Abstract: The prevalence of female and male sexual dysfunction is high and it may significantly affect self-esteem and quality of life. Even sexual dysfunction of short duration can create frustration and anguish. When chronic, it may lead to anxiety and depression, harm relationships, and cause problems in other aspects of life. The goal of the present research is to study the effect of cognitive-behavioral counseling on the level of anxiety in women and men with sexual dysfunction. In this research, Cognitive behavior therapy during 8 individual weekly sessions and 4 group therapy weekly sessions used for subjects group and it focused on cognitive restructuring, modification of cognitive distortions and training of behavioral techniques. Spilburger’s Anxiety questionnaire was used as the pre-test and post-test for subject group. Finally data analysis will be shown that the cognitive behavior therapy has significantly effect on reduction of anxiety. The mean scores of anxiety in post-test of subject group were significantly lower than mean scores in pre-test. Cognitive counseling as a therapeutic method can have a significant role in improvement of women and men suffering from anxiety which is resulted from sexual dysfunction.

Keywords: Sexual Dysfunction, Anxiety, Cognitive Behavior Counseling

1. Introduction

Female sexual dysfunction (FSD) is defined as persistent or recurring decrease in sexual desire, persistent or recurring decrease in sexual arousal, dyspareunia and a difficulty in or inability to achieve an orgasm (Basson, 2000). The prevalence of female sexual dysfunction is high, ranging from 43% to 88% (Dennerstein, 2002). It may significantly affect self-esteem and quality of life. Even sexual dysfunction of short duration can create frustration and anguish. When chronic, it may lead to anxiety and depression, harm relationships, and cause problems in other aspects of life (Dennerstein, 2005). Several factors, including interpersonal, psychological, physiological, medical, social and cultural variables, have been shown to correlate with sexual dysfunctions (Bradford, 2007). Anxiety disorders can preclude women’s ability to attend to sexual stimuli and to be lost in the moment (Meston, 2004). The anxiety resulting from sexual functioning put people in trouble psychologically. Instead of focusing on sexual arousal stimuli, one involves in a sense of anxiety concerning sexual functioning (Adams, 1985). The results of a comprehensive research by Holvorsen and Metz on various methods of treating sexual disorders showed that the most prevalent methods for psychopathic treatment of sexual malfunctioning that have been in practice from 1996 onward include sensory focus, CBT (Cognitive Behavior Therapy), relaxation practice, hypnosis, and group therapy; the results also showed the above-mentioned treatments have achieved considerable results in improvement of different sexual disorders like sexual idiosyncrasy in women (Kabakci, 2003). Cognitive behavior therapy focuses on decreasing anxiety and promoting changes in attitudes and sexual thoughts, which increase the ability to achieve orgasm and to gain satisfaction from orgasm (Soykan, 2005). The goal of the present research is to study the effect of cognitive-behavioral counseling on the level of anxiety in women and men with sexual dysfunction. The assumption was based on the fact that the method can alleviate the anxiety which is one of the co-morbidities of sexual dysfunction.

Basic Definitions:

Sexual dysfunction or sexual malfunction refers to a difficulty experienced by an individual or a couple during any stage of a normal sexual activity, including desire, arousal or orgasm. To maximize the benefits of medications and behavioral techniques in the management of sexual dysfunction it is important...
to have a comprehensive approach to the problem. A thorough sexual history and assessment of general health and other sexual problems (if any) are very important.

Assessing (performance) anxiety, guilt (associated with masturbation in many Indian men), stress and worry are integral to the optimal management of sexual dysfunction. When a sexual problem is managed inappropriately or sub-optimally, it is very likely that the condition will subside immediately but re-emerge after a while this cycle continues, it strongly reinforces failure that eventually make clients not to access any help and suffer it all their life. So, it is important to get a thorough assessment from professionals and therapists who are qualified to manage sexual problems. Internet-based information is good for gaining knowledge about sexual functioning and sexual problem but not for self-diagnosis and/or self-management. Sexual dysfunction disorders may be classified into four categories: sexual desire disorders, arousal disorders, orgasm disorders and pain disorders.

**Sexual desire disorders** or decreased libido are characterized by a lack or absence for some period of time of sexual desire or libido for sexual or of sexual fantasies. The condition ranges from a general lack of sexual desire to a lack of sexual desire for the current partner. The condition may have started after a period of normal sexual functioning or the person may always have had no/low sexual desire. The causes vary considerably, but include a possible decrease in the production of normal estrogen in women or testosterone in both men and women. Other causes may be aging, fatigue, pregnancy, medications (such as the SSRIs) or psychiatric conditions, such as depression and anxiety. Loss of libido from SSRIs usually reverses after SSRIs are discontinued, but in some cases it does not. This has been called PSSD; however, this is not a classification that would be found in any current medical text. While a number of causes for low sexual desire are often cited, only some of these have ever been the object of empirical research. Many rely entirely on the impressions of therapists.

**Sexual arousal disorders** were previously known as frigidity in women and impotence in men, though these have now been replaced with less judgmental terms. Impotence is now known as erectile dysfunction, and frigidity has been replaced with a number of terms describing specific problems with, for example, desire or arousal.

For both men and women, these conditions can manifest themselves as an aversion to, and avoidance of, sexual contact with a partner. In men, there may be partial or complete failure to attain or maintain an erection, or a lack of sexual excitement and pleasure in sexual activity.

There may be medical causes to these disorders, such as decreased blood flow or lack of vaginal lubrication. Chronic disease can also contribute, as well as the nature of the relationship between the partners. Unlike disorders of orgasm, as the success of Viagra attests, most erectile disorders in men are primarily physical conditions.

**Erectile dysfunction or impotence** is a sexual dysfunction characterized by the inability to develop or maintain an erection of the penis. There are various underlying causes, such as damage to the nervi erigentes which prevents or delays erection, or diabetes, which simply decreases blood flow to the tissue in the penis, many of which are medically reversible.

The causes of erectile dysfunction may be psychological or physical. Psychological impotence can often be helped by almost anything that the patient believes in; there is a very strong placebo effect. Physical damage is much more severe. One leading physical cause of ED is continual or severe damage taken to the nervi erigentes. These nerves course beside the prostate arising from the sacral plexus and can be damaged in prostatic and colorectal surgeries. Due to its embarrassing nature and the shame felt by sufferers, the subject was taboo for a long time, and is the subject of many urban legends. Folk remedies have long been advocated, with some being advertised widely since the 1930s. The introduction of perhaps the first pharmacologically effective remedy for impotence, sildenafil (trade name Viagra), in the 1990s caused a wave of public attention, propelled in part by the news-worthiness of stories about it and heavy advertising. The Latin term impot entia coeundi describes simple inability to insert the penis into the vagina. It is now mostly replaced by more precise terms.

**Orgasm disorders** are persistent delays or absence of orgasm following a normal sexual excitement phase. The disorder can have physical, psychological, or pharmacological origins. SSRI antidepressants are a common pharmaceutical culprit, as they can delay orgasm or eliminate it entirely.

**Sexual pain disorders** affect women almost exclusively and are known as dyspareunia (painful intercourse) or vaginismus (an involuntary spasm of the muscles of the vaginal wall that interferes with intercourse). Dyspareunia may be caused by insufficient lubrication (vaginal dryness) in women. Poor lubrication may result from insufficient excitement and stimulation, or from hormonal changes caused by menopause, pregnancy, or breastfeeding. Irritation from contraceptive creams and foams can also cause dryness, as can fear and anxiety.
about sex. It is unclear exactly what causes vaginismus, but it is thought that past sexual trauma (such as rape or abuse) may play a role. Another female sexual pain disorder is called vulvodynia or vulvar vestibulitis. In this condition, women experience burning pain during sex which seems to be related to problems with the skin in the vulvar and vaginal areas. The cause is unknown.

**Uncommon sexual disorders in men.** Erectile dysfunction from vascular disease is usually seen only amongst elderly individuals who have atherosclerosis. Vascular disease is common in individuals who have diabetes, peripheral vascular disease, hypertension and those who smoke. Any time blood flow to the penis is impaired, erectile dysfunction is the end result. Hormone deficiency is a relatively rare cause of erectile dysfunction. In individuals with testicular failure like klinefelter's syndrome, or those who have had radiation therapy, chemotherapy or childhood exposure to mumps virus, the testes may fail and not produce testosterone. Other hormonal causes of erectile failure include brain tumors, hyperthyroidism, hypothyroidism or disorders of the adrenal gland. Structural abnormalities of the penis like Peyronie's disease can make sexual intercourse difficult. The disease is characterized by thick fibrous bands in the penis which leads to a deformed-looking penis. Drugs are also a cause of erectile dysfunction. Individuals who take drugs to lower blood pressure, uses antipsychotics, antidepressants, sedatives, narcotics, antacids or alcohol can have problems with sexual function and loss of libido.

**Priapism** is a painful erection that occurs for several hours and occurs in the absence of sexual stimulation. This condition develops when blood gets trapped in the penis and is unable to drain out. If the condition is not promptly treated, it can lead to severe scarring and permanent loss of erectile function. The disorder occurs in young men and children. Individuals with sickle-cell disease and those who abuse certain medications can often develop this disorder.

### 2. Material and Methods

The subjects included 20 persons men and women aged 25-45 years old with sexual dysfunction who had referred to a Hospital in Tehran, the capital of IRAN. First the demographic questionnaire, together with Spilburger’s Anxiety questionnaire, were filled by the subjects in order to measure their level of anxiety. This questionnaire was presented by Spilburger et al. in 1970, and was renewed in 1983. The questionnaire measures the anxiety in two scales of situation and trait. The Chronbach’s Alpha coefficient in the scale of situation was reported 0.92%, and the corresponding coefficient for trait was 0.90 %. The questionnaire includes 40 questions, and questions 1-20 assess the anxiety of situation. Each question is followed by four options- **never, sometimes, often, very often**. Questions 21-40 deal with anxiety of trait consisting of four options: **almost never, sometimes, most often, and almost always**. The scores of 20-30 signify low level of anxiety, and scores 31-45 denote medium level of anxiety, and eventually the scores above 46 indicate high level of anxiety.

After conducting the test, subjects group underwent cognitive-behavioral treatment (CBT), which consisted of 4 groups and 8 individual sessions. The sessions were decided to be twice a week, and each session lasted one-and-a-half hours. Throughout the session the focus was mainly on cognitive restructuring, modification of cognitive distortions, and training of behavioral techniques such as relaxation education.

Following the counseling sessions, they sat a post-test, and SPSS software, version 18, and Chi-Square test together with T-test were used to analyze the data.

**Protocol of implementation of cognitive-behavioral therapy:** First session of group counseling: the aim of this session was introduction, and assessing the level of the subjects’ awareness of sexual behavior.

Second session of group counseling: this session aimed at teaching sexual behavior and giving information, and focused on teaching the relaxation skill in order to reduce their anxiety in intercourse. Third session of group counseling: this session focused on analyzing the wrong images as well as suppositions of the subjects by themselves, and learning some skills and doing some assignments. Fourth session of group counseling: in this session all the subjects’ questions were answered, and all the previous subjects were reviewed.

Following the group counseling sessions, since they did not feel free to put forward some of their problems, 8 individual counseling sessions were organized with the following goals:

The first session focused on individual interviews, assessment of their manner of intercourse, and determining the problem. In the second session, false negative views and thoughts that often lead to the expression of negative feelings towards sexual issues were discussed. The purpose of the third session was further cognitive reconstruction in the subjects. In the fourth session, the main objective was sensual focus type II, as well as training the Kegel exercises. During the fifth session, penetration without orgasm, and self-stimulation was practiced, and in the sixth session, reaching orgasm was
practiced in the presence of their spouse, and some other assignments. The aim of the seventh session was individual counseling, intercourse, and orgasm; and eventually, in the last session, all the material covered during the previous sessions were reviewed and conclusions were drawn. The subjects were categorized and assigned to each level of the counseling process depending on the nature of their problems.

3. Results
Considering the results gained from demographic questionnaire, the average age for the subjects was determined 32 years. 60% of the subjects group had middle school education; 25% of them had high school diploma, and 10% of them had bachelor degree. 5% in subjects group had primary level of education. Also, 60% of subjects group were housewives, while 35% in subjects groups were office employees, and finally, 5% of them were retired. Regarding their economic status, 60% in subject group had an average economic situation; 30% of them had bad economic situation, and 10% of them , had a decent economic state. The results can be seen in the following tables 1 and 2.

Table1: Distribution frequency scores demographic data in subjects group

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>10</td>
<td>35%</td>
</tr>
<tr>
<td>High school</td>
<td>12</td>
<td>40%</td>
</tr>
<tr>
<td>Diploma</td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>Bachelor</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>12</td>
<td>35%</td>
</tr>
<tr>
<td>Employee</td>
<td>7</td>
<td>25%</td>
</tr>
<tr>
<td>Retired</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Economy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad</td>
<td>6</td>
<td>15%</td>
</tr>
<tr>
<td>Moderate</td>
<td>12</td>
<td>35%</td>
</tr>
<tr>
<td>Good</td>
<td>2</td>
<td>5%</td>
</tr>
</tbody>
</table>

Table2: distribution frequency and compare mean scores situational anxiety and trait anxiety before and after CBT in subjects group

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual</td>
<td>20</td>
<td>62.9</td>
<td>7.526</td>
<td>0.09</td>
<td>38</td>
<td>0.95</td>
</tr>
<tr>
<td>Trait-pre</td>
<td>20</td>
<td>62.60</td>
<td>7.598</td>
<td>0.243</td>
<td>38</td>
<td>0.81</td>
</tr>
<tr>
<td>Trait-post</td>
<td>20</td>
<td>35</td>
<td>8.349</td>
<td>11.07</td>
<td>37</td>
<td>0.000</td>
</tr>
</tbody>
</table>

As it can be seen from the table2, the average Pre-test score for situation anxiety for subjects group was 62.9, and it was high; however, the average score for the Post-test concerning the situation anxiety was 35.11 , which means there has been a considerable difference between the pre-test and the Post-test (P<0.05) in subjects group. The difference in figures, in fact, denotes a decrease in anxiety in subjects group and effectiveness of the interference. Also, it was concluded that the average Pre-test score for Trait Anxiety was 62.60 and they had a high level of Trait anxiety. In contrast, the average Post-test scores for Trait Anxiety were quite different: 35 in subjects group. This implies a significant difference between the pre-test and the Post-test (P<0.05) and a reduction of anxiety as well as effectiveness of interference.

4. Discussions
There are many factors which may result in a person experiencing a sexual dysfunction. These may result from emotional or physical causes. Sexual dysfunction may arise from emotional factors, including interpersonal or psychological problems. Interpersonal problems may arise from marital or relationship problems, or from a lack of trust and open communication between partners, and psychological problems may be the result of depression, sexual fears or guilt, past sexual trauma, sexual disorders among others.

Sexual dysfunction is especially common among people who have anxiety disorders. Ordinary anxiousness can obviously cause erectile dysfunction in men without psychiatric problems, but clinically diagnosable disorders such as panic disorder commonly cause avoidance of intercourse and premature ejaculation. Pain during intercourse is often a co-morbidity of anxiety disorders among women.

Sexual activity may also be impacted by physical factors. These would include use of drugs, such as alcohol, nicotine, narcotics, stimulants, antihypertensive, antihistamines, and some psychotherapeutic drugs. For women, almost any physiological change that affects the reproductive system—premenstrual syndrome, pregnancy, postpartum, menopause—can have an adverse effect on libido. Injuries to the back may also impact sexual activity, as would problems with an enlarged prostate gland, problems with blood supply, nerve damage (as in spinal cord injuries). Disease, such as diabetic neuropathy, multiple sclerosis, tumors, and, rarely, tertiary syphilis may also impact on the activity, as would failure of various organ systems (such as the heart and lungs), endocrine disorders (thyroid, pituitary, or adrenal gland problems), hormonal deficiencies (low testosterone, estrogen, or androgens), and some birth defects.

Since in many men the cause of sexual dysfunction is related to anxiety about performance, psychotherapy can help. Situational anxiety arises from an earlier bad incident or lack of experience. This anxiety often leads to development of fear towards sexual activity and avoidance. In return evading leads to a cycle of increased anxiety and desensitization of the penis. In some cases, erectile dysfunction may be due to marital disharmony. Marriage counseling sessions are recommended in this situation.
Lifestyle changes such as discontinuing smoking, drug or alcohol abuse can also help in some types of erectile dysfunction. Several medications like Viagra, cialis and Levitra have become available to help people with erectile dysfunction. These medications do work in about 60% of men. In the rest, the medications may not work because of wrong diagnosis or chronic history.

Another type of medication that is effective in roughly 85% of men is called intracavernous pharmacotherapy — used by companies such as Boston Medical Group, Performance Medical Centers and independent doctors — and involves injecting a vasodilator drug directly into the penis in order to stimulate an erection. Although there are no approved pharmaceuticals for addressing female sexual disorders, several are under investigation for their effectiveness. A vacuum device is the only approved medical device for arousal and orgasm disorders. It is designed to increase blood flow to the clitoris and external genitalia. Women experiencing pain with intercourse are often prescribed pain relievers or desensitizing agents. Others are prescribed lubricants and/or hormone therapy. Many patients with female sexual dysfunction are often also referred to a counselor or therapist for psychosocial counseling.

A manual physical therapy, the Wurn Technique, which is designed to reduce pelvic and vaginal adhesion, may also be beneficial for women experiencing sexual pain and dysfunction. In a controlled study, Increasing orgasm and decreasing intercourse pain by a manual physical therapy technique, twenty-three (23) women reporting painful intercourse and/or sexual dysfunction received a 20-hour program of manipulative physical therapy. The results were compared using the validated Female Sexual Function Index, with post-test vs. pretest scores. Results of therapy showed statistically significant improvements in all six recognized domains of sexual dysfunction. A second study to improve sexual function in patients with endometriosis showed similar statistical results.

Results of the research concerning the persons who referred to a Hospital in Tehran showed in subject groups, the level of anxiety was high and acute; also the group and individual counseling sessions offered to them had significant effect on reduction of anxiety for both Situation and Trait.

Planning the details of the method of intercourse, and also discussion around fears, anxieties and concerns, coming over the sense of guilt, existing misunderstandings, as well as correcting the misconceptions about sexual behavior, and finally the radical alteration of women’s view to sex and sexual act are among the many issues that justify the effectiveness of this therapeutic method.

The findings of the present research corresponds with the results of another study implying that those who enjoyed this type of counseling experienced a significant drop in their level of anxiety (Kabakci , 2003). It also corresponded with the results of another research concluding the effectiveness of cognitive-behavioral treatment for sexual disorders in Vaginistic women and specific phobia of female diseases, and anxiety (Crespo, 2004). In another research, cognitive-behavioral counseling was conducted to promote the sexual intercourse, and reduce the anxiety and fear of sex act, the results of which corresponds with the present study (Turkuile , 2007).

In the studies conducted by Mehrabi, Jaberi and Mehryar on assessing the level of effectiveness of cognitive-behavioral treatments concerning the women inflicted with the sex-phobia disorder, as well as studying the sex intercourse that was conducted, the results showed that as a result of cognitive-behavioral treatment, the level of anxiety in the subjects reduced considerably, and their efforts to have more intercourse was successful. The results of the research also corresponded with the present study (Mehrabi, 1999). Therefore, it is recommended that longer similar therapeutic methods and more number of sessions be organized and conducted, and in order to monitor the consistency of the treatment effects, follow-up tests be performed at various intervals, following the termination of the therapeutic interference. Since the subject who referred to the hospital was limited, there any kind of generalization must be cautioned.

As it was mentioned, sexual disorder has had high prevalence among women and caused several problems in their personal life including anxiety and depression, as well as in their inter-personal relations, and as it was noticed, individual cognitive counseling as a therapeutic method can have a significant role in improvement of people suffering from anxiety which is resulted from sexual dysfunction.

Table 1: Distribution frequency scores demographic data in subjects group.

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<tr>
<th>Variables</th>
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<td>Retired</td>
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<td>Bad</td>
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<tr>
<td>Good</td>
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<td>%5</td>
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</table>
Table 2: distribution frequency and compare mean scores situational anxiety and trait anxiety before and after CBT in subjects group

<table>
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<th>STD</th>
<th>T</th>
<th>DF</th>
<th>Sig</th>
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<td>0.929</td>
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<tr>
<td>Situational-post</td>
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<td>6.189</td>
<td>-13.116</td>
<td>38</td>
<td>0.000</td>
</tr>
<tr>
<td>Trait-pre</td>
<td>20</td>
<td>62.60</td>
<td>7.598</td>
<td>0.243</td>
<td>38</td>
<td>0.809</td>
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<tr>
<td>Trait-post</td>
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<td>34.15</td>
<td>8.349</td>
<td>-11.074</td>
<td>37</td>
<td>0.000</td>
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1/26/12