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Original Article

Comparing the effect of treatment based on psychosocial pattern of doubt with cognitive-behavioral therapy on doubt in nurses with obsessive-compulsive disorder

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Abstract

Introduction: Doubt predicts the performance of nurses and how they relate to patients. Therefore, the present study compared the effect of psychosocial model therapy and cognitive-behavioral therapy on reducing the level of doubt in nurses.

Materials and Methods: The statistical population of this clinical trial included all nurses in Isfahan hospitals in 2018-2019. Amongst them, 45 people were selected by the convenient sampling method and divided in 3 groups. The researcher-made questionnaire of doubt and the Yale Brown Questionnaire were used to measure the research variables. Also, the treatment program based on psychosocial pattern of doubt and cognitive-behavioral therapy was performed in 12 separate 90-minute sessions. The data analyzed by the descriptive statistics, repeated measures analysis of variance in three stages of pre-test, post-test and follow-up, and SPSS version 24.

Results: The results showed that cognitive-behavioral therapy and treatment program based on psychosocial pattern of doubt are effective in reducing doubts of nurses and there is a significant difference between these two treatments and treatment program based on psychosocial pattern of doubt and the last one has a greater impact($P<0.05$).

Conclusion: Therefore, the use of treatment based on psychosocial model can reduce doubts in nurses more than cognitive-behavioral therapy.

Keywords: Cognitive behavioral therapy, Doubt, Psychosocial pattern

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Introduction

The goal of the nursing profession is to ensure the recovery and health of people under care. Also, direct communication between patients and nurses is a vital element of care and treatment that increases patient satisfaction and health (1). On the other hand, job satisfaction, life satisfaction, burnout, quality of life, hope, and resilience of nurses can be predicted through their psychological well-being (2-4). This is while one of the factors affecting the psychological well-being of people in doubt (5). The concept of self-doubt in medical discourse refers to the degree to which the therapist doubts his or her ability to help clients, which predicts the outcome of therapy. Doubt is most often experienced when therapists encounter unmotivated, aggressive, violent, and emotional patients (6). The therapist is challenged about trusting in the competence, judgment, and effectiveness of his or her treatment (7). In the study of professional doubt in psychotherapy interns and their adverse reactions in dealing with patients during cognitive-behavioral therapy, it has been shown that increasing professional doubt intensifies the symptoms of the disease (5). Also, doubt in medical activities can be attributed to the fear of doing the wrong methods (8), lack of professional knowledge and skills, and weakness in clinical education planning (9).

In this regard, doubt can be described as a lack of trust and confidence in one's memory, attention, observations, and perception. Therefore, in doubt, the reaction to the signs and information received is delayed, and a kind of indecision and feeling of "this is not right" is formed in the person (10). In addition, an important component of the decision-making process is the assurance of information related to the decision. So, doubt is described as a lack of mental trust in perceptions and inner states (11). Doubt also shows the speed of decision-making internal calculations with a neuropsychologic basis. Therefore, doubt has a computational psychological pattern, and the cognitive characteristics of everyone can make individual differences in the process of doubt (12).

In addition, the process of doubt is known as a person's inability to choose an option or path. The selection process requires the individual to pay attention to the value of each of the options available and is considered a conscious thought process (10). In this regard, Olson defines the concept of self-doubt as a degree of lack of confidence in one's abilities in dealing with events (13), which prevents a person from having confidence in his or her performance (14). Doubt also has an external aspect, which is referred to as skepticism and distrust of others, the manifestations of which are a willing and effective way to perceive the actions of others as if done with the intention of humiliating or threatening the person (15). Finally, it is associated with decreased self-esteem, life satisfaction and optimism (16), depression, anxiety, aggression (17), and conduct disorder in adulthood (6).

Relentless and excruciating doubt that focuses on the fear of infection or harming others is a primary symptom of obsessive-compulsive disorder. Also, successive doubts seem to trigger many pathological behaviors common in obsessive-compulsive disorder. In addition, doubt is a dysfunctional internal process that has incompatible cognitive themes, so it can be said that cognitive-behavioral therapy as a psychotherapy approach that targets dysfunctional internal processes such as feelings and emotions with cognitive themes (18) can affect doubt. Cognitive-behavioral therapy, using systematic methods, combines behavioral therapies and cognitive therapies and focuses on pragmatism so that the client can use appropriate strategies to deal with problems (19). The basic approach in this treatment is that it affects people's cognition, feelings and behavior, and it is people's interpretation of the events, not the event itself, that shape their reaction (20).

In addition, Esquirol presents the madness of doubt as a constant doubt in various psychosocial dimensions, accompanied by endless doubts about people about thoughts, behavior, and experiences (21). According to Clark, people who cannot bear and face their doubts suffer from psychological problems (22).

Also, due to the inability to experience firm belief, people with obsessions face endless doubts about their thoughts, feelings, actions, and experiences (22). However, so far, research findings, both in terms of etiology and treatment, have not considered this important and decisive component in obsessive-compulsive disorder. Therefore, considering what is being said about

obsessive-compulsive disorder and the resulting lesions and considering the determining role of doubt in causing obsessive-compulsive disorder (23), it is necessary to pay attention to the treatments that focus on the etiology of doubt in the psychosocial dimension. Therefore, considering the importance of cognitive-behavioral therapy in reducing the symptoms of doubt and also according to the research findings of Mardani and colleagues and also because the development of treatments with high effectiveness is one of the important issues in psychotherapy of any disorder, this study aimed to compare psychotherapy based on the psychosocial pattern of doubt with cognitive-behavioral therapy to answer the research question that, which of these two therapies is more effective in reducing doubt in nurses with obsessive-compulsive disorder?

Materials and Methods

The statistical population included all nurses in Isfahan hospitals in 2018-2019, and the available sampling method is considered. The participants completed pre-test forms before the test. After 12 treatment sessions for the experimental groups, the post-test forms were completed one month after the last treatment session. The questionnaire was performed again for both groups one month after the last treatment session to follow up on the findings.

According to Gall, Borg, and Gall, the number of samples in the experimental group of cognitive-behavioral therapy was 15, the experimental group of psychosocial therapy was 15, the control group was 15, and a total of 45 people (23). Criteria for admission to the program were obtaining a score corresponding to a standard deviation on the researcher-made questionnaire of doubt, being in the age range of 20 to 40 years, no other psychiatric disorders, addiction, delinquent behavior, or antisocial issues such as theft, violence. In addition, exclusion criteria were the absence of more than two treatment sessions or the initiation of other medical or psychological therapies after the start of treatment sessions.

Research instrument

A) The Yale-Brown Questionnaire: This scale, developed in 1986 by Goodman and colleagues, is a self-report tool for measuring obsessions and compulsions. This questionnaire consists of 10 sections, each with five options (on a 5-point Likert scale). The two subscales in this questionnaire are: (a) "Obsessions": including aggressive obsessions, contamination obsessions, sexual obsessions, hoarding or collecting obsessions, religious obsessions, symmetry and order obsessions, physical obsessions, and other obsessions. (B) "Compulsions": includes washing and cleaning, checking, behaviors related to counting, ordering, hoarding, and various compulsions. This test can be performed individually or in groups for people 14 years and older. On average, this test takes about 10 minutes to complete. The data relating to the validity and reliability of this scale show that the reliability between the evaluators in 40 patients was 0.98 and the internal consistency coefficient (alpha coefficient) was 0.89. The convergent validity of this test was obtained with the Clinical Global Impression of Obsessive-Compulsive Syndrome test at baseline 0.97 (16). In the Iranian sample, the internal stability of the two parts of the symptoms and intensity scale were 0.97 and 0.95, respectively, the reliability of halving for symptoms and intensity was 0.93 and 0.89, respectively, and the reliability of the retest was 0.99. The convergent validity of this test with SCL-90-R-OCS was obtained as two parts of the symptoms and intensity 0.48 and 0.22 (24).

B) Doubt Researcher-Made Questionnaire: This questionnaire was made according to three effective components in doubt, namely self-doubt (24), doubt about others (researcher-made), and confidence in performance (25) and according to existing theories (26). In this regard, with a deductive-oriented approach by reviewing the existing texts and resources and tools related to this field, tool items were extracted. In order to increase the richness of the quality of the tool items, the suggestions of experts in various scientific fields and dominating the research topic were also used.

Because the findings show that people with obsessive-compulsive disorder seek out external factors when it comes to answering questions about their inner state, and in response to questions that there are multiple options for answering them due to doubts about their feelings, perceptions, thoughts, and behaviors (22), the questions were designed as few as possible. The way to answer was yes and no. After the initial design of the

questionnaire questions, the items were psychometrically evaluated. Psychometrics in the present study means the acceptability of the instrument in terms of validity and reliability. First, to assess face validity, the questionnaire was given to a small number of nurses to the level of difficulty in understanding phrases and words, appropriateness and appropriate relationship with other dimensions of the questionnaire, and the possibility of ambiguity of items or inappropriate interpretation of some phrases or inadequate words, if necessary, some expressions should be corrected. In the next step, the validity of the content of the questionnaire was done by a group of expert evaluators who are experts on the research topic and research methodology. In this regard, five scientific board members, familiar with the subject of research and instrumentation, were selected, and the tools were provided to them to present their corrective views after careful study of the tools.

In evaluating the quality of content validity, evaluators should consider grammar, proper use of words, placement of items in the right place, proper scoring, time to complete the designed tool, appropriateness of the selected dimensions. The content validity ratio was measured to ensure that the most important and correct content (item necessity) was selected.

To determine the content validity ratio of the tool, 15 experts were asked as item evaluators to rate each item of the tool based on the three-part range of "item is necessary", "useful but not necessary" and "not necessary" to answer to determine whether each item in the set of other items is necessary and important or not? The numerical value of the content validity ratio was determined with the help of the table of determination of the minimum value of the Lauche method and based on the number of specialist evaluators 0.51 (the minimum value for this number of specialists is 0.41) (27). The questionnaire was designed with 60 questions, including three components of self-doubt, other-doubt, and confidence in performance.

Convergent validity of this questionnaire with Madzley questionnaire for self-doubt component 0.54, other-doubt 0.43, confidence in performance was 0.76 and for the whole 0.63 and with Padua questionnaire for the component of self-doubt was 0.70, other-doubt was 0.74, confidence in performance was 0.43 and for the whole 0.72. Its reliability was obtained 0.98, using alpha Cronbach.

C) Cognitive-Behavioral Therapy: It is a type of psychotherapy that focuses on the effect of a person's beliefs, thoughts, and attitudes on his or her feelings and behaviors. In addition, the purpose of this treatment is to teach the patient how to actively deal with various problems or events during his life and overcome them (summary of treatment sessions is presented in Table 1) (28).

D) Psychotherapy Program Based on the Psychosocial Model: It is a type of psychotherapy that based on the principles of cognitive-behavioral therapy (29), dialectical behavior therapy (30), schema therapy (31), life skills (32), and acceptance and commitment-based therapy (33) which is compiled. In order to determine the face and content validity of the psychosocial treatment program, this tool was provided to 8 clinical psychologists, and based on their experiences and observations, they identified the most important components and dimensions, respectively, then modified the content of the program (summary of treatment sessions is presented in Table 2).

As a result, the content validity ratio index based on the Lauche method for a treatment plan was 0.76 (minimum for eight specialists is 0.75) (27). The sessions consisted of 12 ninety-minute meetings (summary of treatment sessions is presented in Table 2).

This research has an ethics certificate with code 1397.110 from the Vice Chancellor for Research of the University of Isfahan. Before starting the work, the participant (volunteer) was informed about the subject and method of the study and received written moral consent. Furthermore, they were assured that the candidates' private and personal information would be protected, and the results of each test would be interpreted upon request. Also, participation in the research did not involve any financial burden, and this research does not contradict the religious and cultural norms of the subject and society.

The descriptive statistics analyzed the data, repeated measures analysis of variance in three stages of pre-test, post-test, and follow-up SPSS version 24.

Table 1. Summary of cognitive behavioral therapy sessions (28)

Sessions	Aim
First	Introduction, pre-test, expression of treatment logic
Second	Interview and cognitive-behavioral assessment; In addition to looking for different symptoms to reach the diagnosis, much attention is paid to identifying the underlying factors, predisposing and maintaining doubt
Third	Introducing cognitive-behavioral therapy; Explaining about cognitive theories, characteristics of treatment, level of expectations from treatment and the types of techniques used in treatment
Fourth and Fifth	Treatment planning, with the aim of creating a cognitive record for the patient in which the following items are classified: types of symptoms the patient experiences, list of problems, fifth types of dysfunctional cognitions (such as dysfunctional thoughts and cognitions), strengths (such as receiving good support on the part of family members or higher education) and weaknesses (such as not receiving enough support from the family or dealing with economic crises) and the behavioral and cognitive techniques chosen for treatment
Sixth	Training and implementation of behavioral techniques; The main purpose of training and implementing behavioral techniques is to enable the patient to be aware of the role of dysfunctional negative thoughts in the onset and persistence of symptoms
Seventh	Identifying automatic thoughts with the aim of recognizing the main roots of emotions and the presence of the mind
Eighth	Identifying negative automatic thoughts with the aim of recognizing common cognitive errors in the patient
Ninth and tenth	Changing automatic negative thoughts in order to reducing mental and emotional stress
Eleventh	Recognizing dysfunctional fundamentals (dysfunctional hypotheses)
Twelfth	Changing dysfunctional fundamentals, post-test, termination

Table2. Summary of treatment sessions based on the psychosocial pattern of doubt (29-33)

Sessions	Aim	Content
First	Introduction, pre-test, expression of treatment logic.	Establishing the initial therapeutic relationship by introducing themselves, first the therapist, second the patients. Then a pre-test is performed. In the following, the logic of psychosocial therapy, session objectives, number of sessions, time of sessions and assignments of each session will be expressed.
Second	Improving cognitive-emotional regulation and dysfunctional coping strategies, reducing feelings of shame from pubertal gender changes	In this session, the participants first explain the manifestations of doubt in their lives. The therapist then explains the basics of cognitive-behavioral therapy (thought, emotion, and behavior) and self-awareness based on the principles of life skills. At the end, the relevant homework is given.
Third	Improving cognitive errors by emphasizing extreme generalization, improving the consequences phobia	In this session, the therapist first teaches relaxation and then performs it in groups. The therapist explains automatic thoughts and cognitive errors and strategies for dealing with them. The following types of coping strategies are taught. At the end, the relevant homework is given.
Fourth	Improving low flexibility and difficulty in thinking shifts	In order to increase skills, relaxation is performed at the beginning of the session. The therapist then explains the underlying beliefs of cognitive-behavioral therapy and ways to challenge cognitive beliefs. At the end, the relevant homework is given.
Fifth	Correcting the schema of distrust and rejection Prevent relationship failure / strengthen communication skills	In this session, the therapist explains the basics of schema therapy and the types of maladaptive schemas. Among the inconsistent schemas, the cut / exclusion area is emphasized in this session. In the area of life skills, the beginning of a relationship is explained. At the end, the relevant homework is given.
Sixth	Modifying the schema of obedience and entitlement Resolving work-family conflict	In this session, the schemas of other areas of other-oriented and disturbed-constraints will be explained. In the field of life skills, the relationship continuity is explained. At the end, the relevant homework is given.
Seventh	Modifying the dependency-incompetence schema	In this session, the schemas of the field of Self-regulation will be explained. In the area of life skills, conflict resolution is explained. . At the end, the relevant homework is given.
Eighth	Strict criteria / self-blame-punishment, improving the feeling of control / avoidance of criticism / consequences phobia	In this session, the schemas of the constituency will be explained. In the area of life skills, saying no and self-assertiveness is explained. . At the end, the relevant homework is given.
Ninth	Improving low flexibility and difficulty in thinking shift, improving insecurity, job competition and job risk prediction, high irritability in roles	In this session, return attention is explained with a dialectical behavioral therapy approach, and in the area of life skills, anger management is explained. At the end, the relevant homework is given.
Tenth	Accepting early family problems Strengthen efficient decision making	In this session, acceptance is explained with the approach of treatment based on acceptance and commitment, and in the field of life skills, body language, empathy, listening, problem-solving training with the approach of cognitive-behavioral therapy is explained. At the end, the relevant homework is given.
Eleventh	Resolving work-family conflict, resolving ambivalence between self-choice and family through social change	In this session, values are explained with an approach based on acceptance and commitment. At the end, the relevant homework is given.
Twelfth	Post-test, termination	In this session, the contents of the previous sessions will be summarized, the critics of the participants and their requests will be reviewed and evaluated. At the end, post-test individuals were taken and praised for participating in the sessions.

Results

Descriptive findings related to the demographic characteristics of the participants showed that 42.2% of them are under 30 years old, 31.1% of them are 30 to 35 years old, 22.2% of them are 36 to 40 years old, and 4.4% of them are 40 years old and older. In addition, 26.7% of the participants are women, and 73.3% are men. Finally, 66.7% have a bachelor's degree, and 33.3% have a master's degree. The mean and standard deviation of the doubt scores in the pre-test, post-test, and follow-up phases are presented in Table 3.

Table3. Mean and standard deviation of the scores of doubt in the pre-test, post-test, and follow-up phases

Group		Pre-test		Post-test		Follow-up	
		M	SD	M	SD	M	SD
Doubt	Treatment based on psychosocial pattern	43.2667	6.19293	18.8000	3.72635	16.1333	4.64245
	Control	44.3333	5.52484	44.0667	4.77294	44.0000	4.07080
	CBT	44.8000	5.08780	34.8000	6.38301	16.9333	5.17503
	Total	44.1333	5.52926	32.5556	11.66299	25.6889	13.86431

The results of the Shapiro-Wilkes test on the normality of the distribution of scores showed that the default normality of the distribution of scores was confirmed in the total scores of the studied variables for both control and experimental groups and the distribution of variables in the community was normal. Also, the results of the Levin test on the assumption of the equality of variances of the two groups showed that the assumption of the equality of variance was confirmed for the total scores of the studied variables, p> 0.05. Therefore, the assumption of using analysis of variance has been observed. To analyze the data, repeated measures analysis of variance test with intrapersonal factor was used to measure the doubt score and its subscales in three consecutive times, and the interpersonal factor of the group was used. Table 4 presents the results of Mauchly's sphericity test.

Table 4. Results of Mauchly's sphericity test

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	P	Epsilon[a]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Doubt	.251	56.259	5	.062	.577	.629	.333
Treatment	.957	1.815	2	.403	.958	1.000	.500
Doubt *Treatment	.069	106.378	20	.121	.545	.625	.167

Table 5. Repeated measures analysis of variance to compare the effectiveness of treatment methods in doubt

Scale	Source	Type III Sum of Squares	df	Mean Square	F	P	Partial Eta Squared	Noncent. Parameter	Observed Power
Doubt	Stage	7098.846	1	7098.846	691.475	.000	.943	691.475	1.000
	Stage*Group	824.572	2	412.286	40.159	.000	.657	80.319	1.000
	Error	431.182	42	10.266					
	Group	7654.444	1	7654.444	508.360	.000	.924	508.360	1.000
	Error		42	15.057					

The results of Table 5 suggest a significant difference between the experimental and control groups in the mean post-test and follow-up scores of doubt ($P< 0.05$). After doing Bonferroni's post hoc test, it was found that there is a significant difference between the control group and each of the experimental groups in the post-test and follow-up scores (Table 6).

Table 6. Bonferroni's post hoc test to compare the mean of the research variables in groups

	Group	Post-test			Follow-up	
		Subset			Subset	
		1	2	3	1	2
Doubt	Treatment based on psychosocial pattern	22.0667			24.9421	
	CBT		16.0889			19.5316
	Control			13.0333		14.2862

Based on the post hoc test results, the doubt follow-up scores in the experimental group who received treatment based on psychosocial pattern decreased compared to the post-test, but still, they are significantly different from the control group scores($P< 0.05$). Hence, the efficacy of both treatments is confirmed, and better results are obtained in the post-test scores of treatment based on psychosocial patterns compared to the cognitive-behavioral therapy.

Discussion

The purpose of the present study is to compare the effectiveness of treatment based on the psychosocial pattern of doubt with cognitive-behavioral therapy on reducing doubt in nurses. Findings showed that cognitive-behavioral therapy is effective on doubt. According to the researcher, a study that examined the effect of cognitive-behavioral therapy on doubt was not found, but several studies have examined the effect of cognitive and behavioral therapy on psychological variables. In this regard, Kazemini assessed the effectiveness of cognitive-behavioral group therapy on improving students' self-esteem and self-efficacy by using the Coopersmith self-esteem questionnaire and Scherer et al.'s self-efficacy index. This study showed that the experimental group has more self-esteem and self-efficacy significantly compared to the control group, and cognitive-behavioral therapy can improve students' self-esteem and self-efficacy (34). Therefore, it can be expected that cognitive-behavioral therapy has also affected the self-efficacy of nurses with obsessive-compulsive disorder and thus has been able to reduce doubt in nurses. In another study, Patrizia, Thomas, and Jurgen studied the experiences of psychotherapist trainees of professional self-doubt, adverse personal reaction during cognitive-behavioral therapy, and their relationship to symptoms and interpersonal problems of patients. In this study, forty therapists who treated 621 patients were analyzed. Patients' interpersonal symptoms and problems were collected repeatedly during treatment. Problems were evaluated, fall into two categories: trait-based (meaning one assessment across all patients) and state-based (meaning repeated assessments for each patient). The results showed that patients' progress was related to the therapists' experiences of problems (35).

According to the results of the study, it can be expected that cognitive and behavioral therapists, if they have professional doubts, can affect patients' symptoms and problems, which emphasizes the importance of paying attention to the category of doubts in nurses. Also, several studies have been conducted on the effect of cognitive-behavioral therapy on reducing the problems and symptoms of psychological disorders in nurses, including Aghajari et al. which pointed out the effectiveness of cognitive-behavioral therapy on job stress and psychological distress of nurses. In this study, the experimental group participants participated in 8 sessions of 90 minutes of cognitive-behavioral spiritual therapy. According to the findings of this study, cognitive-behavioral spiritual therapy reduces job stress and psychological distress in nurses working in the intensive care unit (36). In another study, Ramak, Jangi, and Sangani investigated the effect of teaching cognitive-behavioral techniques on reducing social phobia in nursing students. This study was quasi-experimental with a pre-test-post-test design and a control group. The statistical population was all nursing students in Babol. Using a simple random sampling method, 54 students were selected with a diagnosis of social phobia according to the cut-off point of the Libuitz questionnaire. The results showed that cognitive-behavioral group therapy

significantly reduces students' social phobia (37). Adavi, Madmoli, Vafaeenezhad, and Aghilirad investigated the effect of cognitive-behavioral therapy on depression in medical students.

This quasi-experimental study was a pretest-posttest design with a control group. The results showed that the cognitive-behavioral approach had a significant effect on the treatment of students' depression (38). Therefore, cognitive-behavioral therapy can be expected to affect a wide range of psychological problems of nurses, including professional doubt in nurses. In addition, it can be pointed out that cognitive-behavioral therapy acts as a therapeutic approach focused on dysfunctional internal processes and overshadows cognitive themes (18). Therefore, it can affect doubt, which is an inefficient cognitive process. On the other hand, cognitive-behavioral therapy, using systematic methods and combining behavioral therapies with cognitive therapies, helps people choose appropriate strategies for challenges (19). Therefore, it can be expected that when nurses face doubts, they will face this challenge and adopt an appropriate strategy by using cognitive and behavioral therapy techniques. Li et al. also believe that individuals' interpretations of events shape their reactions, not the events themselves (20). Based on this, it can be said that when nurses in the workplace have doubts about their abilities, their reaction and interpretation of the event have led to doubts in them. Since cognitive-behavioral therapy focuses on recognizing people, this treatment can help nurses improve the process of perception and interpreting events and reduce doubts in nurses. In addition, cognitive-behavioral therapy leads people to master their limitations and capabilities.

Therefore, when people are doubtful about their performance and ability to deal with events, cognitive-behavioral therapy can reduce doubt by clarifying the abilities and limitations of individuals.

The present study results also show the effect of the psychosocial model of doubt. Since this type of treatment is a combination of cognitive-behavioral therapy (29), dialectical behavior therapy (30), schema therapy (31), skills life (32), and therapy based on acceptance and commitment (33) has been developed and implemented for the first time by Mardani and colleagues, so no other research has been done on this treatment and its effect on doubt. Since this type of treatment is designed from the principles of 5 different types of treatment, it can be expected that treatment based on psychological pattern has the combined effects of this type of treatment. For example, Zalewski, Lewis, and Martin see dialectical behavioral therapy as a set of techniques for thinking and modifying a defective behavioral cycle (39).

Therefore, it can be said that using the principal elements and components of the mentioned treatments in the treatment based on the psychosocial model can be expected that reduce nurses' doubts. On the other hand, the common denominator of these therapies can be considered as focusing on undesirable internal processes such as affects, emotions, and cognition so that treatment can overshadow doubt as an internal cognitive process. The results also showed that in comparison with treatment based on psychological patterns with cognitive-behavioral therapy, the first one is more effective, which can be attributed to the score of this treatment in applying several patterns and techniques of treatment and combination.

So that the treatment based on the psychosocial pattern of doubt uses cognitive-behavioral therapy, has gone one step further and can be expected to have more effects. In addition to affecting cognition and behavior, this treatment also affects undesirable initial schemas that increase doubt in individuals. Also, this treatment reduces insecurity, improves job competition, occupational risk prediction, and high irritability in nurses' roles by using dialectical therapy techniques.

This treatment also uses life skills to teach conflict resolution techniques in the family and the workplace. Since the statistical sample of the present study consists of nurses, the generalization of the present results to other people is one of the limitations.

Therefore, the present study is suggested to be repeated in other statistical communities, and its results are compared with the findings. Furthermore, it is worth mentioning that due to the work shift of nurses, regular treatment sessions were difficult and is one of the limitations of the present study. Also, considering the effectiveness of cognitive-behavioral therapy and therapy based on the psychosocial model, it is suggested that these

two therapies be used in psychotherapy interventions to reduce doubt.

Conclusion

It seems that cognitive-behavioral therapy and treatment based on the psychosocial model effectively reduce doubts in nurses, and there is a significant difference between these two treatments. Therefore, using treatment based on the psychosocial model can reduce doubts in nurses more than cognitive-behavioral therapy.

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