

EFFECT OF INTERPERSONAL AND SOCIAL RHYTHM THERAPY ON GLOBAL FUNCTIONING AND QUALITY OF LIFE AMONG PATIENTS WITH BIPOLAR AFFECTIVE DISORDER

Madhu Kumari Gupta^{1*}, Prakash Kumar Mahanta², K. S. Sengar³

¹- Research Scholar, Department of Clinical Psychology, Ranchi Institute of Neuro-Psychiatry and Allied Science (RINPAS), Kanke, Ranchi, Jharkhand, 834006.

²- Research Scholar, Department of Clinical Psychology, Ranchi Institute of Neuro-Psychiatry and Allied Science (RINPAS), Kanke, Ranchi, Jharkhand, 834006.

³- Additional Professor, Department of Clinical Psychology, Ranchi Institute of Neuro-Psychiatry and Allied Science (RINPAS), Kanke, Ranchi, Jharkhand, 834006.

ABSTRACT

The present study was planned to see the effect of Interpersonal and Social Rhythm Therapy (IPSRT) among patients with Bipolar Affective Disorder (BPAD) -Manic episode for enhancing the quality of life and global functioning of the individual. It was a hospital-based study with pre-post research design with experimental and control groups. Total 12 in-patients with BPAD (Manic episode), selected from RINPAS's wards and randomly divided into two groups (06-06 on experimental and control groups). Tools were using with P.G.I. Quality of Life Scale (P.G.I. QOL), and Global Assessment of Functioning (GAF). Interpersonal and Social Rhythm Therapy (IPSRT) based intervention module was used with experimental group individuals. For statistical analysis, Non-parametric Mann-Whitney U Test was used. Results of the study suggested that IPSRT is significantly improving the quality of life and global functioning among experimental group individuals who were given psychotherapeutic intervention when compared to the Control group. It was also helpful to understand their manic symptoms and manage to reduce the symptoms of the patients of BPAD.

Key Words: *Bipolar Affective Disorder (BPAD), Mania, Quality of life (QOL), Global Functioning, Interpersonal and Social Rhythm Therapy (IPSRT).*

I. INTRODUCTION

Bipolar disorder is a long-term illness that affects all aspects of a person's life, including but not limited to, daily living skills, physical health, vocational goals, interpersonal relationships, and other social and spiritual issues. Bipolar disorder may include periodic relapses and may require long-term support. However, recovery, defined as maximizing functioning and well-being and minimizing disability, and is the desirable outcome goal. Bipolar disorder is a chronic, recurrent mental health problem, characterized by mood fluctuation as hypo-manic, manic and depressive mood episodes that are with deficits in quality of life and psychosocial functioning of the individuals (Coryell et al., 1993; Salvatore et al., 2007; Sanchez-Moreno et al., 2009; Tohen et al., 1990; Young and Grunze 2013).

In recent few decades, BPAD recognize by Psychiatrists as 'bipolar disorder is not a variant of unipolar depression or other mood disorders (Phillips & Frank, 2006), but a complex condition that often requires aggressive multimodal treatment (Leahy, 2007)'. This complexity often makes it difficult to diagnose and treat, and therefore the chronic symptomology and impairment experienced by individuals with the disorder significantly impacts their physical health and whole quality of life (Culver, Arnow, & Ketter, 2007). Psychologist's view is that well-being means having good emotional and mental health as pillars of quality of life in a particular individual (Lopez & Torres, 2001). QOL refers to the degree of excellence in individual's life at any given period of time- that contributes and benefits for the society and towards as fruitful, satisfactory and with happiness of the person. Being somewhat polymorphous it tends to cover a verity of areas such as physical, mental, psychological, social and spiritual wellbeing, personal functioning and general limitations. Typically, pharmacological treatments are inherent to managing bipolar disorder (Miklowitz & Ofto, 2006). However, pharmacological treatment alone is often inadequate to re-established

and maintain physical health and quality of life among bipolar patients. MacQueen, et al., (2000) found that 60% of BPAD patients never regain full occupational and social functioning.

IPSRT is a modular, manual-based intervention, specifically designed for BPAD patients by Frank et al. (2005). They introduced a model, there are likely to be three paths to episodes of BPAD patients to maintained on non-adherence to medication as stress-full life events, especially interpersonal issues; changes in social roles; and disruption into sleep/wake-cycles can precipitate manic episodes. According to Miklowitz et al, (2007) IPSRT mainly emphasized the necessity for normal sleep/wake-cycles to keep moods stable, keep detailed records of daily and night-activities, levels of social stimulation, sleep, and mood. The phases of interpersonal and social rhythm therapy include (a) identifying a key interpersonal problem area; (b) setting targets for regulating meals, exercise, and sleep; (c) making plans for maintaining rhythm stable when disruptive social events occur; and (d) developing strategies to improve the priority interpersonal problem area (Frank, 2007).

II. RESEARCH METHODOLOGY

2.1. Objective of the Study

To assess the efficacy of Interpersonal and Social Rhythm Therapy on Quality of Life and Global Functioning among the individuals with Bipolar Affective Disorder Current Episode Mania.

2.2. Hypothesis of study

- There is no significant effect of Interpersonal and Social Rhythm Therapy on Quality of Life in individuals with Bipolar Affective Disorder, Current Episode Mania.
- There is no significant effect of Interpersonal Social Rhythm Therapy on Global Functioning of the individuals with Bipolar Affective Disorder, Current Episode Mania

2.3. Research Design and Sample

The purpose of the study was to explore the effect of IPSRT among individuals with BPAD manic episode patients. This is a hospital based study using pre-post design with experimental and control group. The purposive sampling method were used for selecting samples, as per inclusion criteria consisting 12 male BPAD manic episode cooperative individuals were selected according to ICD-10-DCR criteria of BPAD manic episode, with minimum education up to 5th class, cooperative individuals, with age range 20-50 years old. There excluded individuals who having any history of serious medical condition/physical injury/neurological problems (like head injury, seizures, etc), any co-morbid condition of psychiatric disorder, alcohol and other substance-dependent disorder, mental-retardation, family history of mental illness, Electroconvulsive therapy (ECT) in last 6th months. Among the total numbers of individuals, 06-06 were randomly assigned into two groups, for Interpersonal and Social Rhythm Therapy with treatment as usual (experimental group) and 06 of them were assigned for treatment as usual (control group) in-patients selected from different wards of Ranchi institute of neuro psychiatry and allied sciences (RINPAS).

2.4 Research Tools

P.G.I. Quality of Life Scale (P. G. I. QOL)

P.G.I. Quality of life scale (revised) has a number of earlier versions which were tried on different populations data were analyzed and item was modified and simplified. P.G.I. Quality of Life Scale finalized form by Moudgil et.al, (1986) was used for assessing the quality of life of the BPAD patients. Inter-rater reliability was .89 and validity is independent of socioeconomic status with 26 questions in five-point rating scale.

Global Assessment of Functioning (GAF)

The GAF is a numeric scale used in Axis V of DSM IV and DSM-IV-TR, and its inter-rater reliability was 0.74 (Hilsenroth et al., 2000). It is rating from 0-100 with respect the psychological, social, and occupational functioning. The instructions specify about GAF, to do not include impairment in functioning due to physical or environmental boundaries.” In most instances, ratings on the GAF should be for the current status of the patients (i.e., the level of functioning at the time of the evaluation) because the ratings of current functioning were generally reflecting the need for treatment or care. Global Assessment of Functioning Scale (GAF) covers the range from positive mental health to severe psychopathology and is an overall measure of how a person is functioning.

2.4. Interpersonal and Social Rhythm Therapy (IPSRT) as an Intervention Module

For the present study, this module is planned to engagement in meaningful activities of the selected individuals who had a significant effect on their biological rhythm, interpersonal relationship, social rhythm, and mood of global functioning and the quality of personal and social life activities of daily living and cope with the stressful life events. In the IPSRT intervention module, specifically focused to improve of: disruptive biological rhythm; social rhythm; interpersonal relationship; and fluctuating mood of the individuals. Total duration of intervention period was for two months, the individuals and therapist meet twice in weekly for 45 minutes to 01 hour per sessions. Whole intervention program based with component of Psycho-education, Social Rhythm Therapy and Interpersonal Psychotherapy. *The intervention processes proceed into Four phases as Initial Phase, Intermediate Phase, Maintenance Phase, and Termination Phase.* Social Rhythm Metric- revised version (SRM-17, Frank et al. 1994) used for recording all activities of all participant's daily activities (e.g., time out of bed, first contact with another person, meal times, bedtime), whether each occurred alone or with others present, and how stimulating (i.e., quiet vs. interactive) these others were.

III. PROCEDURE

Present study was done as a part of academic curriculum with ethical permission. In this study initially 12 male individuals who suffering from BPAD (Manic episode), were selected through purposive sampling as per the consent, inclusion and exclusion criterions. Out of 12 individuals 06 was randomly assigned to experimental group and 06 control group. Than pre assessment was done on both group using tools P.G.I. Quality of Life and Global Assessment of Functioning (GAF). Immediate after the intervention program IPSRT module was started applying on experimental group. During that intervention program individuals were engaged to works in wards, for gardening, at male occupational training section, kitchen and bakery at RINPAS. The intervention (IPSRT) period was for two months, twice in a week, and during intervention period all individuals were under supervision by researchers. However, during study phase the control group treated as usual without any specific intervention programme. After the IPSRT intervention program, the post assessment was done by same tools to evaluate the impact of IPSRT intervention on both groups (experimental and control group). After completion of the study, therapy sessions were also provided to control group patients for ethical consideration about their mental health and how the health affects human personal and social day to day life. As sample size in the study was small, hence obtained data was analyzed by using non-parametric Mann Whitney U test applied for comparison of pre-post assessment of experimental and control groups.

IV. RESULT AND DISCUSION

Result Table: - Shows the comparison of Pre-Post assessment between Experimental and Control Group of P.G.I.QOL Scale and GAF.

Variable	Experimental Group (Mean ± SD)			Control Group (Mean ± SD)			Mann Whitney			
	Pre	Post	Diff. (Pre-Post)	Pre	Post	Diff. (Pre-Post)	Mean Rank		U	Z
							Exp. G.	Cont. G.		
QOL	77.66±12.956	102±6.511	24.33±12.176	79.66±10.726	85.17±10.147	5.50±2.660	3.6	9.33	1.00	2.741*
GAF	47.83±8.565	71.66±9.179	23.83±8.010	44.67±7.479	48.83±8.750	4.16±2.316	9.50	3.50	0.00	2.892*

*Significant at 0.01 level.

The result shows the comparison between Experimental and Control group at Pre-Post assessment with Quality of Life (P.G.I.QOL) and GAF. For QOL the Pre assessment Mean and SD was 77.66±12.956 and Post assessment Mean and SD was 102±6.511 of Experimental group. The Pre assessment Mean and SD was 79.67±10.726 and Post assessment Mean and SD was 85.17±10.147 for Control group. The difference between Experimental group (Pre & Post Mean) was 24.34 and for Control group (Pre & Post Mean) it was 5.50. Further, significant low on Mean rank 3.6 found on Experimental group in comparison to Control group Mean rank 9.33. The U value=1.000, Z value=2.741 and P value is 0.006, which was significant at 0.01 level. The results of the present study suggest that intervention was significantly helpful to improve the quality of life of experimental group individuals when compared to Control group. Michalak et al., (2006), quantitative studies had examined the relationship between quality of life (QOL) and Bipolar disorder (BD) and has generally indicated that QOL is markedly impaired in Individuals with BD. However, little qualitative research had been conducted to better describe Individuals' own experiences of how BD impacts upon life quality. The primary target of the IPSRT is the interpersonal stress, circadian rhythm dis-regulation and medication non-adherence is significantly relevant in cases of bipolar disorder (mania). IPSRT as an intervention

also focuses on current interpersonal issues that are often the areas of significant concern and importance for the global functioning of the individuals of bipolar disorder cases. This becomes more significantly when a deal with interpersonal problems and mood symptoms. The findings of the present study very clearly indicate that in symptoms of mania and in managing of symptoms of mania the Interpersonal and Social Rhythm Therapy (IPSRT) significantly effective as the results of present study presented on Result-Table shows the individuals symptoms of BPAD mania who were given the Interpersonal and Social Rhythm Therapy (experimental group) achieved approximately four times more improvement gain comparison between control group, who were on treatment as usual and achieved very lesser gain (5.50), when they are assess on baseline and on the comparison after the therapeutic phase. The findings of the present study in line of study Homayoun Amini & Vandad Sharifi (2012); Ellen Frank et al. (1999), who reported the significant effect of psychotherapeutic measures (IPSRT), were found significantly effective in managing the recurrence of the illness.

The findings of the use of Interpersonal and Social Rhythm Therapy in cases of bipolar disorder increasing but sum studies reported the contrary evidence. The study of Frank et al (2005), conducted comparative study of IPSRT and intensive clinical management during the acute phase of illness or large sample of 175 bipolar patients and reported that the stabilization of remission rate and experiencing of longer episode free periods for those who were given the IPSRT. The findings of present study are also is the same line. Michalak et al (2006); Awad et al, (1995); Sierra et al, (2005), these research findings indicate that there is a complex, multifaceted relationship between Bipolar Disorder and QOL. Most of the affected individuals were interviewed and reported that Bipolar Disorder had a profoundly negative effect upon their life Quality, particularly in the areas of education, vocation, financial functioning, and social and intimate Relationships. According to them the concept of Quality of Life has become increasingly relevant in Bipolar Disorder research, since effective treatment from a bio-psycho-social perspective is now regarded as the reduction of symptoms without compromising the patients' Quality of Life.

For Global Assessment of Functioning (GAF) the Pre assessment Mean and SD of Experimental group was 47.83 ± 8.565 and Post assessment Mean and SD was 71.66 ± 9.179 . The Pre assessment Mean and SD was 44.67 ± 7.474 and Post assessment Mean and SD was 48.83 ± 8.750 for Control group. The difference between Experimental group (Pre & Post Mean) was 23.83 and for Control group (Pre & Post Mean) it was 4.16. Mean rank for Experimental group was 9.50 and for Control group it was 3.50. The Z value was 2.892 and P value is .004, which was significant at 0.01 level. The result of the present study suggest that intervention was significantly helpful to improve the Global functioning of Experimental group individuals when compare of Control group. Bipolar disorder is one of the most important leading causes of disability Worldwide. It include insist quality of life which includes impairment in physical, social and environmental and psychological well-being, in such condition the effective treatment of options with such serials are greatly needs. The growing research findings indicate those pharmaco-therapies are not usually adequate as standalone treatment for bipolar disorder. The medication often fails to bring about timely and complete remission from an acute episode (Geller et al, 2002; Gitlin et al. 1995) and fail to prevent the recurrence of new episode. A result of the good numbers of studies indicates that adjunctive psychotherapeutic measures help and acts to decreased suicidal attempt, improve social, occupational and psychological functioning, increased medication adherences and finally remarkably reduced the symptoms of bipolar illness (Miklowitz et al. 2007). The findings of the present study also indicates the significant improvement of Social, Occupational and Psychological functioning areas in the persons, the areas of the persons who received Interpersonal and Social Rhythm Therapy (IPSRT) in comparison to the persons who were on treatment as usual.

Individuals with bipolar disorder (BD), is associated with significant morbidity, mortality, and impairment in their psychosocial and occupational functioning. IPSRT is an empirically supported as an adjunctive psychotherapy for adult patients with bipolar disorder, which has been helpful to delay relapse, speed recovery from a bipolar depressive episode, and enhance occupational and psychosocial functioning in adults with BD. Feasibility and acceptability of IPSRT-A were high. Out of 12 participants, 11 were completed treatment, 97% of sessions were attended, and adolescent-rated satisfaction scores were high. IPSRT-A participant's experienced significant reduction in their manic, depressive, and general psychiatric symptoms over the 20 weeks of treatment. Participants' global functioning increased significantly as well. IPSRT appears to be a promising adjunctive treatment for adolescents with bipolar disorder (Elizabeth et al. 2010). BPAD individuals are represents a chronic and recurrent illness that can lead to severe disruptions in personal and family life, social, and occupational functioning. This study finding indicates that depressive symptoms are associated with greater negative impact on psychosocial functioning than (hypo) manic symptoms. Further deficits in functioning seem to persist during remission. The findings highlight the importance of aggressively treating depression and mania and the need to develop psychosocial interventions targeting to improve functional outcomes (Rosa et al. 2011). These findings of the studies also suggest that in the present study findings are significant improvements of social, occupational and psychological functioning areas in the

persons who received Interpersonal and Social Rhythm Therapy (IPSRT) in comparisons to the persons who were on treatment as usual.

V. CONCLUSION

In the present study based on the Interpersonal and Social Rhythm Therapy (IPSRT) as an intervention programme among BPAD manic patients, shows significant improvement in their quality of life and global functioning's impairments which were severely affected due to bipolar disorder. The results findings support the feasibility of implemented the IPSRT in psychiatric settings and suggest that such an intervention programme is beneficial for individuals with significant functional and symptomatic impairments. Findings of this study are consistent with a growing body of evidence that, this therapeutic intervention improves biological functioning, quality of life, global functioning, and also works on inter-personal and social relationship impairment in bipolar manic individuals. However, some limitation pointed as the sample size is smaller and the period of intervention is also shorter. Future study may carry out for Indian context, to managing BPAD patient with IPSRT intervention for more significant result, large data and generalization.

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VII. CONFLICT OF INTEREST: There is no conflict.

VIII. FINANCIAL SUPPORTS: Nil.

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