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Original Article

The effectiveness of Rogers's client-centered therapy on resilience and hope of women who committed suicide

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Abstract

This study aimed to investigate the effectiveness of client-centered therapy on the resilience and hope of women who have attempted suicide. It is an applied and semi-experimental study employing a multiple baseline single-case study design. The statistical population comprises all women who attempted suicide and were referred to the social emergency center of Meybod City in 2018. Three women were selected through purposive sampling. Data were collected using the Connor-Davidson Resilience Scale and Snyder State Hope Scale in three phases: baseline, intervention, and follow-up. The collected data were analyzed using graphical analysis and improvement percentage. The results indicated an increasing trend in participants' scores in psychological resilience and hope from the beginning of the treatment sessions. This positive trend was maintained throughout the treatment and follow-up periods. The findings suggest that client-centered therapy has been effective in improving and increasing cognitive resilience and hope among women who had attempted suicide.

Keywords

Client-centered therapy
Hope
Psychological resilience

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Introduction

Suicide is defined as self-inflicted death with evidence of intention to die (Naguy et al., 2020) and is defined as thinking, considering or planning for suicide (Hollingsworth et al., 2016). Suicidal behavior is a significant public health issue worldwide (Organization, 2018) and it remains a psychiatric emergency, tragedy, a public health burden. Stigma attached to psychiatric disorders and suicide means many people feel unable to seek help. The development of suicide risk is complex, involving contributions from biological (including genetics), psychological (such as certain personality traits), clinical (such as comorbid psychiatric illness), as well as social and environmental factors (Turecki et al., 2019). The prevalence of people who self-injure each year indicates a public health problem requiring attention and intervention (Najian et al., 2022).

Studies have identified several risk factors and protective factors associated with suicidal behavior. These factors are divided into several groups: social, demographic, cultural, relational and stressful factors of life (Borges et al., 2010). Other factors such as mental conditions, impulsivity caused by serotonin dysfunction and abusing alcohol, tobacco and other harmful drugs are connected to suicidal plans leading to suicidal acts (Mann, 2004). The impact of suicide on societies, mental healthcare, and public health is beyond question. According to WHO, suicide had a global death toll of 703,000 in 2019 and the global age-standardized suicide rate was 9.0/100 000. In 2019, suicide accounted for about 1.3% of deaths (Organization, 2021). Older adults are more vulnerable for death by suicide; in 2011, the rate of death was 15.26 per 10000 for adults 60 years and older and 11.74 for individuals younger than 60 years old. The cost of medical and suicide loss was estimated more than one million dollars for every suicide death in 2005 (Conwell et al., 2002). Moreover, when someone dies by suicide, there will be negative psychological consequences for their family and other loved ones. For those who eventually committing suicide, severe pain and suffering are experienced before death. Considering the extraordinary high amount of personal and financial costs of suicide, there are efforts focused on developing models to identify people who are at risk (Joiner et al., 2005). While the interpersonal theory of suicide is still new, it is considered as the fourth effective theory (Joiner, 2005). The interpersonal theory of suicide, shows that

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individuals who are at risk of death by suicide are those who have tendency and ability to commit it. So, Van Orden et al. (2010) showed that the tendency to suicide is caused by two distinct and at the same time related factors: Perceived difficulty (feeling of irresponsibility or feeling self-hate) and mild dependency (feeling alone and lack of mutual relationship) (Van Orden et al., 2010).

The acquired ability to commit suicide is developed over time by exposure to unpleasant physiological and psychologically provocative events. Moreover, to commit suicide, a fatal or nearly fatal suicidal act is required. Some of the known factors related to suicide are: posttraumatic stress disorder, child abuse, substance use problems, law enforcement problems, losing job or unemployment, medical needs, brain injury, family and relationship problems, financial pressure, as well as cultural and social conditions (Javed & Munawar, 2021). Excessive interpersonal and social stressors are as psychiatric crises which may result in suicide attempts. Evidence showed that impulsive suicides are related to childhood experiences. Ignorance and neglect in childhood influence on psychological, emotional and cognitive behaviors. The risk factors of psychiatric disorders also have been considered as risk factors for suicidal behavior in all diagnostic groups. It has been said that impulsivity may be result of a stroke and a risk factor for developing a pathological response to trauma (Chen et al., 2021). In this regard, researchers suggest that impulsivity may have a mediating role in the relationship between childhood trauma and suicidal behavior.

Suicide is a serious global public health issue. It is among the top twenty leading causes of death worldwide, with more deaths due to suicide than to malaria, breast cancer, or war and homicide. Close to 800,000 people die by suicide every year (Organization, 2019). Given the vulnerability of female and the great sensitivity of suicidal ideation, it seems essential to study the etiology of this tendency and take precise actions to reduce and control it (Alibabaee et al., 2021). A variable that has been constantly and affirmatively related with suicide risk is hopelessness (Drum et al., 2009; Kisch et al., 2005). Hope is a structure in positive psychology and can be defined as the ability to succeed and achieve a set of goals with determination (Snyder et al., 1991). Hope has been described in many ways including as a passion, a virtue, and transformative action (Sain, 2020). Hope consists of two components: pathways and agency. The pathways component refers to the ability to succeed in the way of achieving a goal. While agency is the desire to reach the goal (Snyder et al., 1991). Pathways and agency are related to each other and they are necessary to experience hope and achieve a goal. Evidence shows that high level of hope positively predicts life satisfaction. There is a meaningful correlation between high hope with positive emotions and between low hope with negative emotions (Jayervand, 2018). Recently, the relationship between hope and suicidal ideation has been investigated in several populations and it has been shown that hope is significantly related to low suicidal behaviors (Range & Penton, 1994). People who set the goals and have motivation to achieve them are better able to deal with difficult and unpleasant emotions (Snyder, 1994). Hope is significantly associated with lower levels of suicidal ideation (Pratt & Foster, 2020). Those who have more hope and feel that they have effect on others, better equipped to cope with negative feelings, because they may be able to naturally identify ways they can contribute to the well-being of others and to achieve the goals. Goals, in turn, can protect suicidal thoughts during times of feeling difficulty, pain and suffering (Joiner Jr et al., 2009). The factors influencing on hope are supportive family, stable family relationships, having awareness about own cultural identity, exposure to opportunities for learning, faith and ability to predict the life beyond (Snyder, 2000). Hope is a personal assessment providing a situation in which a person is able to implement the tools to achieve the desired goals. Hope is not same with optimism; optimism can be positive expectation and explanation of a difficult situation. Optimistic people have less suicidal thoughts than pessimistic people. But hope includes special planning. For instance, a person should be hopeful to help others (Javed & Munawar, 2021). High levels of hope result in the weak relation between feeling difficulty, discomfort and depression symptoms. Those who are naturally more hopeful are resilient to detrimental consequences and only people who have high levels of resilience may not have suicidal thoughts, because they don't have tendency to end their lives.

Resilience is an important personality characteristic that seems to be protective against the development of psychiatric disorders (Roy et al., 2007) and it is not an inborn characteristic but is developed during lifetime, so resilience is a dynamic characteristic. The development of resilience depends on management problems in daily life, overcoming the crises and success in doing duties. Early childhood is very important and childhood experiences are the most important in development of resilience (Rutter, 1985). Evidence shows that the early promotion of self-esteem and self-efficacy, using the ability to solve problems and social prosperity, generally improves the crisis management skills and increases resiliency (Rutter, 1985). Resilience is the ability to cope with shocks and to keep functioning in much the same kind of way. A resilient system responds to a disturbance by changing the relative amounts of its different parts and how they interact, thereby changing the way it functions. It stays the same kind of system by learning from a disturbance, to be able to better cope with a similar disturbance in the future. It does not bounce back to look and behave exactly like it did before (Walker, 2020). So, low resilience is one of the factors that cause suicide (Rutter, 1985). Resiliency is defined as a mental structure that reduces the relation between risk factors and suicidal thoughts and efforts. As mentioned, lack of hope and resiliency are two factors that cause suicide. Evidence showed that by interventional programs, we can develop hope and resiliency in people who do not have these characteristics. One of these interventions is Rogers's client-centered therapy.

In client-centered therapy, the metaphor that is often used to convey its theoretical principles is how the oak has this ability to develop. The oak tree with the right nutrients from the soil and the right balance of sunlight and shadow will grow. But due to the lack of nutrients from the soil and unbalance of sunlight and shadow, its potential as an oak tree will be destroyed (Rogers, 2008). So, personality development, its movement toward development and autonomous functioning are provided when social and environmental conditions are optimized. The American Psychological The empathy, positive attention, consonance and being real were significantly effective in psychotherapy. According to the person-centered theory, individual is considered as an active organism that tries to use own abilities in the environment (Cornelius-White, 2002). In Rogers' theory, there are two poles for self-actualization: one pole is the individual who is going toward self-actualization as a biological tendency and a social requirement and the other pole is a social environment which can facilitate the conditions of individual's achievement (Cornelius-White, 2002). According to these treatment conditions, clients who suffer from disappointment are inflexible in facing problems, do not have resiliency and decide to commit suicide; this treatment creates an environment for the person that can knows his own features, abilities, values and needs, and act for achieve them and realize his worth. After the individual was able to recognize his abilities and values, he becomes hopeful to himself and provide an environment which he can grow there; so hopelessness turns into hope and consider problems as a part of life and his life prospers. A study in Iran demonstrated that most of the suicides committed by females (Koohestani et al., 2021). So the presented data emphasize the need for urgent action to prevent suicide. Person who intends to commit suicide is full of hopelessness and does not know his values and abilities. Considering the essential role of hope in renunciation of suicide in people who committed suicide, investigate interventions which can increase hope in these people seems necessary. In this regard, this study investigates the effect of Rogers's client-centered therapy on resilience and hope of people who commit suicide.

In spite of the fact that in recent years the impact of various psychotherapy approaches on people attempting suicide has been investigated, the client-centered approach, as one of the important humanistic approaches in psychotherapy, has not yet received much attention. Resilience and hope are also considered as two important factors in dealing with suicidal thoughts, which have not been given much attention in researches. Most studies have addressed the negative aspects of people attempting suicide, such as dysfunctional thoughts, depression, and suppressed emotions, and positive aspects such as hope have been less addressed; So the present study aimed to evaluate the effectiveness of Rogers's client-centered therapy on resilience and hope among women who committed suicide who referred to Meybod city's social emergency center.

Methods

Participants

Current study was a single-case experimental study. The main purpose of the study was to investigate the effect of client-centered therapy on resilience and hope of women who committed suicide. The community comprises all women who committed suicide and were referred to the social emergency center of Meybod City. By purposive sampling, 3 women were selected. Inclusion criteria were included: committing suicide by taking pills (referred by the hospital), having at least a school education, not taking psychiatric drugs, married, housewife; and exclusion criteria were included: have a history of psychological disorders and receiving other psychological treatments.

Instrument

Resilience questionnaire:

The Connor-Davidson Resilience questionnaire (CD-RISC) was developed by Connor and Davidson (2003) to measure the ability to deal with pressure and threats. This questionnaire consists of 25 items and 5 subscales (perception of individual competence, trust in individual instincts, tolerance of negative emotions, control and spiritual influences, positive acceptance of change and secure relationships) which are scored on a 5-point Likert scale from 0 (not true at all) to 4 (true nearly all the time). The higher scores indicate greater resilience. The score 50 indicates people with resilience, and higher than this score shows the higher intensity of individual resilience, and vice versa (Connor & Davidson, 2003). The CD-RISC had good internal reliability (α =. 88), test-retest reliability (r =. 87), and convergent and divergent validity with Kobasa's stubbornness scale and Sheehan's stress vulnerability scale, respectively (Connor & Davidson, 2003). The construct validity of the new scale of resilience based on confirmatory factor analysis for all ten questions is loaded between 44 to 93 percent, which indicates that the construct validity is desirable and acceptable for this scale (Campbell-Sills & Stein, 2007). The convergent validity of the Persian version of CD-RISC was evaluated through correlation with Kubasa's hardiness scale, and the findings showed that the correlation coefficient was positive and significant in psychiatric outpatients (r= .83, p<.001). Also, there was a negative and significant correlation between CD-RISC and perceived stress scale (r = -.76, p.001) which shows the concurrent validity of this scale (Mohammadi, 2005). In another study, the Cronbach's alpha coefficient of the Persian version was reported .89 (Mohammadi et al., 2006). In the present study, in a sample of 10 women who committed suicide, the test-retest reliability was .86 and its standard deviation was 3.72.

Snyder's hope scale:

The hope scale prepared by Snyder, Harris, Anderson, Holleran, Irving and colleagues (1991), has 12 items and aimed to evaluate the hope in individual regarding self-assessment. The items scored on 5-point Likert scale and measures agency thinking and pathways. There are 4 items to measure agency thinking, 4 items to measure pathways and 4 deviant items. Scores between12-24 indicate low level of hope. Scores between 24-36 indicate average hope and scores higher than 36 indicate high level of hope (Snyder et al., 1991). The Hope Scale has acceptable internal consistencies (alphas of .74 to .88 across several studies) (Cramer & Dyrkacz, 1998; Snyder et al., 1991; Sumerlin, 1997). The test-retest reliability of total score, agency thinking and pathways subscale were .85, .81, .74 in three week interval, respectively (Snyder et al., 2000). The Hope Scale also has good convergent validity with optimism scale (r= .50) and the desire for personal control (r= .54) (Snyder, 1989; Snyder et al., 1991). There is a positive and significant correlation between this scale with positive emotion, optimism, life satisfaction and self-esteem, and a negative and significant correlation with anxiety and pessimism (Abdel-Khalek & Snyder, 2007). In construct validity, two factors of agency thinking and pathways were obtained through factor analysis by implementing it on 676 people (295 mental patients, 112 criminals and 296 students) (Brouwer et al., 2008). Also, by implementing it on 1025 survivors of traumatic events, the two-factor structure of this scale has been confirmed (Creamer et al., 2009). The factorial structure of the Persian version of the scale was confirmed using factor analysis; also, the retest reliability was .81. The Persian version had convergent validity with the meaning of life and divergent validity with the scale of suicidal thoughts (Kermani et al., 2011). In another study, two main factors were confirmed via the exploratory factor analysis and both factors explained 51% of the variance generally (Nasiri & Jokar, 2008). Cronbach's alpha coefficient of the version was 0.89 (Khoshkharam & Golzari, 2011). In the current study, in a sample of 10 women who committed suicide, the test-retest reliability was 0.9 and its standard deviation was 2.49.

Procedure

The method of this research was as follows: First, the participants were interviewed, and then if they have the criteria to participate in the study, the objectives were explained to them and the consent form was completed. The reason of suicide in all three participants was family conflicts. All of the participants entered the baseline phase at the same time. The baseline phase consisted of two tests which were done in three weeks apart from each other. For all three participants intervention was carried out individually and separately. Participants, in 10 sessions, were received Rogers's client-centered therapy. The dependent variables were measured in the third, sixth, eighth and tenth sessions of intervention phase. In addition, in follow-up phase, two weeks and two months after treatment, the measures were repeated.

Data analysis

Graphical analysis method was used to analyze the data. In this method, ups and downs of dependent variable are considered as the basis for judging about the amount of change. In addition to graphical analysis, the improvement percentage was also used for verification the clinical significance of the changes (Ogles et al., 2001). The following formula was used to calculate the improvement percentage:

$\Delta A\% = (A0 - A1) / A0$

$\Delta A\%$: improvement rate, A0: participant problem in the first session, A1: participant problem in the last session

Also, reliable change index (RCI) with a modified formula was used to measure the significance of clinical changes (Jacobson & Truax, 1992).

Content of person-centered intervention

Session 1. Introduction: Introducing group members and group rules, defining and giving explanations about the components of self-concept, explaining how to change self-concept and the necessity of its existence and its effect on disappointment, depression and sense of emptiness; **Session 2.** Self-awareness, mental impression and investigating of individual judgment: Each of the participants told a story about their life. The goal was to help the members become aware of themselves. Explaining the stories based on the five main components of cognitive resilience (optimism, internal control, social adequacy, positive acceptance, negative emotional tolerance) and giving assignments to the clients in the context of the five components of cognitive resilience was another part of the session structure; **Session 3.** Four human characteristics from Rogers' viewpoint: Presenting a report of the previous session assignment and taking feedback. The four human characteristics from Rogers' viewpoint (openness to experience, self-confidence, internal source of evaluation, desire to continue developing) were examined and explained its relationship with suicidal thoughts. Bring up a list of current events and examining these four features from inside of these events and giving assignments to the subjects was one of the other topics of this session.; **Session 4.** Congruence and honesty: Presenting a report of the previous session assignment and giving feedback. Each of the participants told a story about their life and the goal was that participants have the opportunity to explore the broad range of their experience, including their feelings, beliefs, behavior, and perspectives and to examine the incompatibility between their self-concept and their actual experience. Giving assignments to the subjects was one of the other topics of this session. **Session 5.** Diagnosing the ineffectiveness of controlling internal events: Helping client to identify ineffectiveness of controlling internal events and accepting painful events without controlling those using parables and giving assignment. **Session 6.** Contact with

the present and self: Presenting a report of the previous session assignment and providing feedback. Creating a distance between evaluations, personal experiences and observing thoughts without judging by using metaphors, and giving assignments. Contact with the present and self was taught as a context for concentration tasks, and clients were asked to concentrate and be aware of their situation at every moment and when emotions, feelings and cognitions are processed, observe them without judgment.; **Session 7.** Finding hope in clients: The participants were encouraged to choose appropriate goals and to say the characteristics of appropriate goals. The purpose of these sessions was to increase hope in the members. In this session, learning about hope was discussed, teaching the theory of hope and its positive consequences and also, the induction of positive thinking is emphasized and the reference is obliged to choose a goal.; **Session 8.** Repeating positive words to emphasize hope: The characteristics of suitable paths were discussed; the members chose appropriate solutions to achieve the set goals and they were taught to break the paths into a series of small steps and determine alternative paths. In these sessions, the goal was to maintain hope in the group members. **Session 9.** Inducing positive thinking: In this session, people were asked to engage in positive self-talk and mental imagery and work to reach their goal. Finally, they were taught to be a healer for themselves and apply hope on a daily task, so that they can determine their goals and obstacles. **Session 10.** Pluralization: Summary, pluralization and an overview of the interventions carried out during the previous sessions, reviewing members' comments about sessions and ways to achieve their goals, determining the amount of self-concept changes during interventions and investigate the amount of stability of hope in the group members.

Result

All three participants were married, the age of first woman was 32, the second one was 29 and the third one was 37. The education level of the first and third woman was diploma and the second woman had graduate degree. Their spouse age, were 36, 35 and 44, respectively. The participants' scores in resilience and hope questionnaires, separately from the stages of the measures, are shown in Table 1.

The first hypothesis of this study was "the effect of person-centered therapy on resiliency of women who committed suicide". In Figure 2, the changing scores of participants in resiliency in the baseline, intervention and follow-up phase are shown. The reliable change index using calculating the difference between the average of the final score in intervention and the baseline phase in resiliency in all three participants is more than Z=2.58, which shows that with 99 percent confidence interval, person-centered therapy in all three participants, caused an increase in resiliency and the first hypothesis of study is confirmed. The reliable change index by calculating the difference between the average scores of follow-up and baseline phase shows that changing in resiliency remained stable in participants. The overall percentage in the end of intervention was over 178% and in the end of two-month follow-up is over 193%, which shows that the person-centered therapy had a significance effect on the process of increasing resiliency in the participants (Table 1).

Table 1. Improvement percentage and reliable change index in the overall score of resilience and hope

Phases	Resilience			Hope		
	P 1	P 2	P 3	P 1	P 2	P 3
1th baseline	16	15	18	21	18	19
2th baseline	15	13	14	22	19	21
Baseline stage average	15.5	14	16	21.5	18.5	20
3th intervention session	22	16	25	25	22	22
6th intervention session	29	27	36	25	24	23
8th intervention session	29	36	41	27	27	27
10th intervention session	42	44	40	29	28	29
Reliable change index	13.52	15.31	12.24	6.70	8.48	8.03
Improvement percentage	171	214	150	35	51.3	45
Overall improvement percentage		178.33			43.77	
2 week follow-up	43	46	44	30	31	28
2 months follow-up	46	45	42	30	29	29
Follow-up stage average	44.5	45.5	43	30	30	28.5
Reliable change index	14.79	15.56	13.77	7.59	10.27	7.59
Improvement percentage	187	225	169	39.5	62.2	42.5
Overall improvement percentage		193.67			48.07	

The second hypothesis of this study was "the effect of person-centered therapy on increasing the hope in women who committed suicide". In figure 2, the changing scores of participants in the baseline, intervention and follow-up phase is shown. As same with previous hypothesis, in all three participants, the reliable change index is more than Z=2.58, which shows that with 99 percent confidence interval, person-centered therapy in all three participants, caused an increase in hope and the second hypothesis of the study is also confirmed. In the follow-up phase, it also shown that the increase in hope remained stable in participants.

The overall percentage in the end of intervention phase is over 43% and in the end of two-month follow-up is over 48%, which shows that the person-centered therapy has a great effect on the process of increasing hope in the participants (figure 2). So, the recovery percentage in women's resiliency was much greater than hope.

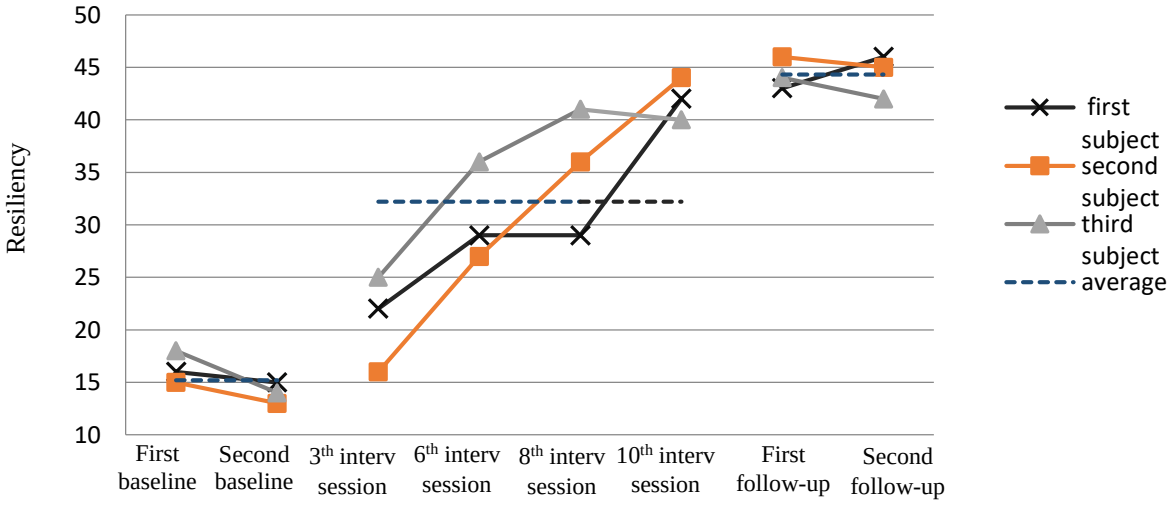

Fig 1. Resiliency changes in the intervention and follow-up phase

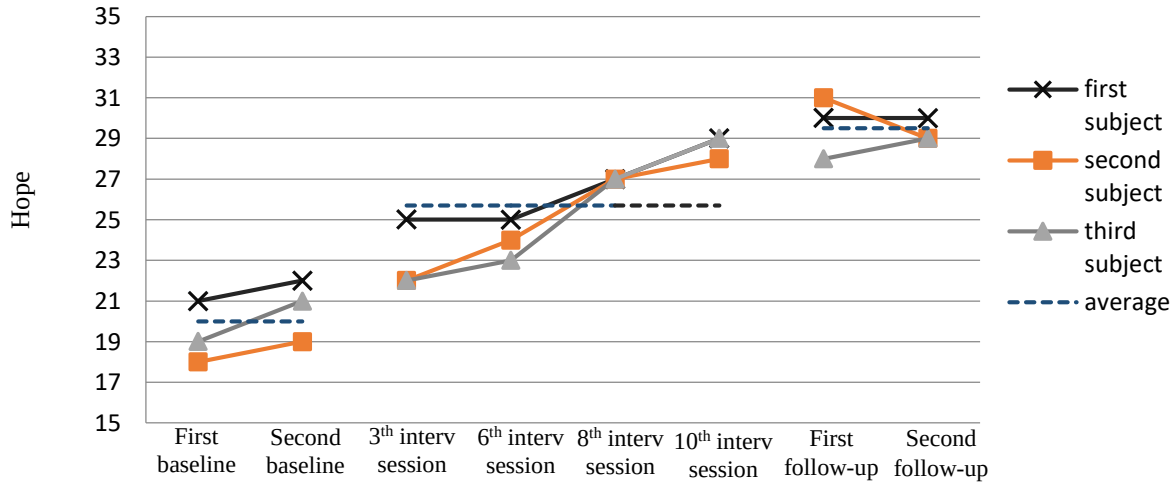

Fig 2. Hope changes in treatment and follow-up phase

Discussion and Conclusion

This study aimed to investigate the effect of client-centered therapy on resilience and hope of women who committed suicide. The results showed that client-centered therapy, by providing treatment condition such as acceptance, unconditional attention and congruence, can improve the self-acceptance and self-awareness of people who intend to commit suicide and change their mind about it. People who commit suicide may lose their hope in themselves, life, future and others. They don't trust others and others also don't pay attention to them, and they don't receive acceptance from others (Shafiabadi & Naseri, 2010). Consist with findings of this study, evidence showed that client-centered therapy by changing the client's understanding and attitudes using unconditional therapeutic relationship was able to be effective and reduced patient's depression (Kiossee & Karathano, 2012). People who committed suicide are disappointed and do not find any solution for their problems except suicide. People with these problems, who have resilience with therapy, when enter in a therapy session with person-centered approach, received trust and intimacy. The therapist creates such a relationship with client that he/she can trust the therapist and therapy conditions. It's hard for these people to trust the therapist because they have lost their trust to others, but after they received the unconditional attention and acceptance, their trust is gained and they will be eager to continue the therapy (Shafiabadi & Naseri, 2010). During the client-centered intervention, the therapist tries to see the problem from client's eyes and understand his inner world. One of the reasons that cause the despair of those who commit suicide is the lack of acceptance by others. Client-centered therapist

accepts each person without judgment and respects him regardless of his culture, religion, personality, beliefs, thinking and attitude and sees the client as a human. The therapist tries to create an intimate relationship with clients to gain their trust and also make them feel good about the therapy sessions. As the therapy session goes forward, the client accompanies the therapist. Client in these sessions realized that there is someone who is with him and can understand him (Shafiabadi & Naseri, 2010). The evidence showed that taking care of patients with person-centered method result in improving treatment plans, positive mental health outcomes and increasing patient satisfaction (Ekman et al., 2011) and led to significant improvement during therapy sessions (Olsson et al., 2013).

The clients who intend to commit suicide consider all their worries and problems from outside and actually blame others for that. This people are unaware of their own abilities and values and only see the troubles, do not like to be with others, do not believe in himself, are insensitive to positive events and have a negative view of everything. A basic principle in the person-centered approach is that the actual and innate tendency of every human is to achieve motivation, development and reaching his own potential (Lloyd & Guthrie, 2007). There is no special disease or event that can destroy this tendency in human. When a person faces a certain problem, there is an inconsistency between his self-concept and his experiences, and this is where he feels doubt and despair and stops trying to grow, develop and own motivate (Crisp, 2011). So, a person who thinks about suicide loses his hope, and cannot resist in front of problems and hardships and becomes a fragile person. In client-centered therapy, the main focus is on the client, and the therapist never call the client as a patient; the therapist considers (Shafiabadi & Naseri, 2010). As a result, the client also realizes that suicide is not the solution to problems and stop suicide thinking. The therapeutic relationship and also behavior and attitude of the therapist is so important and effective that help these people to find their way in their lives and realize their weaknesses and strengths and never do this action again and choose another way to solve their problems (Liang et al., 2010). The evidence showed that this treatment over time was associated with positive consequences such as good functional health, increased abilities, as well as eliminated mental and emotional disorders and performance. Also, person-centered therapy has a significant long-term effect on patients with mental disorders such as depression and alcohol abuse, which are associated with other uncommon diseases such as diabetes and heart disease (Patel & Chatterji, 2015). In same line with this study, the findings showed that in cancer patients, person-centered therapy was more effective than other treatments (Hui et al., 2006). Based on the finding of this study, it can be concluded that person-centered therapy has a significant effect on the hopelessness and resilience of people who commit suicide. So, we suggest that therapists use this treatment method for their suicidal clients. It is also suggested that psychologists, counselors and social workers, in order to reduce the suicide rate in women, hold client-centered therapy sessions to increase their resilience and hope. Finally, considering that only women participated in this study, it is suggested that in future studies the client-cantered therapy be conducted in men who commit suicide, especially according to previous studies, the suicide rate is also high in men. The present study, like other studies, had limitations, some of which are mentioned below. This study was conducted with case study method and small sample size. The small sample size may make it difficult to generalize its results to larger populations. Also, long-term follow-up to ensure the stability of the results was not performed. So, we suggest future studies investigate the client-cantered therapy using full experimental methods with control group and larger sample sizes. In this study, intervening variables such as marital status, number of children, level of social support, and socio-economic status were not controlled. Considering these limitations, it is suggested that future studies be conducted by controlling these intervening variables. Considering that the questionnaire was used as an instrument in this study, it is suggested that future studies use the interview and observation to check and evaluate the research variables.

Conflict of interest

No potential conflict of interest was reported by the authors.

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