

EFFECT OF SELECTIVE SEOTONIN REUTAKE INHIBITOR AND COGNITIVE BEHAVIOUR THERAPY COMBINED WITH SELECTIVE SEOTONIN REUTAKE INHIBITOR IN IMPROVING THE EMOTIONAL MATURITY OF CONVERSION DISORDER PATIENTS

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Abstract

The aim of this research was to study comparative effectiveness of Selective Serotonin Reuptake Inhibitor (SSRI) alone and Cognitive Behaviour Therapy (CBT) combined with Selective Serotonin Reuptake Inhibitor (SSRI) in improving the emotional maturity of conversion disorder patients. Quasi- experimental research design was followed for the research. A sample of 30 female patients with conversion disorder was selected. Tool used for this study is Emotional Maturity Scale (EMS) by R.R.Tripathi (1982) was administered on patients suffering from conversion disorder to see the pre-post intervention effect of SSRI alone and CBT+SSRI on emotional maturity. Study revealed that after the 12 weeks of interventions the outcome revealed that the effect of CBT+SSRI intervention was found more successful in improving the emotional maturity of conversion disorder patients.

Keywords: Conversion Disorder, Emotional Maturity, Selective Serotonin Reuptake Inhibitors, Cognitive Behaviour Therapy

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I. Introduction

Conversion disorder is a disorder where patients present their problems through neurological symptoms such as numbness, paralysis, or seizures, but then again where no neurological explanations found^[1]. It is seen that these complications arise in response to difficulties comes in patient's life. Both, ICD-10 as well as DSM-V considered that conversion is a psychiatric disorder^{[2],[3]}. According to ICD-10 the term "conversion" is widely useful to some of these disorders, and it suggests that the unpleasant distress, produced by the problems and conflicts which the patient cannot solve, gets changed into the symptoms. According to ICD-10, dissociative (or conversion) disorders is a partial or complete loss of the normal integration between memories of the past, awareness of identity and immediate sensations, and control of bodily movements. Normally people have a considerable degree of conscious control over the memories and sensations which can be selected for immediate attention, and the movements that are to be carried out.

However, these complaints previously classified as "conversion hysteria", now, the term "hysteria" is seems to be avoided. Earlier the hysteric symptom was linked with an illness of the uterus or given explanations such as witchcraft or demonic possession^[4]. The concept of 'wandering womb' was proposed by Hippocrates, hysteria, though it ridden with controversies, and occupied an important place.

Prevalence of conversion disorder may present at any age but is rare in children younger than 10 years or in the elderly^[5]. Some other studies suggest a peak onset in the mid-to-late 30s^[6]. Conversion disorder is most frequently found in women with history of child abuse^[7]. On the other hand, according to Owens the female to male ratio for the disorder ranges between 2:1 and 10:1. The prevalence of conversion disorder is highest in rural areas, among the illiterate and the lower socioeconomic classes.

The aetiology of conversion disorder remains controversial. The accumulated research literature revealed that some factors like sex, psychological distress, family conflicts, early trauma, socioeconomic status, home environmental disadvantages and social environments, may play a very important role in developing conversion symptoms^[8]. Strong association was found between stressful life events and conversion disorder which has been established since the 19th century and the impacts of stressful life events on patients changed with the time^[9]. Few studies have attempted to compare the aetiology of this disorder. Patients with conversion disorder experienced high 'stresses'. In patients with conversion disorder traumatic experiences mainly sexual abuse might be the stressors. Studies conducted on this disorder have mainly concentrated on adults and the problems they are facing. However, somatoform and dissociative disorders are being increasingly seen in children. It has also been demonstrated that the onset of dissociative disorders in adulthood is linked to parental dysfunction and family psychopathology in childhood.

Although treating conversion disorder by psychoanalytic and behavioural methods were emphasized in recent years with growing interest in using Cognitive Behavioural Therapy (CBT) in clinics worldwide, the efficacy of the method is found considerable. CBT has been declared as a successful treatment for the conditions grouped under the somatoform disorders, currently known as Somatic Symptom and Related Disorders. Randomized controlled clinical trials found that conversion disorder can be successfully treated with CBT which included the modification of catastrophic cognitions and inappropriate behaviours. A study conducted showed CBT to be effective in treating conversion disorder.

Earlier there was the lack of information for controlled trials on the pharmacological treatment of conversion disorder; but now, researches have been conducted to use medications appropriate for the comorbid psychiatric and somatic symptoms and to withdraw antiepileptic drugs unless they are benefiting the comorbid conditions. Anecdotal studies revealed the improvements with selective serotonin reuptake inhibitors (SSRIs), beta-blockers, analgesics, and benzodiazepines [10]. An open trial of antidepressants in patients with psychogenic movement disorder and recent or current depression also showed that SSRIs to be effective in reducing conversion symptoms [11]. A randomized controlled study evaluated the effectiveness of sertraline on patients with non-epileptic seizures and co-morbid depression and anxiety [12].

The demographic characteristics of conversion disorder have not been investigated extensively. But, some studies gave the evidence that conversion disorder majorly found in women and individuals from lower socioeconomic classes [5],[13],[14]. Co-morbid psychiatric distress in patients with pseudo-neurological symptoms are high and it has been estimated that 30% to 90% of patients seeking treatment for pseudo-neurological symptoms also have at least one other psychiatric disorder, typically somatoform disorders, affective disorders, anxiety disorders, or personality disorders [15],[16]. A co-morbid personality disorders has been found to indicate poor prognosis of conversion disorder [17].

Emotional Maturity

The concept of maturity has a very important role in psychology and psychiatry. We call a person psychologically mature after he/she has reached a certain point of intelligence and emotional outlook. The development of a person is depends on its biological and psychological maturation which progress more or less parallel with each other. Usually, biological maturation proceeds ahead of emotional maturation. Emotional maturity is a process in which the personality is continuously striving for greater sense of emotional health, both intra-physically and interpersonally. Emotional maturity can be understood in terms of ability of self-control which is a result of thinking and learning or it is the ability to bear tension'. Researchers majorly stressed upon 'self-control' and not on 'self-fulfilment' [18].

Selective Serotonin Reuptake Inhibitors (SSRIs) are the drugs that are basically used as antidepressants to treat major depressive disorder and anxiety disorders. Some SSRIs are effective in anxiety disorder, although their effects on symptoms are not always good and sometimes it gets rejected in favour of psychological therapies. Paroxetine was the first drug which got approved for social anxiety disorder and found effective. Later sertraline and fluvoxamine were also approved to treat anxiety disorders. Few other medicines like escitalopram and citalopram are used off label with acceptable efficacy, while fluoxetine is not considered to be effective for this disorder [19].

Cognitive Behaviour Therapy

Cognitive behavioural treatments integrated by two different techniques: the behavioural and the cognitive. This therapy focuses on two processes: self-relief (primary gain) and social attention (secondary gain) which benefits the patients to cope with his disorder. There is a specific intervention for each one. For primary gain it is an internal cognitive process, the most suitable therapy would be cognitive restructuring, as given by Beck. For the secondary gain, a behavioural approach found more suitable, due to the social nature of this process [20].

Need of the study

Many researchers are concerned with the significant effect of treatments on conversion disorder patients, but very few research studies have been carried out to explore the important role of emotional maturity in conversion disorder. Hence, the present study was conducted to find out the role of emotional maturity and which treatment gives the positive effect among conversion disorder patients or improve their conditions.

Objectives

- 1) To study the effect of Selective Serotonin Reuptake Inhibitor in improving the emotional maturity of conversion disorder patients.
- 2) To study the effect of Cognitive Behaviour Therapy combined with Selective Serotonin Reuptake Inhibitor in improving the emotional maturity of conversion disorder patients.
- 3) To compare the effectiveness of Selective Serotonin Reuptake Inhibitor and Cognitive Behaviour Therapy combined with Selective Serotonin Reuptake Inhibitor in improving the emotional maturity of conversion disorder patients.

Hypothesis

- 1) Emotional Maturity of conversion disorder patients would improve after getting Selective Serotonin Reuptake Inhibitor treatment.
- 2) Emotional Maturity of conversion disorder patients would improve after getting Cognitive Behaviour Therapy combined with Selective Serotonin Reuptake Inhibitor treatment.
- 3) Combination of cognitive behaviour therapy with Selective Serotonin Reuptake Inhibitor would be better in improving the emotional maturity of conversion disorder patients.

II. Methodology

Design: Quasi- experimental research design.

Sampling: A sample of 30 females with age range 20-40 years DIAGNOSED WITH conversion disorder as per ICD-10 selected from Lady Harding Medical College Hospital, Delhi. Patients suffering with any co-morbid disorder and with any serious physical illness were excluded from the study also patient that cannot read or write Hindi and English languages.

Measures

The emotional maturity scale by R.R. Tripathi (1982)

The emotional maturity scale by R.R. Tripathi (1982) is a 65 items scale. This scale measures emotional maturity through 8 dimensions, viz., curiosity, pleasure, sorrow, disgust, aggression, shame, fear & contempt, based on level of control of expressions of emotions. The age range of this scale is among adults & adolescents [21].

Procedure

Patients were diagnosed by the psychiatrist after that they were given information about the treatment combinations their participation in the study was completely voluntary and they were free to select any treatment module. After that the consent form was given to the participants and the nature of the study was explained before administration of the questionnaire. As per the ICD-10 diagnosis criteria 63 patients diagnosed with conversion disorder were referred from outpatient department (OPD) of Department of Psychiatry, Lady Harding Medical College Hospital, New Delhi. Out of these 63 patients, 10 did not meet the inclusion criteria of this study and 12 denied the participation in study. Overall, 41 patients gave their consent to participate in study. Out of 41 patients, 11 patients could not continue owing to several factors in between the pre-post phase culminated into a final sample of 30 who complete the treatment procedure. 15 patients were given treatment through SSRI and other 15 with CBT combined with SSRI. Patients were assessed at pre-post treatment level on Emotional Maturity Scale.

A 12 week intervention plan was developed for the treatment of CD for both groups. Psychiatrist along with the researcher executed the treatment plan in this research for SSRI group. As per the requirement each patient dose ranging between 20 to 60 mg per day was prescribed by the psychiatrist. After a gap of 12 weeks patients were re-assessed on Emotional Maturity Scale for both the groups. For another group Psychiatrist, Psychologist along with researcher the 12 weeks sessions of CBT was planned for each patient along with SSRI.

The data collected from the assessments was analyzed with the help of statistical techniques. After the data collection, result was calculated by using SPSS version 20 to fulfil the research objective. The *t*. test was performed to see the effectiveness of SSRI alone and CBT combined with SSRI in improvement of emotional maturity in conversion disorder patients.

III. Result

To fulfil the research objective, data was analysed to see the effect of Selective Serotonin Reuptake Inhibitor (SSRI) alone and Cognitive Behaviour Therapy (CBT) combined with Selective Serotonin Reuptake Inhibitor (SSRI) in improving emotional maturity. Following table is depicting the effect of SSRI on emotional maturity and Social support of the patients:

Table 1: Pre-Post treatment mean difference of Emotional Maturity (SSRI Group)

Variable (n=15)	Pre-Treatment Mean (S.D.)	Post-Treatment Mean (S.D.)	t. (d.f.=14)
Emotional	174	202.4	4.80**

Maturity	(21.31)	(25.84)	
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Note: **p<.001

Table shows that the mean of the pre intervention score (M=174) of emotional maturity improved at post intervention score (M=202.4). The obtained *t.* value also favours a significant difference in the pre and post treatment mean score ($t = -4.80$; $P<.001$). Result points toward the success of SSRI in improving Emotional maturity

Table 2: Pre-Post treatment mean difference of Emotional Maturity (CBT+SSRI Group)

Variable (n=15)	Pre-Treatment Mean (S.D.)	Post-Treatment Mean (S.D.)	t. (d.f.=14)
Emotional Maturity	181.1 (25.37)	223.8 (15.87)	9.76**

Note: **p<.001

Table shows that the pre intervention mean score (M=181.1) of emotional maturity increased when re-assessed after the 12 weeks treatment, the post intervention score (M=223.8). The obtained *t.* value also favours a significant difference in the pre and post treatment mean score ($t = 9.76$; $P<.001$). Result points toward the success of CBT+SSRI in improving Emotional maturity.

Comparison of both intervention groups in improving the emotional maturity of conversion disorder patients is shown below:

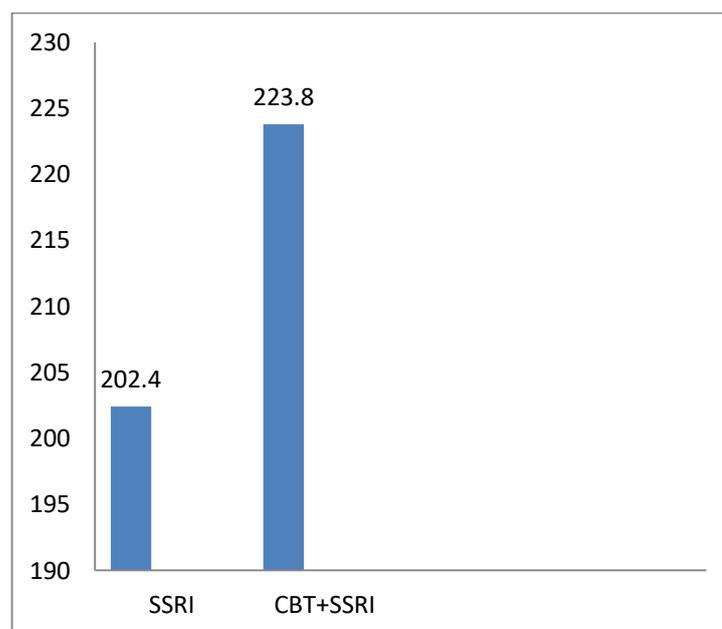


Figure 1: Post treatment mean of both groups (N=30)

IV. Discussion

Present research was conducted to study the comparative effectiveness of Selective Serotonin Reuptake Inhibitor (SSRI) and Cognitive Behaviour Therapy (CBT) combined with Selective Serotonin Reuptake Inhibitor (SSRI) in improving the emotional maturity of conversion disorder patients, after the 12 weeks of procedure the results came out.

The first objective of this research was to study the effect of SSRI on emotional maturity in conversion disorder patients. Result (table-1) revealed that SSRI was found effective on improving emotional maturity with a significant value (4.80**). SSRI helps to reduce the symptoms of anxiety and neurological problems for short duration or till the time patient is consuming the medicine. Hence, first hypothesis got accepted that there would be a positive effect of pharmacotherapy in improving the emotional maturity of conversion disorder patients.

On the other hand, the second objective of this research was to study the effect of CBT+SSRI on emotional maturity of conversion disorder patients. In result (table- 2) it was found that CBT+SSRI were also the effective treatment in treating the emotional maturity of conversion disorder patients (9.36**). This combine (CBT+SSRI) treatment not only comforts and reduces the anxiety of patients it also helped them to improve the cognitive thinking patterns and do things with maturity and help them to cope with difficult and long term situations. CBT+SSRI helped patients to improve neurological as well as cognitive problems and increase the level of understanding the emotional maturity which is required for every human being for the survival in the society. The majority of patients with CD reported antecedent stressors, and approximately half were diagnosed with a psychiatric disorder during childhood or adolescence ^{[22],[23]}. In northern region of India socio cultural values considers females inferior to the male. Female's upbringing patterns trained them for restricted expression of their feelings and allowed lesser to express their emotions openly. In this case, if they are facing

issues in their inter-personal relationships and do not have good coping strategies they are more prone to develop conversion symptoms ^[24]. Hence, second hypothesis was accepted.

For conversion disorder there is no fixed or permanent treatment was found. Many researches was done still the treatment of conversion disorder is not clear. To sum up, because of the-high prevalence rate of psychological disorders in the Arab world and the lack of sufficient specialized mental health professionals ^[25], it is imperative that some form of psychotherapy is included in primary care practice to treat patients with mental health conditions. The most widely supported evidence-based approach in the literature is CBT but other approaches have also proven to be superior to SSRI or usual care in treating psychological disorders, namely anxiety and depression ^[26]. Elderly patients with somatic symptom disorder (SSD) put a great burden on the health care delivery system. Cognitive Behavioural Therapy (CBT) is effective in adults with SSD. However, no studies have been conducted yet into CBT for SSD in later life ^[27].

A combination of treatment with antidepressant medication and appropriate psychotherapy and multidisciplinary rehabilitation which focused on improving the patient's level of functioning and reducing their subjective distress may be the most effective treatment till now ^[28]. An assessment of the empirical research on CBT for somatoform disorders suggests that in some respects it mirrors the literature on evaluating the efficacy of psychotherapy with various mental disorders. CBT has been shown to be superior to various control conditions, especially for standard medical treatment. Effect sizes in the research are respectable, relative to other medical or quasi-medical interventions ^[29]. Somatic symptoms are often common causes due to which people go for medical consultations. The treatment of somatic symptoms disorders has always been very complicated by lack of boundary, conceptual clarity, and overemphasis on psychosocial causation and effectiveness of psychological treatments. In clinical practices usually all classes of psychotropic are used to treat somatic symptoms disorder. Five groups of drugs such as tricyclic antidepressants (TCA), serotonin reuptake inhibitors (SSRI), serotonin and noradrenalin reuptake inhibitors (SNRI), atypical antipsychotics and herbal medication are systematically studied. The evidence found from the researches indicates that all five groups are effective in a wide range of disorders. All classes of antidepressants seem to be effective against somatoform and related disorders. SSRIs are more successful against hypochondriasis and body dysmorphic disorder (BDD), and SNRIs appear to be more effective than other antidepressants when pain is the predominant symptom. But research could not answer few questions like duration of treatment, sustainability of improvement in the long term and differential response to different class drugs. It is very important for researchers to focus on treatments based on clinical features/psychopathology and collaborative research with other specialists in understanding the relation of somatic symptom disorders and functional somatic syndromes (FSS), and comparing psychotropic and non-psychotropic and combinations treatments. In the present study it was found that CBT when combined with SSRI proved to be more effective for conversion disorder patients than SSRI alone (Graph-1). Hence, third hypothesis was accepted.

V. Conclusion

The present study was conducted to study the comparative effectiveness of Selective Serotonin Reuptake Inhibitor only and cognitive behaviour therapy combined with Selective Serotonin Reuptake Inhibitor

in improving the emotional maturity of conversion disorder patients. After the 12 weeks of interventions the outcome revealed that the effect of CBT+SSRI intervention was found more successful in improving the emotional maturity of conversion disorder patients.

VI. Limitations and Suggestions

Study includes sample that are educated at least up to primary level, this study was conducted on a small sample size, study does not include male patients and the absence of control group is also a limitation of this study.

A study can be generalised on uneducated sample, a study could be done on a large sample and study can be done on male population are some suggestions for future researches.

Conflict of interest: NIL

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Ethical clearance: Taken from SGT University ethical committee.

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