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Original Article

A Comparative Study of Dialectical Behavior Therapy and Aripiprazole on Marital Instability of in Patients with Hypersexual

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Abstract

Background: Sexual desire and sexual activity are natural needs of human beings, which can be problematic and lead to various sexual disorders, if not used in the right way, including hypersexuality. The present study aimed to compare the effect of dialectical behavior therapy (DBT) and aripiprazole drug on marital instability in patients with hypersexuality.

Materials and Methods: This experimental case--control Pretest--Posttest Control Group Design with follow up was done on 27 male and female patients with hypersexuality having at least a higher education degree selected from four hospitals and psychiatric centers including Khorshid Hospital, Asgariyeh Specialized Hospital, Farhangian Clinic and Imam Reza Medical Center in Isfahan and were randomly assigned to two groups of treatment (nine patients in every group) and one group of control (nine patients) after adjusting the age and gender. Pretest phase was done for both three groups using Marital Instability Index (MII). The first treatment group underwent DBT intervention for eight sessions of 2 hours (once a week), and the second experimental group was prescribed aripiprazole for 2 months. Afterwards, the posttest and follow-up were performed for all the three groups. The data were analyzed using SPSS 24 and multivariate analysis of covariance (MANCOVA).

Results: The findings showed that DBT and aripiprazole had little effect on the problem of marital instability in patients with hypersexuality ($p > 0.05$); also, there was no significant difference between the effect of DBT and aripiprazole ($p > 0.05$).

Conclusion: DBT and the drug aripiprazole cannot have a significant effect on the marital instability in patients.

Keywords: Aripiprazole, dialectical behavior therapy, hypersexuality, marital instability

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Introduction

Sexual desires and sexual activities are considered as the natural needs of human beings. However, if this desire is not used in a right way, it can be problematic and lead to various sexual disorders. One of these disorders is constantly thinking about sex and not controlling one's sexual behaviors. An unquenchable thirst and a compulsion force a person to constantly repeat acts such as forced masturbation or the consumption of pornographic products, insist on finding a new sexual partner, telephone sex, or sex with strangers or prostitutes (for example, paying for sex or marital infidelity), to have even unhealthy sex, and to satisfy his sexual addiction. This behavioral disorder is a hypersexuality that can affect a person's feelings, job, social relationships, and other aspects of life.[1]

The prevalence of hypersexuality among men and women is almost the same, with the highest prevalence from the ages

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of 25 to 55.[2] Hypersexuality, sexual hyperactivity, or sexual arousal [sometimes known as sexual addiction, hypersexual disorder (HD), compulsive sexual behavior disorder (CSBD), sexual compulsivity, and hypersexual behavior] is referred to a sexually more capable behavior of a person compared to others. This means that in these people the sexual power and need is such severe that disrupt their normal and daily life and cause nervousness, drug addiction, and if the person does not have access to a sexual partner, it leads to masturbation and lack of focus on daily tasks and works.[2,3] Historically, there has been debate as to whether hypersexuality should be considered an impulse control disorder, behavioral addiction, or sexual dysfunction disorder. In recent years, there has been a growing consensus on the understanding of hypersexuality, largely due to development of field studies to diagnose hypersexuality and subsequently researchers recommending the 5th edition of the book Diagnostic and Statistical Manual of Mental Disorders (DSM-V). During the development of the DSM-V, the diagnosis of hypersexuality was clinically proposed and tested; although it was eventually removed from the final version of the DSM-V, its diagnosis was welcomed by many health and clinical psychologists, psychiatrists, and physicians.[2]

It is also important to note that there are differences between nonparaphilic hypersexual behaviors (referred to as hypersexual) and paraphilic hypersexual behaviors.[4] The present study sought to investigate patients having nonparaphilic hypersexual behavior.

As mentioned, hypersexuality, or CSBD, has been called by various names over the years and has been suggested as an impulse control disorder in ICD-11. Diagnosis of hypersexuality based on the definition and clinical guideline of ICD-11 includes the following:

1. Repetitive sexual activities become the main focus of a person's life, that is, the person neglects his or her health and personal care or other interests, activities, and responsibilities (scope: excessive focus and a significant amount of time allotted to sexual behavior so the extent that other important areas of life are ignored).
2. The person makes numerous attempts to significantly reduce repetitive sexual behavior but fails (scope: there is a control disorder).
3. The pattern of uncontrollable sexual motivation or intense motivation that results from repetitive sexual behaviors can cause significant distress or disruption in personal, family, social, educational, occupational, or other important areas of a person's performance (scope: sexually generated thoughts or behaviors cause significant distress or disorder in performance).
4. The person engages in repetitive sexual behaviors despite the adverse consequences (scope: despite the danger or adverse consequences, the person continues and engages in sexual behaviors).
5. A person engages in repetitive sexual behaviors despite low or no sexual satisfaction (scope: forced interaction and engagement is associated with less sexual satisfaction over time).
6. Distress that relates only to moral judgments and disapproval of sexual motives, urges, or behaviors is not sufficient to diagnose HS or CSBD (exclusion criterion: distress is entirely related to moral incompatibility).[5]

However, the relationship of life partners, including the marital relationship, is a unique human relationship, in which all biological, spiritual, social, and emotional dimensions of human beings are taken into account. The marital system as a unique system has features that distinguish it from other forms of social relations:

1. An effective marital relationship requires a balance between dynamism and stability. For a healthy relationship between couples, some degrees of stability, predictability, and to some extent, freshness and flexibility are required.
2. Marital relationship has a past, present, and future. Couples connect their past issues and future plans and try to keep their relationship fresh in the present time. A marital relationship requires a combination of the future and the past of two people who have different values and attitudes.
3. The marital relationship requires support; husbands and wives should be able to understand their spouse's needs as their own and reduce their self-centeredness.
4. A marital relationship requires that each member, while maintaining his or her individuality and unique identity, may sometimes abandon his or her individuality because of the relationship.
5. Couples should be able to establish boundaries to meet the needs of the family and to create security, personal privacy, and close relationships.[6]

As mentioned, in some cases, sexual behaviors may be too coercive and cause severe problems in the lives of people, especially couples. One of the major problems that may exist among couples with hypersexuality is the instability of the marriage. Marriage instability can be referred as to determine a couple's tendency to dissolve a marriage. In other words, marriage instability has been used in conjunction with concepts such as marital breakup, marital dissolution, divorce, poor marital quality, and desertion. It refers to divorce as a couple's tendency, which includes two cognitive components (thinking about the question of whether their marriage is in a difficult situation or thinking about divorce) and behavioral (an action that a person does as a result of his/her feelings or in a conversation with his spouse about divorce).[7] Research in Canada, Germany, the Netherlands, South Africa, Sweden, and the United States suggests that marital satisfaction is associated with lasting marriage; meanwhile, according to the official data of the Civil Registration Organization in 2018, the divorce rate in Iran was approximately 5 to 1 compared to 2012 and 3 to 1 compared to 2017.[8]

Given the relationship between quality of life and mental health and the high prevalence of psychological problems in

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hypersexual patients, effective interventions seem necessary to improve mental health and the quality of life of patients. In this study, the cognitive interventions of dialectical behavior therapy (DBT) and aripiprazole are used to reduce the problem of marital instability among these couples.

Many treatments have been performed to address the problem of marital instability of couples with hypersexuality; one of these treatments is prescribing medications. Despite their relative effectiveness, some medical interventions, such as the use of Selective Serotonin Reuptake Inhibitors (SSRIs), antiandrogens, and other standard and well-known psychiatric medications, are used for these disorders.[9-11] Aripiprazole is an antipsychotic drug and a partial agonist of dopamine D2 receptor agonist, rarely associated with sexual side effects. Sexual disorder is a significant reason for nonadherence to antipsychotic drugs in patients with mental health disorders. Antipsychotic drugs reduce dopamine levels and increase prolactin levels, which reduce sexual desire. Aripiprazole is a relative dopamine D2 receptor agonist that is rarely associated with sexual side effects and often used to relieve side effects and impulsive behaviors such as pathological gambling, excessive shopping, and hypersexuality through increasing prolactin levels. Of course, sexual dysfunction, such as hypersexuality, is also a significant reason for inadherence to antipsychotic treatment in patients with mental health disorders

Special psychological therapies for the problems of couples with hypersexuality include psychoanalytic therapies, couple therapy, and behavior therapy.[12,13] One of the approaches that has long-term effectiveness by enhancing skills through intervention in the field of cognition, emotion, and behavior is DBT.[14] Considering the role of hypersexuality in sexual satisfaction, impulsive behavior, instability of marriage, and emotional divorce in the life of couples, therapies that emphasize on resolving interpersonal conflicts and contradictions and gaining social support can play an important role in the treatment and prevention of hypersexual complications in the life of couples. One of the innovations in psychological therapies that emphasizes skills training and emotion regulation skills is DBT. DBT introduces four interventional components in its group therapy method including mindfulness and distress tolerance as components of acceptance, and emotional regulation and interpersonal efficiency as components based on change.[6] Research results have confirmed the effectiveness of DBT on reducing couples' conflicts, increasing marital satisfaction, emotion regulation skills on the verge of divorce, improving interpersonal relationships, and reducing violent behaviors and impulsivity.[15]

Reviewing research studies conducted in Iran, reveals a gap of studies on hypersexuality disorders in spite of the beneficial effects of DBT, which is a special type of cognitive-behavioral psychotherapy, and Aripiprazole which is a type of antipsychotic drug. Considering the above and psychological interventions to increase the quality of life of couples and creating marital stability, it is necessary to conduct experimental researches to reduce marital instability in new and creative ways. Obviously, DBT and Aripiprazole are effective in this regard. Also, in addition to examining the effect of DBT and Aripiprazole in these patients, a comparison of these two treatments is a requisite of the current study. Therefore, the present study set to conduct a comparative study on the effect of DBT and Aripiprazole on marital instability in patients with hypersexuality. Accordingly, the emphasis of the study was on comparing the effect of DBT and Aripiprazole on the above variable in patients with hypersexuality. It was tried to introduce these treatments briefly and teach DBT to hypersexual patients in relation to the research variable. So, the question is whether there is a difference between the effect of DBT and Aripiprazole on marital instability in patients with hypersexuality.

Materials and Methods

This applied study was conducted, which is sometimes referred to as action research, emphasis on resolving specific problems in real situations. Due to the nature of the subject and objectives of the research, a quasi-experimental method was used based on the design of three control-experimental groups with pretest, posttest, and follow-up. The two experimental groups were exposed to independent variables. No variables were applied in the control group.

The statistical population included hypersexual patients who referred to four hospitals and psychiatric centers including Khorshid Hospital, Asgarieh Specialized Hospital, Isfahan Farhangian Clinic, and Hazrat Imam Reza (AS) Medical Center in Isfahan. Ten patients were selected purposefully as the sample size for the control group, 10 as the sample size for the first experimental group (including dropouts) and 10 as the sample size for the second experimental group (including dropouts). After initial evaluation, they were randomly divided into three groups of control and experimental. Despite the dropouts, 27 people were divided into three groups of nine. In the first experimental group, DBT was provided (this treatment protocol was performed in eight sessions of 90 min) [Table 1]. For the second experimental group, Aripiprazole was initially prescribed by the psychiatrist with an initial dose of 5 mg daily. If the dose needed to be increased, it was prescribed once a week until the final dose increased to 20 mg daily (in case of tolerance) for 2 months. After completing these steps, the questionnaires were administered again as a posttest, and the follow-up period was performed 5 months later (after 2 months of drug administration, the medication was continued for up to 6 months at a specific dose until the follow-up phase was completed to stabilize the medication period according to the psychiatrist view); finally, all subjects were thanked for their participation.

The inclusion criteria were as follows: diagnosis of hypersexuality as a separate diagnosis based on ICD-11 classification, having at least an educational degree of diploma, being over 20 years of age, being married, and not receiving

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Table 1: Brief description of DBT sessions according to Marsha Linhan's instructions[18,19]

Sessions	Summary
First session (Mindfulness 1)	Familiarity with the concept of mindfulness and three mental states (wise mind emotional mind and reasonable mind)
Second session (Mindfulness 2)	Teaching two categories of skills to achieve mindfulness; The first category is "what" skills (including observing, describing, and participating) and the second category is "how" skills (including nonjudgmental stance, pervasive self-awareness, and acting effectively).
Third session (Distress Tolerance 1)	Teaching distraction strategies with ACCEPTS skills (Activities, Contributing, Connection, Emotions, Push Away, Thoughts and Sensations).
Fourth Session (Distress Tolerance 2)	Self-Soothing skill training with five senses.
Fifth meeting (Emotion regulation 1)	Teaching the pattern of emotions' recognition and labeling, which leads to increase of emotional control
Sixth section (Emotion regulation 2)	Learn to create positive emotional experiences by creating short-term positive emotional experiences.
Seventh session (Effective and efficient interpersonal communication 1)	Opportunities for effective and efficient interpersonal communication (proportionality between one's own desires and the desires of others; the ratio of wants and needs).
Eighth Session Effective and efficient interpersonal communication 2)	Goals of effective and efficient interpersonal communication (achieving goals in a situation and coping with resistance and conflict).

any other educational program before and while performing DBT. The exclusion criteria were as the following: severe psychiatric illness concurrently with hypersexuality and the use of psychiatric drugs, patients being treated with Levo-Dopa, substance abuse, frontal lobe disorders or schizophrenia, pregnant women, breast feeding mothers, and people at the risk for suicide. Therefore, according to the inclusion and exclusion criteria, medical and psychiatric examinations and possible differential diagnoses were performed and the types of hypersexuality drugs used or the underlying psychiatric diseases were indicated. Also, in clinical interviews and periodic examinations of patients, all possible side effects were considered. If there were any side effects, they were recorded and evaluated, and the side effects of Aripiprazole, especially cardiac complications, were carefully monitored.

Eligible individuals were randomly assigned to a control group and two experimental groups, and in the pretest phase, Marital Instability Index (MII) was administered to all three groups. Then, DBT was hold for eight sessions (2 months and 1 session per week), and Aripiprazole was administered to the experimental groups for 2 months. Immediately after discontinuation of psychotherapy and drug treatment, the posttest stage was performed. In the posttest stage, the mentioned questionnaire was performed again for all three control and experimental groups. The follow-up period was then performed 5 months after the posttest. The main reason for the follow-up period was to evaluate for possible late side effects, including tardive dyskinesia, which may usually occur 3 to 6 months after starting the drug. Changes in recurrence of symptoms, changes in mood, and other cases were also examined during the follow-up period. Finally, the obtained data were analyzed. Field experiment method was used for data collection.

After indicating the study population and formulating hypotheses using special techniques, the necessary information and figures were collected from the members of all three groups in three stages: pretest, posttest, and follow-up. The instruments used were the MII and researcher-made demographic questionnaire.

The MII was compiled by Edwards, Johnson, and Booth in 1987. This index is a 14-question tool developed to measure the instability of marital marriage and was first used in 1989 for 2034 married men and women under the age of 55 and also for 1578 married men and women in 1983. This index has two parts; the first part has 14 questions, scored based on a four-point Likert scale (never = 1, sometimes = 2, often = 3, and very = 4). Scores 14 to 28 indicate that the instability of marriage in the individual is low; a score from 28 to 42 indicates that the rate of marriage instability is moderate; and a score from 42 to 56 indicates that the instability of marriage is high in the individual. Also, in the second part, which has eight questions, some of the things that a couple sometimes do together are examined. In general, a low score in this index means more stability of marriage and marital life, and a higher score indicates higher instability of marriage.

The validity of this scale has been evaluated and confirmed in several studies, and its positive correlation with the scales related to marital problems and its negative correlation with the scales related to marital interaction and satisfaction have been confirmed. In one study, the coefficient of validity was 0.93 and was reported 0.75 for an 8-item scale.[16] The reliability of this scale using Cronbach's alpha is reported 93%. Nazari, Sahebdel, and Asadi (2011) used the split-half correlation method to evaluate the validity of the test, and a validity coefficient of 70% was reported. Cronbach's alpha was used to examine the internal consistency of this index, which was 0.74. Also, correlation coefficient of –0.53 was obtained for the convergence validity of this index with marital intimacy, which is significant at the level of 0.01.[17]

Ethical considerations: To observe research ethics, about four to five sessions of DBT intervention were performed for the control group after the experiment sessions and the follow-up period in addition to observing the principles of the ethical charter.

It is noteworthy that part of the present study was presented as a project in the Commission of the Research Council of Research Development Management, Research Evaluation

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and Coordination of Research Centers of Isfahan University of Medical Sciences and was accepted on September 1, 2021 with the ethical code of IR.MUI.MED.REC.1400.421 from Isfahan University of Medical Sciences.

Results

Descriptive findings include statistical indices of mean and standard deviation. Also, multivariate analysis of covariance (MANCOVA) was used to test the hypotheses. Kolmogorov--Smirov test was used to check the normality of the data; Leven test was used to check the homogeneity of variances, and box´M test was used to check the correlation between the research variables. To compare the difference of dependent variables, Wilk Lambda test, Pillai Trace, Hotelling Trace, and Roy Largest Root are used. To assure the assumptions of parametric tests, ANOVA was used to calculate the data. In hypotheses that needed to control the effect of auxiliary random variables, ANOVA and in hypotheses that needed to examine the effect of an independent variable on two or more dependent variables simultaneously, MANCOVA was used. Before performing the MANCOVA, the necessary assumptions were also examined to determine whether MANCOVA can be used. The following research hypotheses are presented, and the results related to each are presented.

The use of ANCOVA requires statistical assumptions such as (1) normality, (2) homogeneity of variances, (3) homogeneity of regression slopes, and (4) multicollinearity ($p < 0.05$) [Table 2]. The normality assumption was tested and confirmed by Shapiro--Wilk test. Leven and box´M test (F = 1.41) also showed the equality of variances, so the ANCOVA could be used. The results of the Leven test are presented in Table 2.

The mean and standard deviation of pretest, posttest, and follow-up scores of marriage instability component in the three intervention and control groups are presented in Table 3, respectively [Table 3].

Tables 4 and 5, respectively, are related to the results of ANCOVA for comparing the two groups (first experimental group and control group; second experimental group and control group) in the variable of tolerance of marital instability, and Table 6 is related to the results of ANCOVA for comparison of three groups of the variable of tolerance of marital instability.

Given that the variable of marital instability has become significant over time ($p < 0.01$), there was a difference between the three stages of pretest, posttest, and follow-up in this variable. These differences were investigated using Bonferroni post hoc test [Table 4]. Also, considering interaction between group and time ($p < 0.01$), it is clear that there is a difference between the pretest, posttest, and follow-up stages between group therapy and control groups in the dependent variable, an evaluation of which is provided. Also, assuming the group effect and according to the values of F and significance levels, there was no significant difference in the variable of marital instability between the experimental (DBT) and control groups ($p < 0.05$).

Since the variable of marital instability has become significant over time ($p < 0.05$), there was a difference between the three stages of pretest, posttest, and follow-up. These differences were investigated using Bonferroni post hoc test [Table 5]. Also, considering the interaction between group and

Table 2: Leven test results: homogeneity of variances regarding marital instability

Variable	Phase	Degree F	Degree of freedom 1	Degree of freedom 2	Levels of significance
Marital instability	Pretest	0.18	2	24	0.83
	Posttest	0.27	2	24	0.76
	Follow-up	0.18	2	24	0.83

Table 3: Mean and standard deviation of marital instability in pretest, posttest, and follow-up

Variable	Experimental group (dialectical behavior therapy)		Examination group (Aripiprazole)		Control group	
	Mean	SD	Mean	SD	Mean	SD
Marital instability						
Pretest	37.11	8.06	36.55	8.04	37.77	7.37
Posttest	31.44	5.98	33.66	6.20	38.44	8
Follow-up	32.11	6.41	35.22	7.52	38.44	7.61

Table 4: Results of repeated measures ANOVA related to intragroup and intergroup effects of marital instability

Scale		Source	Total squares	Degree of freedom	Mean square	*F*	Levels of significance	ETA	Statistical power
Marital instability	Intergroup	Test	66.33	1.55	42.75	7.65	0.005	0.32	
		Test and group interaction	109	1.55	70.25	12.57	0.000	0.44	
	Between groups	Group	294	1	294	1.95	0.18	0.10	

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Table 5: Results of repeated measures ANOVA related to intragroup and intergroup effects of marital instability

Scale	Source		Total squares	Degree of freedom	Mean square	*F*	Levels of significance	ETA	Statistical power
Marital instability	Intergroup	Test	11.70	1.57	7.41	3.76	0.046	0.19	0.57
		Test and group interaction	28.59	1.57	18.10	9.20	0.002	0.36	0.92
	Between groups	Group	127.57	1	127.57	0.77	0.39	0.046	0.13

Table 6: Results of repeated measures ANOVA related to intragroup and intergroup effects of marital instability

Scale	Source		Total squares	Degree of freedom	Mean square	*F*	Levels of significance	ETA	Statistical power
Marital instability	Intergroup	Test	99.28	1.69	58.71	13.93	0.000	0.36	0.99
		Test and group interaction	113.67	3.38	33.61	7.97	0.000	0.39	0.99
	Between groups	Group	303.87	2	151.93	0.99	0.38	0.077	0.20

time ($p < 0.01$), there was a difference between the pretest, posttest, and follow-up stages between group therapy and control groups in the dependent variable. Also, assuming the group effect and according to the values of F and significance levels, no significant difference was found in the variable of marital instability between the experimental (Aripiprazole) and control groups ($p < 0.05$).

Since the variable of marital instability has become significant over time ($p < 0.01$), there was a significant difference between the three stages of pretest, posttest, and follow-up [Table 6]. Also, considering the interaction between group and time ($p < 0.01$), there was a significant difference between the pretest, posttest, and follow-up stages between the two treatments (DBT and Aripiprazole) and control groups in the dependent variable, a review of which is provided. Also, assuming the group effect and according to the values of F and significance levels, no significant difference was found in the variable of marital instability between the experimental (DBT and Aripiprazole) and control groups ($p < 0.05$).

Discussion

According to the evaluations, there is a significant difference between the pretest and posttest and between the pretest and follow-up in the values of marital instability variable ($p < 0.05$), but there is no difference between posttest and follow-up ($p > 0.05$). The mean scores in the variables of marital instability in post-test (31.44) and follow-up (32.11) show that the scores decreased compared to pretest. The results show that DBT reduced the marital instability. Also, in the pretest, posttest, and follow-up stages, no difference was observed between the group undergoing DBT and the control group ($p > 0.05$). Hence, DBT has little effect on reducing the instability of marriage of a patient with hypersexuality.

Ismailifar, Jairvand, Rasouli, and Hassani considered despair, inability to solve problems, and negative emotions of couples as effective factors on marital instability.[20] On the other hand, studies have shown that DBT skills improve problem-solving skills and emotion management in spouses.[21] In DBT sessions, emotion regulation and turbulence tolerance skills give couples the opportunity to resolve their conflicts with high concentration and to find different solutions to their problems with greater creativity and flexibility. Thus, a change in problem-solving style by changing cognition reduces stress and, ultimately, the instability of married life. Zeraati also concluded that DBT is effective on reducing marital boredom of addicts with suicidal ideation. However, DBT is more effective than self-regulatory couple therapy.[22] Explaining this finding, it can be said that couples with poor coping skills and low flexibility show the weakest results in treatment, and this is one of the reasons for reporting reduction in the effectiveness of couple therapy approaches. In DBT, flexibility is increased in couples through stress coping skills. Mara showed that helplessness coping skills help a person to better adapt to painful events through increasing flexibility and offering new ways and modifying the effects of distressing situations. In the 2-month training process, using acceptance and change techniques, the motivation of the participants to change increased and their resistance decreased. Instead of spending energy and time dealing with unpleasant thoughts, separation from these thoughts and accepting them without judgment have possibly contributed to the process of increasing their quality of married life and thus the married life stability.[9] The present variable requires more time for performing therapeutic interventions to be effective; in the present study, limited research time may not have affected it as desired and probably more time is needed because, as mentioned, some variables take longer to take effect.

The obtained data also showed a significant difference between pretest and posttest and between pretest and follow-up in the values of marital instability variables ($p < 0.05$), but no difference was observed between posttest and follow-up ($p > 0.05$). The mean scores in the variable of marital instability in the posttest (36.55) and follow-up (35.22) showed that the scores were lower compared to the pretest. So, the results show that DBT has reduced marital instability.

According to the results, in the pretest, posttest, and follow-up stages, no difference was observed between the group treated

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with Aripiprazole and the control ($p > 0.05$). Thus, Aripiprazole has little effect on reducing the marital instability of patients with hypersexuality.

Aripiprazole is an unusual FDA-approved antipsychotic that is primarily used for symptomatic management of psychosis in patients with schizophrenia and monotherapy or an auxiliary therapy for acute manic episodes associated with bipolar disorder. Studies show that short-term use of Aripiprazole in patients with ASD leads to decreased excitability, decreased hyperactivity, and reduced repetitive and aimless actions (cliché behaviors).[23] Aripiprazole has also been shown to reduce hospitalization in psychiatric hospitals, reduce the symptoms of late dyskinesia, improve cognitive function, improve sexual function, and reduce the desire for alcohol and sex in addicted patients.[11] Therefore, when a person with hypersexuality shows less excitability and impulsive behaviors, he/she will show less repetitive and aimless actions, will improve cognitive functions, modulate sexual activities, and may compensate for defects in the sexual behaviors that a person has had with his/her spouse. The affected person and the couple show more hope in life regarding positive changes they have experienced through Aripiprazole in their lives, thus expecting improvement in marital relationships and quality of life, resulting in more stable relationships.

On the other hand, Aripiprazole stimulates 5-HT2A receptors in mesocortical pleasure centers to increase pleasure in marital life.[23] Today, marriage occurs and continues because of the feeling of emotional satisfaction resulting from cohabitation and close relationship with the desired spouse. Some experts have considered couples' shared leisure as a possible factor in the stability of marital life based on attachment theory. Couples' time together is a form of enjoyable interaction that strengthens attachment between couples and prevents marital dissolution. Couples' time together and enjoyable activities with each other provide a close relationship between couples and affect marital satisfaction and increase their chances of marital life. As mentioned, the present variable requires more time for performing of therapeutic interventions to be effective, so the limited time of the research had not had much effect on it. Also, in another explanation, according to the studies, the medication has no specific and obvious effect on this variable.

In none of the stages, a significant difference was observed between the group treated with DBT and the group treated with Aripiprazole and the control group ($p < 0.05$). Hence, the research hypothesis "there is a difference between the effectiveness of DBT and Aripiprazole on marital instability" is not accepted.

According to the results, it was observed that in the pretest stage, there is no difference between the group undergoing DBT and the group treated with Aripiprazole and the control group.

Marital relationships become complicated and threatening when couples express their emotions impulsively or do not have insight into their behaviors. Satisfaction can be resulted from respect, appreciation, commitment, affection, mood stability, controlling the emotions, and trust in their relationship. Marriages that pass this stage correctly are likely to remain stable.[24] The more mature the couple's marital relationship at this stage, the more time couples spend together, learn to take on the roles and responsibilities of the other party in some situations, adapt to cohabitation conditions to improve their health, and decide on a common future for their lives.[25] In addition, age-related problems, the occurrence of some diseases, and hormonal problems in both genders can negatively affect the sexual desire or function of couples and reduce the stability of their lives.

Following this study and according to the results obtained from the analysis of the collected data, DBT intervention and aripiprazole can be used to improve mental health and treatment of psychological problems in hypersexual patients; Urologists and Gynecologists, in collaboration with health and clinical psychologists, can help patients to cope with physical and psychological complications and side effects of the disease as well as reduce the inconvenience of the patients and improve the quality of their life. It should be noted that this study was conducted in the mentioned medical centers of Isfahan in 1399, so in generalizing the results to other hospitals, clinics and similar research institutes, it is better to be cautious; also, people's reactions to some DBT techniques differ not only in different societies, but also between the various groups of individuals. It should be noted that in people at high risk of developing hypersexuality disorder, aripiprazole should be used to prevent related problems.

Conclusion

Therefore, when these couples undergo psychological therapies such as DBT or when they take psychiatric drugs such as Aripiprazole because of their problems, their relationship, psychological, and especially sexual problems decrease; as a result, they report more levels of stability in their lives. Therefore, due to the impact of Aripiprazole and DBT on the dimensions of this disease, they show the same effectiveness in the stability of married life of couples with hypersexuality; thus, no significant difference was observed between the two groups.

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Conflicts of interest

There are no conflicts of interest.

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