



Group Cognitive Behaviour Therapy in the management of Compulsive Sex Behaviour

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Abstract

The aim of the study is to evaluate the existence of compulsive sex behaviour, emotional states such as anxiety and depression and to evaluate the effectiveness of Cognitive Behaviour Therapy in the group format. Twelve men with a mean age of 28 years, who gave consent, were screened out for compulsive sex behaviour i.e. depression and anxiety. They were subjected to the Group Cognitive Behaviour Therapy program of 12 sessions. They were tracked on three different scales (Sexual Compulsivity Scale, Beck's Depression Inventory II and State -Trait Anxiety Scale) for their emotional status of anxiety, depression and compulsive sex behaviour. Negative assumptions and core attributions related to their dysfunction in the area of academics, finances, relationships, physical health and compulsive sex behaviour were drawn using Semi Structured interview. Ten men participated in the entire Cognitive Behaviour Therapy program. The outcome variables were Compulsive Sexual behaviours, anxiety, depression and their impact in the domains of physical health, relationships, finance and academics. Cognitive Behaviour Therapy was found to be effective in stabilizing their emotional states of depression and anxiety and learning of effective coping skills.

Keywords: Compulsive Sex Behaviour; Sexual compulsivity; Cybersex; Cognitive Behaviour Therapy.

Introduction

Major advances have been made regarding computer/Internet technology in the past decade. This growth, in large part, can be attributed to a greater access, affordability and anonymity. Problems with compulsive cybersex tend to develop in vulnerable or at-risk users who are predisposed to developing an obsessive preoccupation, frequent harmful outlets and continue online sexual behaviour despite negative consequences. The

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demarcating line between severe psychopathology and crime, can at times, become blurred when it comes to the manifestation of Compulsive Sex Behaviour (CSB).

The term compulsive sex behaviour (Goodman, 1993), sexual addiction (Coleman, 1986) and sexual compulsivity (Kalichman & Rompa, 1995) have been used for the same condition. Compulsive Sex Behaviour (CSB) refers to sequences of visual or textual exchange with a partner for the purposes of sexual pleasure, which frequently culminates in masturbation. Compulsive Sex Behaviour ranges from solitary acts through consensual interactions to coercive contacts. CSB or Sexual Compulsivity (SC) is a clinical phenomenon characterized by sexual urges, fantasies and behaviours that are sufficiently recurrent and intense as to interfere with one's normal daily functioning (Miner et al., 2006). CSB has been shown to be increasingly affecting the individual's family relationships, work productivity and academic success. CSB is characterized by inappropriate or excessive sexual cognitions or behaviours that lead to subjective distress or impaired functioning in one or more important life domains (Black et al, 2000).

Sex addiction, another term used for CSB, is said to be a chronic, relapsing disorder in which repeated sexual stimulation persists despite serious negative consequences. Sexual arousal induces pleasant states (euphoria in the initial phase) and relieves stress. Dependence, craving, and relapse frequently exist (Delmonico, 1999). Several contributors characterized compulsive cybersex as a form of sexual addiction in which users engage in a predictable cycle leading to powerlessness and unmanageability (Carnes et al, 2001; Schneider et al, 2001). Many compulsive cybersex patients present with co-morbid anxiety and affective disorders. CSB has an onset in adolescence, with paraphilic behaviours frequently occurring earlier than nonparaphilic behaviours. The disorder is chronic or episodic. However, the same studies (Black, 1997; Kafka 1992) also show a long delay before their subjects sought treatment, perhaps because of the stigma that persons with CSB experience. CSB has been characterized as a progressive, multiphase illness that grows more intense till it is untreated.

Stages of development of CSB, symptoms and classification

- Preoccupation: a person develops sexual thoughts and urges.
- Ritualization: involves the development of an idiosyncratic routine that prompts the sexual behaviour.
- Gratification: involves the sexual behaviour itself.
- Despair: is characterized by feelings of guilt, powerlessness, and isolation, all of which fuel the tension underlying CSB and prompt the person to repeat the cycle.

Bergner (2002) also noted that CSB patients follow a recurrent pattern in their behaviour and argued that fantasy scenarios are derived from early experiences of degradation. He suggests that CSB represents an internalized attempt to recover from the trauma of that degradation.

Compulsive masturbation, excessive use of pornography and online sexual chat and dating services, sex with multiple and often anonymous partners, and obsessive sexual thoughts are usually reported as symptoms of SC (Parsons et al., 2007). Internet problems that were the primary focus of treatment are listed here in descending percentage of young and adult patients: sexual exploitation (48%), infidelity (47%), pornography (44%), overuse (40%), failed relationships (37%), fraud and deception (37%), gaming and role-playing (29%), harassment (28%), risky behaviour, not otherwise specified (NOS) (28%), harmful

influence (23%), and isolative-avoidant use (23%). The list of clinical problems emphasized sexual and relational issues, deception and criminal conduct, and harmful social impacts.

Excessive use of pornography or sexually explicit materials has been explored as a symptom of compulsive sex behaviour or a trigger for the obsessive sexual behaviour. The link between pornography and sexual compulsivity has been suggested or implied by a number of researchers and clinicians (Carnes, 1992; Cooper et al., 2000, 2004; Griffiths, 2001; Schwartz & Southern, 2000). Exposure to pornography could function as a trigger for a set of thoughts and behaviours that could activate (or facilitate the activation of) individual potential or predisposition for the condition, much like the exposure to violent pornography may facilitate sexually aggressive behaviour in men who are prone to *hostile masculinity* – as pointed out in the Confluence Model of sexual aggression (Bogaert, 2001; Malamuth et al., 2000; Malamuth et al., 2005).

Similar findings were proposed by another study. Problems with compulsive cybersex tend to develop in vulnerable or at-risk users who are predisposed to developing obsessive preoccupations, frequent harmful outlets, and continued online sexual behaviours despite negative consequences (Carnes et al, 2001; Schneider et al, 2001). Sexual compulsivity is associated with paraphilic preferences. Paraphilic contents of pornography are readily available on the Internet which reduces inhibitions, facilitating the development of elaborate sexual fantasies and extensive erotic daydreaming (Cooper et al., 2004; Delmonico et al., 2002; Griffiths, 2001). Compulsive cybersex functions as maladaptive coping. The problematic behaviour represents an attempt to manage stress or reduce anxiety; ward off boredom, loneliness, or depression; express frustration and anger directly or indirectly; and bolster a fragile ego (Nichols et al. 2004; Schwartz et al., 2000). Specific paraphilias in the subtypes of CSB are enumerated in DSM-IV-TR, although non paraphilic forms of CSB have not been specified in DSM-IV-TR (APA, 2000). Prevalence of CSB ranges from 3% to 6% estimated in the general adult population of the United States (Carnes et al, 1991; Coleman et al, 1992). However, there is a dearth of prevalence studies in the Indian scenario.

Review of Literature

a. Impairment across various life domains:

Evidence has suggested that CSB causes impairment in important life domains such as important relationships or marriage, losing friends, financial loss (due to spending excessively on pornography, prostitutes etc) and also affected their work. Black et al (1997) reported of fifteen (42%) patients who reported subjective distress due to out of control repetitive fantasies in the sample of 36 persons with CSB. Cybersex causes intimacy dysfunction when the online sexual activity alienates a person from a healthy relationship with oneself and one's partner (Winnicott, 1965).

CSB is commonly associated with psychiatric comorbidity- typically mood disorders, anxiety disorders, substance use, and personality disorders (Raymond et al. 2003). Zillman et al. (1989) stated that a continued exposure to pornography had serious negative effects on beliefs about sexuality in general, and on attitudes toward women in particular. They also found that pornography desensitizes people to rape as a criminal offence, and that massive exposure to pornography encourages a desire for increasingly deviant materials that depict violence (such as sadomasochism and rape).

Comorbid clinical syndromes, especially anxiety and affective disorders, may need to be addressed through psychotropic medication management and development of effective coping strategies such as systematic muscle relaxation (Galbreath et al., 2002; Delmonico et al. 2002). Treatment of intimacy dysfunction should include a couple, in the safe haven, or holding environment of interventions, that address bonding, attachment, and closeness (Winnicott, 1965). Orzack et al. (2006), reported findings of an empirical study of 35 men with problematic Internet-enabled sexual behaviour (IESB). Results demonstrated that using a group format of CBT with the combination of Readiness to Change (RtC), and Motivational Interviewing (MI), interventions significantly increased members' quality of life and decreased the severity of their depressive symptoms. Members in the "anxiety" category responded best to the current treatment, those in the "mood" cluster responded relatively positively.

Men have more symptoms of CSB than women (Dodge et al, 2004; Carnes et al, 1996) and are more likely to have compulsive masturbation, engagement in paraphilias, paid sex, or engagement in anonymous sex (Bancroft et al, 2004). While no community studies address this issue, nearly all pertinent clinical reports show a male preponderance. For example, in a study of 36 persons with self identified CSB, only 22% were women.

b. Treatment approach of CBT

Since many compulsive cybersex patients present with comorbid anxiety and affective disorders, it was felt necessary to plan treatment and self-help programs, so that the clients can learn to manage compulsive sexual behaviour and develop a healthier sexual life. Cognitive behavioural therapy had its beginnings in the 1960's when Aaron Beck outlined the theoretical structure and basic method for CBT. Cognitive behaviour therapy (CBT) with its pragmatic, action-oriented treatment approach has become a widely used psychotherapy for major mental disorders as well as other disorders associated with our lifestyles.

From the early emphasis on depression, Beck's model (1964) was extended to other disorders and difficulties including anxiety (Beck & Emery, 1985), bipolar disorder (Basco & Rush, 2005), marital problems (Beck, 1988) and personality disorders (Beck, Freeman, & Associates, 2003; Layden et al,1993; Linehan, 1993), substance use problems (Beck et al, 1993), crisis management (Dattilio & Freeman, 1994), anger (Beck, 1999), and psychosis (Beck et al., 2008). Basic components of the CBT aim to assess the thought or belief (Cognition) process which affects the client's feelings (Emotion) and they act (Behaviour) accordingly. In the treatment process, their incorrect thoughts, automatic thoughts or irrational beliefs get corrected. The clients are trained to replace their negative feelings into correct, positive and appropriate feelings for carrying them out in the difficult situations. Different techniques are used for the same, such as cognitive restructuring, imagery techniques, role play, coping skills, rehearsal exercises, and homework assignments. CBT usually requires 3 months of treatment, or approximately 12 weekly sessions. Through the 1980s and 1990s to the present day the development of CBT for anxiety disorders has progressed by a close link between theory, experimental studies, and therapy. There is a great deal of evidence that CBT is an efficacious treatment for anxiety disorders.

c. CBT in Anxiety Disorders

In the Cognitive model of panic disorder, Clark (1986) proposed core features as catastrophic misinterpretation of body sensations, selective attention, avoidance and safety seeking behaviours (Ehlers, 1995; Salkovskis et al, 1999). A study investigated (Paunovic et al., 2001) the efficacy of cognitive behaviour therapy (CBT) and exposure therapy (E) in the treatment of post-traumatic stress disorder (PTSD) in refugees. The results showed that both treatments resulted in large improvements in all the measures, which were maintained at the follow-up. E and CBT led to a 48% and 53% reduction on PTSD symptoms, respectively, a 49% and 50% reduction in generalized anxiety, and a 54% and 57% reduction of depression. The results were maintained at the 6-month follow-up. The conclusion that can be drawn is that both E and CBT can be effective treatments for PTSD in refugees.

Predominantly behavioural treatment techniques as imaginable and in vivo exposure in imagery have been highly effective in PTSD (Foa et al., 2005.) Trauma focused CBT is based on a cognitive model of PTSD (Ehlers & Clark, 2000) which is developed by identifying the relevant appraisals, memory characteristics and triggers, and behavioural and cognitive strategies that maintain his/her PTSD. The aim is to modify excessively negative appraisals, correct the autobiographical memory disturbance, and remove the problematic behavioural and cognitive strategies. In generalized anxiety disorder Borkovec's avoidance theory is considered the best supported model which deals with the avoidance of aversive images, negative emotions, and autonomic arousal (Sibrava & Borkovec, 2006).

d. CBT in Depression

Beck's cognitive therapy and behavioural programs based on the work of Lewinsohn (Craighead et al., 1998) has substantial empirical evidence for the use of CBT in the treatment of major depressive disorder. CBT was applied using cognitive restructuring for negative thoughts regarding oneself and the world. Individual and group sessions were administered over 12–20 sessions in the therapeutic programme.

A study was conducted to examine the relationship between cognitive and behavioural changes associated with cognitive-behavioural therapy (CBT) and treatment response in an intensive partial hospital (PH) setting. Patients with mood disorders received evidence-based CBT interventions with emphases on psycho education and skills training. It was noted that decreased negative automatic thoughts and increased behavioural activation predicted reduction of depressive symptoms; however, only decreased negative automatic thoughts were predictive of the patients' overall level of psychological distress (Christopher et al., 2009).

Evidence-based psychological treatments for adults with unipolar depressive disorder and bipolar disorder were reviewed. Simple psychological treatments for bipolar disorder, such as medication adherence and early warning symptoms interventions, can improve some types of clinical outcome, but longer psychological interventions delivered by highly skilled therapists such as CBT and group psycho-education may have more comprehensive evidence of effectiveness (Richard et al., 2009).

The National Institute for Health and Clinical Excellence (NICE) guidelines for the National Health Service in the UK have recommended CBT as the treatment of choice for those anxiety disorders for which guidelines have been developed. These guidelines also provide helpful and thorough reviews of treatment outcome studies and meta-

analyses. Most of the efficacy data for CBT for anxiety disorders focuses on the specific CBT protocols that have been evaluated with particular anxiety disorder diagnoses and this is outlined below (NICE, 2005).

A study was conducted to examine the efficacy of cognitive-behavioural therapy (CBT) for obsessive-compulsive disorder (OCD) in patients with comorbid major depressive disorder (MDD). Patients were randomized to receive standard CBT for OCD or integrated CBT that included an exclusive focus on treating MDD in the first phase of treatment and OCD in the second phase of treatment. Both treatments resulted in statistically significant improvements in OCD and MDD symptoms (Rector et al., 2009). Salkovskis (2004) reported that the psychological treatment of obsessive-compulsive disorder (OCD) is highly effective only when it takes the form of behaviour therapy or cognitive-behavioural therapy (CBT). Such treatment is closely linked to learning and cognitive-behavioural theories of the maintenance of OCD. The first published description of CBT came in 1966 from Meyer, in case series described as the 'modification of expectations in cases with obsessional rituals.' This work led to the treatment now known as exposure and response prevention (Rachman & Hodgson, 1980), and ultimately to cognitive-behavioural treatments (Salkovskis, 1999).

A study by Cabedo et al. (2010) comparing the efficacy of individual and group cognitive behaviour therapy (CBT) for the treatment of Obsessive-Compulsive Disorder (OCD) by taking into consideration the change in OCD severity in both the short and long term. Results showed that 16 participants completed the individual CBT treatment, 68.75% were classified as recovered at post-treatment, compared to 40.9% of those receiving group CBT. At follow-up the rate of recovery decreased to 62.5% in individual CBT and to 31.8% in group CBT. In the conclusion, it was stated that Group CBT is effective in decreasing OCD severity. The post-treatment changes were maintained one year later.

e. Eating Disorders

Clinical experience and research evidence indicate that application of CBT in eating disorders has positive outcomes. It increases low self esteem and improves related interpersonal problems. Clinical perfectionism, core low self-esteem and interpersonal problems (Fairburn et al., 2008) which are commonest in patients with eating disorders also show significant changes. Shapiro et al. (2007) reported in the results of their comprehensive and systematic review that CBT was superior to nutritional counselling alone, supportive-expressive therapy, behavioural therapy components alone, ERP and self-monitoring only.

f. CBT, Gambling, and Alcoholism

Sylvain et al. (1997) examined a CBT approach in the treatment of pathological gambling. Intervention focused on cognitive correctional techniques, problem solving skills, social skills training and relapse prevention techniques. A significant improvement had been reported by the individuals who received the cognitive-behavioural intervention at 6 and 12 month follow up as compared to those in the wait-list control condition. Effectiveness of cognitive behavioural therapy has been found in the treatment of alcoholism and related anxiety symptoms (Beck et al., 1985; Barlow, 1988). The intra and interpersonal skills training, identification of high-risk situations, cognitive restructuring,

assertive training (Freedberg et al., 1978), and relaxation training (Jacobson et al., 1938; Conard et al., 2007) have also proved to be efficacious.

Aim and objectives of the study

The aim of the study was to evaluate the existence of compulsive sex behaviour, its psychological and emotional consequences and to evaluate the effectiveness of Cognitive Behaviour Therapy in its management. Compulsive Sex Behaviour (CSB) is said to be a chronic, relapsing disorder in which repeated sexual stimulation persists despite serious negative consequences. Sexual arousal induces pleasant states (euphoria in the initial phase) and relieves stress. Dependence, craving, and relapse frequently exist (Delmonico, 1999). Since, there is a dearth of Indian studies in the area of CSB, the present study was carried out to study the efficacy of the Group CBT in the management of CSB.

The main objectives of the study were

- To assess the presence of CSB in clients reporting sexual problems.
- To assess associated anxiety and depression.
- To assess dysfunctions in the area of physical health, academics, finances and relationships.
- To do the same, a sample was selected and subjected to 12 sessions of Cognitive Behaviour Therapy in a group format.

Methodology

Participants

The research sample consisted of 48 males, ranging in age from 20 to 35 years of age (mean age = 28 years). Participants were drawn from the 'Marital and Psychosexual Clinic' being run at the Institute of Human Behaviour and Allied Sciences (IHBAS), Delhi, for their sexual problems. Those who gave consent were screened out for compulsive sex behaviour, depression and anxiety, using appropriate tools. 12 clients fulfilled the inclusion criteria for the study and 10 clients completed the entire CBT programme (2 clients dropped out at different stages of the study).

Tools Used

- *Semi structured interview*: It comprised of 15 questions related to the symptoms of CSB, nature of problems experienced in the domains of Physical health, Finances, Relationships and Academics (due to CSB), time spent watching explicit porno material, the nature of different sexual behaviours, emotional status following indulgence in different sexual behaviours etc.
- *Visual analogue scale (VAS)*: The Visual Analogue Scale is a self-report instrument that consists of a 10cm straight line anchored by two extremes of impairment: 'no impairment' and 'severe impairment'. Impairment severity in scores from 0-10 (0- No impairment, and 10- being the most severe impairment) were measured in the domains of Physical health, Academics, Finances and Relationships.
- *Sexual Compulsivity Scale (SCS)*: SCS was developed by Kalichman and Rompa (1995). Mean scores are based on responses to the 10-item scale given on a 4-point scale that ranges from 1 (not at all like me) to 4 (very much like me).

- *Beck's depression inventory II (BDI- II)*: It is a 21-item self-report instrument for measuring the severity of depression in adults and adolescents aged 13 years and older. The BDI-II was developed as an indicator of the presence and degree of depressive symptoms consistent with the DSM-IV. The BDI-II requires between 5 and 10 minutes to be completed. The BDI-II is scored by summing the ratings for the 21 items. Each item is rated on a 4-point scale ranging from 0 to 3. The maximum total score is 63. The BDI-II reflects not only cognitive and affective symptoms but also somatic and vegetative symptoms of depression.
- *State-trait Anxiety Inventory (STAI)*: It comprises of separate self-report scales for measuring state and trait anxiety. The S-Anxiety scale (STAI Form Y-1) consists of twenty statements that evaluate how respondents feel "right now, at this moment." The T-Anxiety scale (STAI Form Y-2) consists of twenty statements that assess how people generally feel. The STAI-Y S-Anxiety and T-Anxiety scales are printed on opposite sides of a single-page test form.

The STAI T-Anxiety scale has been widely used in assessing clinical anxiety in medical, surgical, psychosomatic, and psychiatric patients. The STAI T-Anxiety scale has proven useful for identifying persons with high levels of neurotic anxiety. The STAI is a self-administered test and may be given either individually or to groups. The inventory has no time limits. College students generally require about six minutes to complete either the S-Anxiety or the T-Anxiety scale, and approximately ten minutes to complete both. In responding to the STAI-Anxiety scale, examinees blacken the number on the standard test form to the right of each item-statement that best describes the intensity of their feelings: (1) almost never; (2) sometimes; (3) often; (4) almost always. Each STAI item is given a weighted score of 1 to 4. A rating of 4 indicates the presence of a high level of anxiety for ten S-Anxiety items and eleven T-Anxiety items. Scores for both the S-Anxiety and the T-Anxiety scales can vary from a minimum of 20 to a maximum of 80.

Procedure

Once the patients were selected based on the inclusion criteria, they were subjected to pre- assessment consisting of the three scales - Sexual Compulsivity Scale (SCS), Beck's Depression Inventory II (BDI-II) and State -Trait Anxiety Inventory (STAI). The semi structure interview was carried out to collect all the related information. Negative assumptions and core attributions related to their dysfunction in the area of academics, occupation, finances, relationships, physical health and compulsive sex behaviour were drawn using Semi Structured interview. They were subjected to the Cognitive Behaviour Therapy program of 12 sessions which aimed at cognitive restructuring in order to decrease their perceived impairment in the areas of physical health, finances, relationships and academics. It included components of problem solving, coping skills training, stress management and other interpersonal skills. After the completion of the 12 sessions of CBT the patients were on the same scales (SCS, BDI-II and STAI). Visual Analogue Scale (VAS) was used to rate their perceived impairments in the areas of physical health, finances, relationships and academics both in the pre-assessment and post-assessment phases.

Analysis

The present investigation is a prospective experimental study with a pre- and post-test design without the use of a control group. The data were scored on the basis of VAS, SCS, STAI and BDI-II. Mean, standard deviation and t test were used to examine significant differences, if any, between the pre and post conditions. The correlation of Sexual Compulsive Behaviour with Depression, State Anxiety and different areas of impairments was also calculated.

Results

The impact of therapeutic intervention (Table 1) shows that there was a significant difference in the group of ten cases who had completed the Cognitive Behaviour Therapy Programme. Their sexual compulsive behaviours decreased significantly, as revealed on SCS, after cognitive behaviour therapy as t-value was noted to be 14.4 which is significant at .01 level.

Their emotional disturbances like state anxiety and depression were high in the pre-therapy phase. On STAI, the minimum score was 60 and the maximum score 71 (Mean 66.2, SD 4.47) in the pre assessment stage while Depression scores as suggested by the BDI-II were a minimum of 16 and a maximum of 59 (Mean 34.1, SD 16.2) before therapeutic intervention, which subsided significantly after therapeutic intervention. The t-value of STAI was 13.8, which is significant at .01 level. Similarly, on the BDI- II, the t-value was noted to be 5.28, which is also significant at the .01 level.

Table: 1

t- Test Pre and Post Therapy Condition

	Pre		Post		t
	Mean	SD	Mean	SD	
SCS	31.8	5.12	12.5	1.9	14.4*
STAT	66.2	4.47	43.6	7.01	13.8*
BDI	34.1	16.2	16.7	7.33	5.28*

*P>01

The perceived impairment (Table 2) in the areas of physical health, finances, relationships and academics as assessed with the help of the Visual Analogue Scale also showed a significant difference in the pre and post therapy phase from severe levels to mild levels. Before therapeutic intervention their perceived impairment in Academics was very high. The minimum score was 6 and the maximum score was 10 (Mean=7.9, SD= 1.6) followed by perceived impairment in the area of Physical Health where the minimum

score was 5 and the maximum score was 9 (Mean=7.6, SD= 1.35). The perceived impairment in the Relationships domain was noted to be between 4 and 8 on the VAS, with a mean of 7.9 and SD of 1.6. In the domain of Finances, the minimum score was noted to be 4, the maximum being 6 (Mean=7.9, SD= 1.6).

Thus, the post assessment revealed that their perceived impairment in all the domains of physical health, relationships, finances and academics decreased significantly. In academics, t- value was noted to be 10.6, which was significant at .01. In the physical health area the t- value was noted to 13 which is significant at .01 level. Coming to the domain of relationships, the t- value was 9, which was also significant at 01 level. Finally, in the domain of finances, the t- value was noted to be 7.66 which is also significant at the .01 level.

Besides the t-test, an attempt was made to find the correlations if any, between the different variables (Table-3). Results suggest that the Sexual Compulsive Behaviour of the patients was highly correlated with perceived impairment in academics ($r = .80$) followed by physical health ($r = .70$), Depression ($r = .59$) and State Anxiety ($r = .47$). There was also a positive correlation between Sexual Compulsive Behaviour and perceived impairment in relationships ($r = .39$) and finances ($r = .39$).

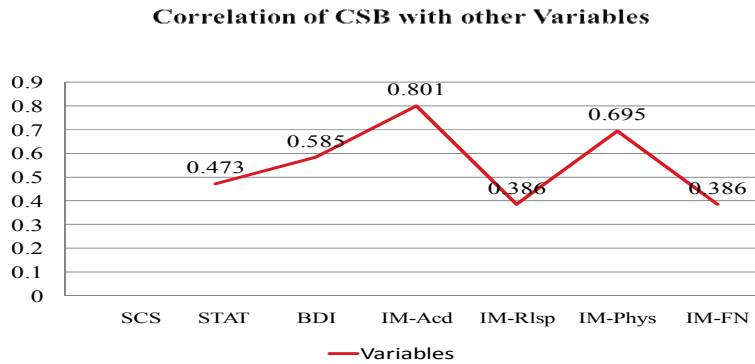
Table: 2

Perceived Impairment in different domains

Domains	Academics		Relationships		Finances		Physical H	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
No. of subjects								
1	9	5	6	3	5	2	9	4
2	7	4	5	2	5	2	6	3
3	10	5	4	2	4	2	8	4
4	8	5	8	3	6	2	7	3
5	10	4	4	2	8	3	9	4
6	6	3	7	4	4	3	7	3
7	9	4	7	3	6	3	5	3
8	6	3	6	4	4	2	8	4
9	8	5	8	4	6	2	9	4
10	6	3	4	2	4	2	8	3
Mean	7.9	4.1	5.9	2.9	5.2	2.3	7.6	3.5
SD	1.6	0.876	1.6	0.876	1.32	0.483	1.35	0.527
T		10.6		9		7.66		13
r		1.174		0.787		0.386		1.605

The results of our study confirm the hypothesis that the symptoms of CSB will reduce with the help of CBT. The associated symptoms of Anxiety and Depression have also reduced with the intervention offered during the study.

Table: 3



- SCS: Sexual Compulsivity Scale
- STAT: State Trait Anxiety Scale
- BDI: Becks Depression Inventory
- IM-Acd: Impairment in Academics
- IM-Rlsp: Impairment in Relationships
- IM-Phys: Impairment Physical health
- IM-FN: Impairment Finances

Discussion and Conclusion

Just like most other mental health problems, the treatment of CSB has been approached from a variety of angles. The Cognitive-behavioural approaches have been found to be very influential in the field of addiction treatment, and the efficacy of these approaches has been tried in cases of CSB, in which these were found to be effective with some clients. However there is a dearth of studies in the Indian scenario. Our study is a pioneering attempt in the same direction.

The review of the related literature suggests that in practice, when treating CSB, the initial focus tends to be on behavioural strategies once the clients have been adequately psycho educated about their condition. Basic Sex Education and clarifying the common queries and demystifying the deep rooted myths and misconceptions formed the body of the initial 2-3 sessions in our study. Major components of behaviour therapy included- enhancement of their motivation for regular follow up in the therapy programme and carrying out the assignments, online time management, engagement in offline activities, appropriate behaviours for sexual outlet, improvement of their social relationships and ability to abstain from problematic sexual behaviours especially keeping in mind their appropriateness in the socio-cultural context. Our findings are in synchrony with the earlier findings that, the use of appropriate behavioural techniques significantly reduces the chances of clients indulging in CSB. There is a significant decrease in the scores on the SCS following CBT.

Keeping the same in view, the behavioural techniques were used to change their compulsive sex behaviours in which they reported a helplessness to control. A few verbatims, as they emerged during the sessions, are as follows *“Even though I want to control,*

I cannot stop these sexual urges.” *“I cannot concentrate on my studies due to the repeated desire of indulging in the masturbatory act.”* These statements not only bring out the inner turmoil but also the associated feelings of guilt and helplessness. They also show their vulnerability of indulging in a possible criminal act to relieve themselves from intense anxiety.

Many of our clients, in the initial assessment, which were carried out with the help of the semi-structured interview, also reported the presence of some faulty beliefs. Here are a few examples as they emerged during the sessions –*“I am worthless.” “I am such a bad person.” “I am a failure in my life.”* These beliefs were in line with the ones reported by Carnes, 1983 and Goodman; 1998. They examined a particular aspect of the phenomenon of sexual addiction, in which the sexual addicts tend to have a set of core beliefs which are typical to the syndrome.

According to Carnes (1997), these following four beliefs are commonly held by sexual addicts:

1. I am basically a bad, unworthy person.
2. No one could love me as I am.
3. My needs are never going to be met if I have to depend upon others.
4. Sex is my most important need.

It certainly seems plausible, based on both common sense and clinical experience, that the core beliefs of sexual addicts would display these kinds of themes, i.e. themes relating to how one might operate in intimate (especially sexual) relationships. The compulsive behaviour is at least partially explainable as a substitute for genuine connection.

And as we know, the concept of core beliefs is central to Cognitive Therapy, especially in the tradition following Aaron Beck's ideas (Beck, 1976; Beck et al., 1979). This approach is based on principles which include Cognitive Conceptualisation, Collaborative Therapeutic relationship, focus on problems, on the present, and on re-Learning, and time-limited structuring (Beck, 1995). The various techniques described in Young (1990), and McGinn and Young (1996) can of course be learnt, whether cognitive (e.g. reviewing evidence for and against, experiential (e.g. emotional catharsis), interpersonal (e.g. providing a therapeutic relationship which contradicts the client's schemas) and/or behavioural (e.g. making environmental changes such as avoidance of trigger situations; substitution of healthy alternatives), with a view to helping the client gain some kind of stability (Carnes, 1991; Goodman, 1998; Earle & Earle, 1995).

The results reveal that there was a significant difference in their compulsive sex behaviour after attending cognitive behaviour therapy sessions. Cognitive restructuring and cognitive distraction was applied to correct their cognitive errors, dysfunctional beliefs, negative automatic sexual thoughts and obsessive sexual thoughts. Environmental manipulations were suggested wherever possible or applicable.

The other two variables that were of interest were the associated anxiety and depression. We noticed that their emotional disturbances such as state anxiety or anxiety due to a situation and depression increased as they indulged in compulsive sex behaviours. Compulsive sex behaviours were also found to be the causative factors for their decreased academic performance, decreased social relationships, excessive money spending and deteriorating physical health. In order to decrease their perceived impairment, application of Cognitive Behaviour Therapy with the components of problem solving techniques, coping skills training, stress management and interpersonal skills training resulted in a significant positive difference.

In this study it was found that perceived impairment in academic performance of the patients was highly correlated with their compulsive sex behaviours followed by perceived impairment in the domain of physical health. In the area of emotional disturbances, the patients were more depressed and their state anxiety was high as they indulged in compulsive sex behaviours.

There was a positive correlation between compulsive sex behaviours and their perceived impairment in relationships and finances as well. The present findings are in line with the study of Orzack et al, (2006) that carried out an intervention based empirical study on Problematic Internet-enabled sexual behaviour (IESB). Their results demonstrated that this group treatment intervention significantly increased members' quality of life and decreased the severity of their depressive symptoms.

Evidence-based psychological treatments for adults with unipolar depressive disorder and bipolar disorder were reviewed. Simple psychological treatments for bipolar disorder, such as medication adherence and early warning symptoms interventions, can improve some types of clinical outcome, but longer psychological interventions delivered by highly skilled therapists such as CBT and group psycho-education may have more comprehensive evidence of effectiveness (Richard et al., 2009). The same was replicated in our study as well.

To conclude, we may say that CSB is a condition which may have a long term impact on the vulnerable mind of the younger population. We need to identify it at the earliest and manage it accordingly to ensure the well-being of the young minds. Besides, as mentioned earlier, the line between severe psychopathology and criminality is very blurred. The highly vulnerable patient at times due to the severity of the problem can engage in some criminal act without realizing the implications of his act. Thus, the management of CSB and its related problems will go a long way in preventing the occurrence of sexual crimes.

Limitations

The main limitation of this study is its small sample size. The generalizability of the findings is yet to be assessed.

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