercises in focused breathing and short meditations. The fifth session addressed identifying and managing the inner critic by helping participants replace self-critical thoughts with kind, supportive responses, including writing exercises to counter internal negative dialogue. The sixth session encouraged compassionate responses to pain and suffering, teaching patients to accept negative emotions and engage in exercises such as writing self-compassionate letters during distress. The seventh session focused on integrating the learned techniques by combining self-kindness, mindfulness, and acceptance in reflective and group-sharing exercises to reinforce application in daily life. The final session provided a summary of key concepts, facilitated reflection on participants' challenges and successes, and guided planning for continued practice of self-compassion techniques beyond the structured program.

### *2.4. Data Analysis*

For inferential statistical analysis, repeated measures ANOVA and Bonferroni post hoc tests were used. Data were analyzed using SPSS version 28, with the significance level set at 0.05.

## 3. Findings and Results

Each group consisted of 15 participants. In the self-care intervention group, there were 8 women and 7 men. In terms of age, 5 participants were between 30 and 35 years old, 8 participants between 36 and 40, and 2 participants between 41 and 45 years old. Regarding educational level, 4 participants had less than a high school diploma, 8 had a bachelor's degree, and 3 held a master's degree.

In the self-compassion intervention group, there were 6 women and 9 men. With respect to age, 7 participants were between 30 and 35 years old, 5 were between 36 and 40, and 3 were between 41 and 45. In terms of education, 3 participants had less than a high school diploma, 9 had a bachelor's degree, and 3 held a master's degree.

In the control group, there were 7 women and 8 men. With regard to age, 3 participants were between 30 and 35 years old, 8 between 36 and 40, and 4 between 41 and 45. Educationally, 4 had less than a high school diploma, 11 held a bachelor's degree, and 1 participant had a master's degree.

**Table 1**

*Descriptive Indices of Hope Scores at Pretest, Posttest, and Follow-up for the Three Groups*

| Time | Group | Pretest (M) | SD | Posttest (M) | SD | Follow-up (M) | SD |
|---|---|---|---|---|---|---|---|
| Control | | 28.07 | 4.65 | 28.13 | 4.60 | 28.27 | 4.28 |
| Self-Compassion Training | | 27.53 | 5.01 | 42.20 | 4.35 | 41.47 | 4.42 |
| Self-Care Training | | 26.80 | 5.45 | 36.93 | 2.71 | 36.53 | 3.14 |

As shown in Table 1, the mean scores for hope in the control group at pretest, posttest, and follow-up were 28.07, 28.13, and 28.27, respectively. In the self-compassion training group, the corresponding mean scores were 27.53 at pretest, 42.20 at posttest, and 41.47 at follow-up. In the self-


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care training group, the mean scores were 26.80 at pretest, 36.93 at posttest, and 36.53 at follow-up.

Before conducting the repeated measures analysis, preliminary assumptions were examined, including equality of error variances at each stage, homogeneity of variance-covariance matrices, linearity of the dependent variable, Mauchly's test of sphericity, and the interaction between time and group. The results of these tests were reported in order.

Levene's test results showed that the significance levels of the F-statistics for hope scores at pretest ($p = .787$), posttest ($p = .819$), and follow-up ($p = .803$) were not statistically significant, indicating that the assumption of homogeneity of variances was met.

Given that the significance level for Wilks' Lambda was statistically significant for the main effect of time (Wilks' Lambda = .803; $F(2, 41) = 83.48$; $p < .01$) and especially for the time-by-group interaction effect (Wilks' Lambda = .693; $F(4, 82) = 11.25$; $p < .01$), the use of repeated measures analysis of variance was justified.

**Table 2**

*Results of Repeated Measures ANOVA (Within-Group and Between-Group Effects of Therapeutic Methods on Hope)*

| Source of Variation | Sum of Squares | df | Mean Square | F | Sig. | Eta Squared |
|---|---|---|---|---|---|---|
| Within-Group Effects | | | | | | |
| Time | 1981.61 | 1.101 | 1799.21 | 154.84 | .001 | .787 |
| Time * Group | 1055.54 | 2.203 | 479.19 | 41.24 | .001 | .663 |
| Error | 537.51 | 46.261 | 46.26 | | | |
| Between-Group Effects | | | | | | |
| Group | 1806.41 | 2 | 903.21 | 20.34 | .001 | .492 |
| Error | 1865.02 | 42 | 44.40 | | | |

As shown in Table 2, the statistically significant F-value for the effect of time indicates that the hope scores of participants in the experimental groups significantly increased from pretest to posttest and follow-up stages ($F(1.101, 46.261) = 154.84$, $p < .01$), suggesting that the therapeutic methods had a significant effect on increasing individuals' level of hope. The Eta squared value indicates that 78.7% of the variance in hope scores from pretest to posttest and follow-up is attributable to the impact of the interventions.

The statistically significant interaction between time and group also reveals that, at the posttest and follow-up stages, the mean hope scores in the experimental groups were significantly higher than those of the control group ($F(2.203, 46.261) = 41.24$, $p < .01$). Likewise, the significant main effect of group indicates a statistically meaningful difference in hope scores among the three groups at posttest and follow-up ($F(2, 42) = 20.34$, $p < .01$). Therefore, there is a significant difference between the effectiveness of self-care and self-compassion training on hope in kidney transplant patients. The Eta squared value indicates that 49.2% of the variance in hope scores is attributable to the group variable.

To determine whether a significant difference exists between the two experimental groups in terms of their effect on hope, the results of the Scheffé post hoc test were analyzed. As shown in Table 3, the Scheffé test revealed a statistically significant difference in the effectiveness of self-care versus self-compassion training in increasing hope ($MD = 3.64$, $p < .05$). The comparison of means in Table 8 indicates that self-compassion training was more effective than self-care in increasing hope levels. Thus, the difference in the effectiveness of self-care and self-compassion training on hope in kidney transplant patients is confirmed.

Additionally, statistically significant differences were observed between the self-care group and the control group ($p < .01$), as well as between the self-compassion group and the control group ($p < .05$), indicating the effectiveness of both interventions on increasing levels of hope.

**Table 3**

*Scheffé Post Hoc Comparison of Mean Hope Scores Based on Treatment Type*

| Comparisons | Mean Difference (MD) | Standard Error | Sig. |
|---|---|---|---|
| Self-Care – Self-Compassion | 3.64 | 1.40 | .044 |
| Self-Compassion – Control | 8.91 | 1.40 | .001 |
| Self-Care – Control | 5.27 | 1.40 | .002 |


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To examine differences between the stages within each experimental group, pairwise comparisons were conducted using Bonferroni post hoc tests. The results of these pairwise comparisons are presented in Table 4. According to Table 4, the Bonferroni test results for comparing means across assessment stages of the hope variable reveal significant differences between the pretest and posttest (MD = -8.29, $p < .01$), and between the pretest and follow-up (MD = -7.96, $p < .01$). However, there was no statistically significant difference between the posttest and follow-up stages ($p > .05$), indicating the stability and persistence of the changes achieved after the posttest.

**Table 4**

*Bonferroni Post Hoc Test Results for Mean Differences Across Test Stages*

| Variable | Stage 1 | Stage 2 | Mean Difference | Standard Error | Sig. | 95% CI Lower | 95% CI Upper |
|---|---|---|---|---|---|---|---|
| Hope | Pretest | Posttest | -8.29 | 0.637 | .001 | -9.88 | -6.70 |
| | Pretest | Follow-up | -7.96 | 0.647 | .001 | -9.57 | -6.34 |
| | Posttest | Follow-up | 0.333 | 0.166 | .154 | -0.081 | 0.748 |

## 4. Discussion and Conclusion

The results indicated that there is a difference in the effectiveness of self-care training and self-compassion training on hope in kidney transplant patients, such that the total hope scores in both the self-care and self-compassion groups were higher in the post-test and follow-up phases compared to the pre-test and the control group. Moreover, the comparison of the two intervention groups showed a significant difference between self-care and self-compassion; specifically, self-compassion demonstrated a greater effect on increasing hope in both the post-test and follow-up phases.

To explain these findings, the effectiveness of each intervention—self-care and self-compassion—on hope was first discussed individually, followed by a comparison of their impacts. The findings of this study showed that self-care training had a significant effect on hope in kidney transplant patients. These results are consistent with the prior findings (Bratt & Fagerström, 2023; Callan et al., 2021).

In explaining these results, it can be stated that self-care training, as an empowering intervention, has multiple effects on the psychological, physical, and social aspects of kidney transplant patients, which can directly or indirectly increase hope. Hope is defined as having positive expectations for the future and the belief in one's ability to overcome life's challenges. Below, we explain how self-care training fosters this hope in patients.

The first impact of self-care training is increasing patients' awareness of their physical and psychological condition. Many patients experience anxiety and constant worry after transplantation regarding graft success and the prevention of complications. Through self-care training, patients learn how to identify warning signs and take timely action (Chen et al., 2018). This awareness provides them with reassurance that they can manage problems, ultimately reducing fear and anxiety about the future and increasing hope.

Another important aspect is enhancing the sense of control and self-efficacy. Kidney transplant patients may feel that their lives are entirely managed by others—doctors or family members. Self-care training equips them with the tools and skills for daily management, such as planning appropriate diets, monitoring vital signs, proper medication use, and infection prevention, instilling a sense of responsibility for their own health (Barnett & Homany, 2022). This perceived control over their condition is directly linked to greater motivation and optimism.

Additionally, self-care training plays a crucial role in reducing physical complications associated with transplantation. For instance, patients who learn and apply self-care techniques correctly are more likely to prevent problems such as infections, graft rejection, or drug-related complications. Improvement in physical health and fewer hospitalizations enhance their quality of life. When patients feel physically well, they develop a more positive outlook on the future, which in turn strengthens hope.

From a psychological perspective, self-care training can reduce stress and depression. Patients who have sufficient knowledge about their condition and how to care for themselves experience less helplessness and anxiety. Reduced stress and improved mental health help patients view life more calmly and optimistically (Chukwuorji et al., 2024). Furthermore, this training can strengthen coping skills, allowing patients to face post-transplant life challenges with greater confidence.

The social effects of self-care training are also important. These trainings can increase the patient's independence and reduce reliance on others for daily tasks. This independence not only raises the patient's self-esteem but also strengthens social relationships, as others perceive them as capable and responsible. This improvement in social interactions and sense of worth can directly impact the enhancement of hope.

Ultimately, self-care training encourages patients to shift focus from limitations and challenges to abilities and opportunities for life improvement. This cognitive shift from problem-orientation to growth-orientation is a core factor in enhancing hope in these patients (Bratt & Fagerström, 2023). Overall, self-care training is not only a therapeutic approach but also a comprehensive and multidimensional intervention that helps kidney transplant patients manage both their physical and psychological well-being and develop a brighter perspective toward the future.

The findings of this study also revealed that the self-compassion intervention had a significant effect on hope in kidney transplant patients. These findings are consistent with prior studies (Aburto et al., 2020; Bai et al., 2023). To explain these results, it can be stated that the self-compassion intervention has a profound effect on increasing hope in transplant patients. As a key indicator of mental health, hope refers to a positive outlook on the future and the ability to cope with life challenges.

Kidney transplant patients, due to the physical and psychological burdens associated with their condition and treatment, may be at risk of decreased hope. The self-compassion intervention, through strengthening psychological mechanisms and inducing positive changes in attitude and behavior, can alleviate these challenges. One key effect of the self-compassion intervention is helping patients accept their current condition. This intervention teaches patients to treat themselves with kindness and nonjudgmental understanding rather than blame (Chuang et al., 2021). This approach reduces psychological pressure and enhances the ability to find solutions and adapt to difficult circumstances, thereby directly increasing hope.

Self-compassion also reduces feelings of isolation and alienation. Transplant patients may feel that their suffering is unique and incomprehensible to others (Chen et al., 2018). The intervention emphasizes that suffering is a shared human experience, fostering a sense of solidarity and belonging. This sense of connection and being understood enables patients to look at the future more positively.

Furthermore, the self-compassion intervention helps reduce stress and anxiety related to post-transplant conditions. It teaches patients to focus on the present moment and distance themselves from negative thoughts through mindfulness. These skills help them overcome challenges and believe in their ability to manage their future. The intervention also enhances psychological flexibility. Patients who learn self-compassion strategies become more capable of accepting changes and adapting to new circumstances. This flexibility enables them to shift focus from limitations to opportunities provided by the transplant, significantly increasing hope.

Another positive outcome of this intervention is the improvement of self-esteem and self-efficacy. Self-compassion helps patients recognize and accept their strengths and efforts instead of comparing themselves to others or focusing on shortcomings. This change in perspective boosts confidence and enhances hope about the future. Finally, the self-compassion intervention transforms patients' perceptions of suffering, enabling them to find positive meaning in their experiences. This sense of meaning reinforces hope and helps patients move forward with motivation and optimism (Barnett & Homany, 2022).

Overall, the self-compassion intervention, by reducing stress, enhancing acceptance, increasing psychological flexibility, and transforming patients' views of themselves and life, significantly increases hope in kidney transplant patients and can serve as an effective component of rehabilitation programs.

The results of this study showed that self-compassion training was more effective than self-care training in increasing hope in both the post-test and follow-up stages. The self-compassion intervention had a greater effect on hope among kidney transplant patients because it emphasizes deeper psychological and emotional aspects, creating more lasting changes in attitude and behavior. Self-compassion, by fostering self-acceptance, self-kindness, and a positive life perspective, helps patients reduce disease-related anxiety and improve their adaptability to new conditions.

This approach, by reducing self-blame and enhancing feelings of self-worth, enables patients to focus on their capacities rather than their physical limitations and to look at the future with more hope (Chukwuorji et al., 2024). Self-compassion also diminishes feelings of isolation and meaninglessness associated with illness by reinforcing the human commonality of suffering. Through this, patients begin to view life's challenges as natural human experiences and discover new meaning and purpose, both of which are crucial in increasing hope.

Conversely, self-care primarily focuses on the practical aspects of disease management, such as diet, medication adherence, and monitoring physical condition, and pays less attention to the psychological and existential dimensions of the patient's life. The self-compassion intervention significantly contributes to hope through stress and anxiety reduction. It helps patients remain grounded in the present moment using mindfulness and acceptance techniques and encourages them to focus on available opportunities rather than worry about the future or regret the past (Bedir & Eliüşük-Bülbül, 2024).

Although self-care improves physical condition and disease management, it does not directly address psychological stress or anxiety. One of the reasons for the superiority of self-compassion is its impact on strengthening psychological flexibility. This intervention teaches patients to approach life's challenges with an adaptive mindset and better coping strategies. Such flexibility distances patients from feelings of helplessness and despair and fosters hopeful visions of the future.

Moreover, self-compassion, by increasing the sense of belonging and social support, allows patients to form deeper connections and receive emotional support, both of which are key contributors to enhanced hope. The enduring nature of changes brought by self-compassion, even beyond the intervention period, is another reason for its greater efficacy compared to self-care. In contrast, the effects of self-care often diminish after the intervention ends (Bratt & Fagerström, 2023).

In summary, the superiority of self-compassion over self-care in increasing hope stems from its more comprehensive and deeper approach to improving patients' psychological and emotional well-being. This intervention can serve as a powerful tool for enhancing the quality of life in kidney transplant patients.

## Authors' Contributions

Authors contributed equally to this article.

## Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

## Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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## Declaration of Interest

The authors report no conflict of interest.

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## Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. This study was approved by the Ethics Committee of Islamic Azad University, Sari Branch, under the code IR.IAU.SARI.REC.1403.110.

## References

Aburto, J. M., Villavicencio, F., Basellini, U., Kjærgaard, S., & Vaupel, J. W. (2020). Dynamics of life expectancy and life span equality. *Proceedings of the National Academy of Sciences*, *117*(10), 5250-5259. https://doi.org/10.1073/pnas.1915884117

Bai, R., Liu, Y., Zhang, L., Dong, W., Bai, Z., & Zhou, M. (2023). Projections of future life expectancy in China up to 2035: a modelling study. *The Lancet Public Health*, *8*(12), e915-e922. https://doi.org/10.1016/S2468-2667(22)00338-3

Barnett, J. E., & Homany, G. (2022). The new self-care: It's not all about you. *Practice Innovations*, *7*(4), 313. https://doi.org/10.1037/pri0000190

Bedir, M., & Eliüşük-Bülbül, A. (2024). The effect of the self-compassion program on self-compassion and professional quality of life among healthcare professionals. *Current Psychology*, *43*(17), 15376-15384. https://doi.org/10.1007/s12144-023-05516-x

Bilal, U., Hessel, P., Perez-Ferrer, C., Michael, Y. L., Alfaro, T., Tenorio-Mucha, J., Friche, A. A. L., Pina, M. F., Vives, A., Quick, H., Alazraqui, M., Rodriguez, D. A., Miranda, J. J., Diez-Roux, A. V., & group, T. S. (2021). Life expectancy and mortality in 363 cities of Latin America. *Nature medicine*, *27*(3), 463-470. https://doi.org/10.1038/s41591-020-01214-4

Borjali, M., & Naseri Nia, S. (2019). The Effectiveness of Emotion Regulation Strategies Training on Mental Health, Self-compassion and Craving in The Addicts. *Counseling Culture and Psycotherapy*, *10*(40), 133-154. https://qccpc.atu.ac.ir/article_10482.html?lang=en

Bratt, A. S., & Fagerström, C. (2023). Perceptions of General Attitudes towards Older Adults in Society: Is There a Link between Perceived Life Satisfaction, Self-Compassion, and Health-Related Quality of Life? *International journal of environmental research and public health*, *20*(4), 3011. https://doi.org/10.3390/ijerph20043011

Bravo, J. M., Ayuso, M., Holzmann, R., & Palmer, E. (2021). Addressing the life expectancy gap in pension policy. *Insurance: Mathematics and Economics*, *99*, 200-221. https://doi.org/10.1016/j.insmatheco.2021.03.025

Callan, S., Schwartz, J., & Arputhan, A. (2021). Training future psychologists to be competent in self-care: A systematic review. *Training and Education in Professional Psychology*, *15*(2), 117. https://doi.org/10.1037/tep0000345

Chen, Y. C., Chang, L. C., Liu, C. Y., Ho, Y. F., Weng, S. C., & Tsai, T. I. (2018). The Roles of Social Support and Health Literacy in Self-Management Among Patients With Chronic Kidney Disease. *Journal of Nursing Scholarship*, *50*(3), 265-275. https://doi.org/10.1111/jnu.12377

Chuang, L. M., Wu, S. V., Lee, M. C., Lin, L. J., Liang, S. Y., Lai, P. C., & Kao, M. C. (2021). The effects of knowledge and self-management of patients with early-stage chronic kidney disease: Self-efficacy is a mediator. *Japan Journal of Nursing Science*, *18*(2), e12388. https://doi.org/10.1111/jjns.12388

Chukwuorji, J. C., Odi, C. P., Chike-Okoli, A., Morah, N. M., Osondu, O. M., Rukmi, D. K., Victor-Aigbodion, V., & Eze, J. E. (2024). Health-related quality of life of people living with HIV: contributions of emotion regulation and self-compassion. *Venereology*, *3*(3), 136-146. https://doi.org/10.3390/venereology3030011

Costa, D. S., Mercieca-Bebber, R., Rutherford, C., Tait, M. A., & King, M. T. (2021). How is quality of life defined and assessed in published research? *Quality of Life Research*, *30*, 2109-2121. https://doi.org/10.1007/s11136-021-02826-0

Dabuke, A. M., Zainal, V. R., & Hakim, A. (2023). The Effect of Self-Ability and Self Confidence on Employee Performance: A Literature Review. *Dinasti International Journal of Digital Business Management*, *4*(2), 286-296. https://dinastipub.org/DIJDBM/article/view/1704

Hashemi, Z., Aghajani Heshjin, T., & Shokrgozar, A. (2024). The Relationship Between Spiritual Well-being, Mental Health, Resilience, and Hope in Cardiovascular Patients. *Research in Religion and Health*, *8*(Fall 2021), 38-52. http://ensani.ir/fa/article/509232/%D8%B1%D8%A7%D8%A8%D8%B7%D9%87-%D8%A8%D9%87%D8%B2%DB%8C%D8%B3%D8%AA%DB%8C-%D9%85%D8%B9%D9%86%D9%88%DB%8C-%D8%A8%D8%A7-%D8%B3%D9%84%D8%A7%D9%85%D8%AA-%D8%B1%D9%88%D8%A7%D9%86-%D8%AA%D8%A7%D8%A8-%D8%A2%D9%88%D8%B1%DB%8C-%D9%88-%D8%A7%D9%85%DB%8C%D8%AF-%D8%A8%D9%87-%D8%B2%D9%86%D8%AF%DA%AF%DB%8C-%D8%AF%D8%B1-%D8%A8%DB%8C%D9%85%D8%A7%D8%B1%D8%A7%D9%86-%D9%82%D9%84%D8%A8%DB%8C-%D8%B9%D8%B1%D9%88%D9%82%DB%8C-%D8%A8%DB%8C%D9%85%D8%A7%D8%B1%D8%B3%D8%AA%D8%A7%D9%86-%D8%AC%D9%85-%D8%B4%D9%87%D8%B1-%D8%AA%D9%87%D8%B1%D8%A7%D9%86

Sharifian, P. (2024). Effect of Resilience Training on Stress, Hope and Psychological Toughness of Mothers Living With Mentally and Physically Disabled Children. *BMC pediatrics*, *24*(1). https://doi.org/10.1186/s12887-024-04828-6


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