

Stressful Life Events, Coping, Social Support, Subjective Well-Being and Burnout in Primary Key Caregivers of Patients with Schizophrenia and Bipolar Affective Disorder in Relapse

Mekap Tech¹, Varghese, Mittu Muthu², Manisha, Kiran³, Nishant, Goyal. 4

PhD scholar, Psychiatric Social Work (Ranchi Institute of Neuro- Psychiatry and Allied Science).

Assistant Professor of Psychiatric Social Work (Central Institute Of Psychiatry).

Associate Professor & Head Of Department of Psychiatric Social work (Ranchi Institute of Neuro- Psychiatry and Allied Science).

Assistant Professor of Psychiatry (Central Institute of Psychiatry)

DOI: 10.29322/IJSRP.10.07.2020.p10340

<http://dx.doi.org/10.29322/IJSRP.10.07.2020.p10340>

Abstract- A primary caregiver is a person who consistently assumes the responsibility for the housing, health or safety of the patient. Caregivers are facing problems such as stress, burden, anxiety, frustration, feeling the pressure of increased dependency and etc. Care activities for schizophrenia and bipolar affective disorder patients affect on the general and mental health of caregivers (Reinhard, 1994). Life stressors are often described as negative events (the death of a loved one, loss of a job, divorce, etc.); however, positive changes in life (marriage, birth, moving, a new job, etc.) Caregiver burnout is a state of physical, emotional and mental exhaustion that can be accompanied by a change in attitude - from positive and caring to negative and unconcerned.

Aim:

To assess stressful life events, coping, social support, subjective well-being and burnout in primary key caregivers of patients with schizophrenia and bipolar affective disorder in relapse.

METHODS AND MATERIAL:

Paper was based on a cross sectional among patients in relapse with schizophrenia and bipolar affective disorder in the respective In/Out patients department of Central Institute of Psychiatry, Ranchi, India. Total sample size will consist of 60 respondents, 30 patients with schizophrenia who have relapse and 30 patients with bipolar affective disorder who have relapse. According to the type of data appropriate statistical analyses was done using SPSS version 20.0

RESULTS:

The study sample has two group i.e. 30 primary key care givers of patient with bipolar affective disorder in relapse and 30 primary key care givers of patient with schizophrenia in relapse. The socio demographic profile revealed that there is no significant different found in the terms of age, sex, marital status, religion, education, residence, occupation, family income, family type, total no. of families, family history on both the group of primary key care giver of patient with bipolar affective disorder and schizophrenia in relapse except in duration of stay of primary key care givers of both the group. Life event was noted, were the primary key care givers of schizophrenia in relapse has higher stressful life event than bipolar affective disorder in relapse were as coping and social support were found to be similar in both the group. Subjective well-being and burnout of both the group has found to be similar.

CONCLUSION:

Care giving can be a rewarding opportunity for many family caregivers this labor of love can put individuals at risk for substantial stressors, including financial, physical, and psychological hardship. Overall the research suggest that care giving, highlights the interactions between regarding Stress, coping, support, subjective wellbeing and burnout of caregiver health.

Index Terms- Stressful, Life event, coping, social support, subjective well-being, burnout, primary key care givers, Patient, relapse.

I. INTRODUCTION

Several definitions for caregiving and family caregiver have been proposed in literature. The first recorded use of the term “caregiving” was in 1966. Etymology (origin of particular word), the word care comes from the old English term *wicim*, which means mental suffering, mourning, sorrow, or trouble. Caregiving as the integration of the two origin meanings, is the action/process of helping those who are suffering, caregiving is facilitated by certain characteristic traits, emotions, skills, knowledge, time, and an emotional connection with the care recipient (Hermanns&Mastel-Smith, 2012). Sociologists hardly define caregivers as unpaid workers such as family members, friends, and neighbors as well as individuals associated with religious institutions (Drentea, 2007).

The important aim of care giving is to make the care recipient more independent by restoring his / her most functional state, both physical and psychological (Bridges, 1995). Family caregivers / informal caregivers provide care and assistance to the care recipient without getting paid, for instance, a daughter or a son, a wife or a husband (McConnell & Riggs, 1994; Haley, 2003). Family dynamics are highly affected when it comes to caring for someone with a mental or physical disability, since most of the time and energy of the caregiver is invested in taking care of patients (Vitaliano, Zhang & Scanlan, 2003). Frequently, the family is solicited as soon as the patient is discharged; even though he or she is often still in a fragile state, and the responsibility for medication often falls on the family members, more and more is expected of family caregivers, who have become a pillar in the recovery of the patient alongside formal caregivers (Jungbauer et al., 2003).

In India, as well as in most of the nonwestern world, and to a lesser extent in other parts of the world, families have been the mainstay of care giving for persons with mental illnesses. The family caregivers take care of the day-to-day needs of the patients, monitoring the mental state, identify the early signs of illness, relapse and deterioration, and help the patient in accessing services. The family caregiver also supervises treatment and provides emotional support to the patient.

Reinhard (1994): Caregivers are facing problems such as stress, burden, anxiety, frustration, feeling the pressure of increased dependency and etc. Care activities for schizophrenia and bipolar affective disorder patients affect on the general and mental health of caregivers. Nolan, (2001): Family caregivers can also have positive experiences - such as growth in competence, finding inner strength, closer family relationships, etc. These positive caregiving experiences contrast the dominance of the stress-burden model that focuses on the negative aspects of caring. Families are the oldest expression of all human relationships (Brennan, 2004) which are fundamental to our well-being as individuals and as a society, and “is the cradle of generations to come. Hammen, C., Shih, J. H., & Brennan, P. A. (2004).

Kwan (2000) caregivers must fill the gap between deinstitutionalization and the shortage of community resources it is necessary to pay more attention to their burdens and difficulties and to examine effective means of support to, at least, avoid illness due to caregiver stress. It is estimated that 50%–90% of people with chronic psychiatric illness live with their families or friends and informal caregivers provide an important service by reducing the need for formal care and burden upon healthcare systems (Gater et al., 2014) . Physical accessibility such as improper transport to the mental health centers, long distance to the facilities, long intervals between visits, and waiting time for the consultations are the main problems (Forouzan et al., 2013). Dore G, Romans SE (2001): Bipolar disorder can have a severe impact on the patient's family and caregivers. During episodes, partners can have significant problems in their relationships with patients, and these difficulties affect caregivers' own employment, legal matters, finances, and social relationships, including parenting. Gallagher SK, Mechanic D (1996): Sharing a household with a person with bipolar disorder affects the physical health of family members, too. When other predictors of health were controlled for, people living with a person with bipolar disorder, regardless of the severity of the condition, reported poorer physical health, more limited activity, and greater health service utilization compared with others.

II. NEED OF THE STUDY:

Caregiving can be a rewarding opportunity for many family caregiver this labor of love can put individuals at risk for substantial stressors, including financial , physical, and psychological hardship. Research indicates that caregivers may put their own health and well-being at risk while assisting loved ones (Burton et al. 1997; Tang and Chen 2002). The strain of caregiving demands has been linked to poor health outcomes including depression, physical illness, anxiety, and poor sleep habits (Schulz et al. 1997). Beach et al. (2000): On the other hand, there is also evidence that suggests that caregiving, if not overly strenuous, can actually be associated with mental health benefits to the caregiver there is an increasing body of research regarding the relationship between caregiving, physical health, and mental health. Although the literature in this area is still emerging, there currently exists significant evidence to support the potential for both positive and negative health effects of key caregiving. The present research is trying to provides

an overview of some of the issues related to the physical and mental health consequences of caregiving, highlights the interactions between regarding stress, coping, support, subjective wellbeing and burnout of caregiver health. Also identifies methodological challenges in the caregiving literature, and outlines future directions for caregiving research.

III. METHODOLOGY:

AIM

To assess stressful life events, coping, social support, subjective well-being and burnout in primary key caregivers of patients with schizophrenia and bipolar affective disorder experiencing relapse.

OBJECTIVE

- ✓ To compare stressful life events, coping, social support, subjective well-being and burnout between primary key caregivers of patients with schizophrenia and bipolar affective disorder in relapse.
- ✓ To assess relationship among stressful life events, coping, social support, subjective well-being and burnout in primary key caregivers of patients with schizophrenia and bipolar affective disorder in relapse.

HYPOTHESES

- ✓ There will be no significant difference in stressful life events, coping, social support, subjective well-being and burnout in primary key caregivers of patients with schizophrenia and bipolar affective disorder who are relapse.
- ✓ There will be no significant correlation between stressful life events, coping, social support, subjective well-being and burnout in primary key caregivers of patients with schizophrenia who are relapse.
- ✓ There will be no significant correlation between stressful life events, coping, social support, subjective well-being and burnout in primary key caregivers of patients with bipolar affective disorder who are relapse.

IV. RESEARCH DESIGN AND METHODOLOGY

Universe of the study: The study was conducted among patients in relapse with schizophrenia and bipolar affective disorder in the respective Inpatient/Out patients department of Central Institute of Psychiatry, Ranchi, India.

Research approach: Quantitative approach.

Research Design: Exploratory in nature

Samples: Primary key care-givers of patient with Bipolar affective disorder and schizophrenia disorder in relapse.

Sample Size: Total sample size was consisting of 60 respondents, 30 patients with schizophrenia who have relapse and 30 patients with bipolar affective disorder who have relapse.

Sampling method: Criteria based purposive sampling

INCLUSION CRITERIA FOR SCHIZOPHRENIA GROUP

- Person diagnosed with Schizophrenia as per ICD-10 Diagnostic criteria for research (WHO 1993).
- At least 5 years of duration of illness.
- Patients who in relapse.
- Age between 18-60 both sexes.

EXCLUSION CRITERIA FOR SCHIZOPHRENIA GROUP

- History of any chronic physical/mental illness other than schizophrenia and bipolar disorder, organic brain syndromes, and substance abuse/dependence, personality disorder.
- Age below 18 or above 60.
- Un-cooperative patients.

INCLUSION CRITERIA FOR KEY CAREGIVERS OF SCHIZOPHRENIA PATIENTS

- Who are living with the patients for at least two years.

EXCLUSION CRITERIA FOR KEY CAREGIVERS OF SCHIZOPHRENIA PATIENTS

- History of any chronic physical/mental illness, organic brain syndromes and substance abuse/dependence.

INCLUSION CRITERIA FOR BIPOLAR AFFECTIVE DISORDER GROUP

- Person diagnosed with bipolar affective disorder as per ICD-10 Diagnostic criteria for research (WHO 1993).
- At least 5 years of duration of illness.
- Patients in relapse.
- Age between 18-60 both sexes.
- Co-operative patients.

EXCLUSION CRITERIA FOR BIPOLAR AFFECTIVE DISORDER GROUP

- History of any chronic physical illness, mental illness other than schizophrenia and Bipolar disorder, organic brain syndromes, substance abuse/dependence, personality disorder.
- Un-cooperative patients.

INCLUSION CRITERIA FOR KEY CAREGIVERS OF BIPOLAR AFFECTIVE DISORDER PATIENTS

- Who are living with the patients for at least two years.

EXCLUSION CRITERIA FOR CAREGIVERS OF BIPOLAR AFFECTIVE DISORDER PATIENTS

- History of any chronic physical/mental illness, organic brain syndromes and substance abuse/dependence.

DESCRIPTION OF THE TOOLS:

1. Socio-demographic and clinical data sheet:

A socio-demographic and clinical data sheet will specially designed for the present study to record the demographic variables and clinical variables such as age, sex, age education, religions and miles.

2. Positive and negative syndrome scale (PANSS) (x, et al. 1987):

The PANSS, developed by SR Kay et al. is a 30-item rating scale that is specifically developed to assess individuals with schizophrenia and is used widely in research settings. The PANSS is an adaptation from earlier psychopathology scales, including the Brief Psychiatric Rating Scale (BPRS). Although the items of the BPRS are embedded in the PANSS, they do not fully correspond to all BPRS items. The PANSS consists of a semi structured clinical interview and any available supporting clinical information, such as family members or hospital staff report. There are 30 items which rate along a seven point continuum (1 = absent, 7 = extreme). The assessment provides separate scores in nine clinical domains including a positive syndrome, depression, a composite index, and general psychopathology. Ratings are generally based upon information relating to the past week the reliabilities is 0.80.

3. Young mania rating scale (YMRS- x, et al., 1978):

Developed by RC Young et al, is probably the most frequently utilized rating scale to assess the manic symptoms. This scale has 11 items and based on the patient's subjective report of his & her clinical condition over the previous period of 48 hours. There are four items that are graded one to 8 scale (irritability, speech Thought content,

and disruptive aggressive behavior) while the remaining. Seven items are scored on 0-4 grade. The strength of YMRS is its brevity, widely accepted and ease of administration. Reliability and validity independent clinicians on both the total score (0.93) and the individual item scores (0.66 to 0.92).

4. Hamilton Depression Rating Scale (x, 1960)

Since its development in 1960 by Dr. Max. Hamilton of the University of Leeds, England, the scale has been widely used in clinical practice and become a standard in pharmaceutical trials. HAM-D is a 17-21 item observer-rated scale to assess presence and severity of depressive states in patients diagnosed with depression. 9 items are scored 0-4, where as the further 8 are scored 0-2, as these represent variables which do not lend themselves to quantitative rating (0=absent; 1=doubtful or slight; 2= mild; 3=moderate; 4=severe; 0=absent; 1=doubtful or slight; 2=clearly present). Items 17-21 are not regarded as measuring the intensity of depression and are commonly omitted. A score of 11 is generally regarded as indicative of a diagnosis of depression. A score of '>14' is considered to be a reliable indicator of moderate to severe depression. Retest reliability for the Hamilton depression scale ranged from 0.81 to 0.98.

5. Life event scale (The University of Texas. x, et.al 1967):

Life event scale (The University of Texas at El Paso) is adapted from Holmes, T.H. and Rahe, R.H. "The Social Readjustment Rating Scale," *Journal of Psychosomatic Research* 11, 213-218, 1967. It's a 43-item questionnaire containing a wide range of stressful life events and incidents in normal life. The score results will be like 0-150 Low stress, 151-300 Moderate stress, 301+ High or extreme stress.

6. Ways of coping (Revised) (x, & y, 1985):

The Ways of Coping (Revised) is a 66-item questionnaire containing a wide range of thoughts and acts that people use to deal with the internal and/or external demands of specific stressful encounters. Usually the encounter is described by the subject in an interview or in a brief written description saying who was involved, where it took place and what happened. Sometimes a particular encounter, such as a medical treatment or an academic examination, is selected by the investigator as the focus of the questionnaire. Reliability across subscale scores ranged from .60 to .75 with Positive Reappraisal showing the least variability and Self-Controlling showing the most.

7. Social occupational functioning scale (SOFS) (x, et al, 2005):

The SOFS is a new scale that differs from the Global Assessment of Functioning (GAF) scale in that it focuses exclusively on the individual's level of social and occupational functioning and is not directly influenced by the overall severity of the individual's psychological symptoms. Also in contrast to the GAF scale, any impairment in social and occupational functioning that is due to general medical conditions is considered in making the SOFS rating. The SOFS is usually used to rate functioning for the current period (i.e. the level of functioning at the time of the evaluation). The SOFS may also be used to rate functioning for other time periods. For example, for some purpose it may be useful to evaluate functioning for the past year. Reliability of individual items ranged from 0.73 to 0.96.

8. Maslach Burnout Inventory (x and y, 1981):

Maslach and Jackson (1981) developed this scale. The MBI is a widely used self rating scale for measuring hypothetical aspects of burnout syndrome. It consists of 21 items with a seven-point rating scale representing three aspects (emotional exhaustion, depersonalization and personal accomplishment). For the emotional exhaustion and depersonalization subscales, high mean score reflect high levels of burnout whereas low score on the personal accomplishment subscale reflect high levels of burnout. This scale has one more subscale i.e. Involvement which will not be used in the study. Reliability MBI subscales 0.50 to 0.82.

9. Multidimensional Scale of Perceived Social Support (Zimet, et.al, 1988):

(Multidimensional Scale of Perceived Social Support MSPSS) (Zimet et al, 1988): The Multidimensional Scale of perceived social Support is a 12-item, unidimensional tool to measure how one perceives social support system, including an individual's source of social support (i.e., family, friends & significant others). Scoring would be 1= very strongly to 7= very strongly disagree including 4=neutral, 2= strongly disagree, 3= mild disagree and 5= mildly agree, 6= strongly agree. The scale measures subjective perceived social support. The score is at total level as well it is on the basis of domains. The total score range 69-84 indicates high acuity, 49-68 moderate acuity and 12-48 low acuity. Reliability (with a Cronbach's alpha of 0.81 to 0.98 in non-clinical samples, and 0.92 to 0.94 in clinical samples).

10. Subjective well-being scale (Sell, H. and Nagpal, R., 1992):

The 40-item subjective well-being inventory (Sell.H and Nagpal.R.1992), is an inventory that has eleven dimensions. The scoring is done according to the scoring key provided in the manual. The items are grouped under the dimensions to which they belong and total score of each dimension is calculated. Nineteen of the items elicit positive affect (i.e., whether one feels happy, good, or satisfied about particular life concerns). Twenty –one items elicit negative affect (i.e., unhappiness, worry, or regret about particular life concerns). The inventory had been standardized with an adult population. The total sum of the 40 items give the overall subjective well-being score. The SUBI is scored by attributing the values 3, 2 and 1 to response categories of positive items and 1, 2 and 3 to the negative items. Thus range of scores is 40 (minimum) to 120(maximum). The factor analyses over the different samples in different languages, and from different parts of India showed not only an extra ordinary degree of stability in content of factors, but also stability over time of 18 months when re- tested (Sell.H andNagpal.R.1992). This scale has high inter-rater reliability, inter-scores reliability, and test-retest reliability. The scale has been found to be highly significant and satisfactory in validity. Patil, M.S. and Halyal, P.S (1999) have reported that the test retest reliability of the SUBI inventory is 0.79 and the validity is 0.86.

PROCEDURE:

The study was conducted on Central Institute of Psychiatry, Kanke, Ranchi, Jharkhand. The study group was primary key care giver of patient with bipolar affective disorder and schizophrenia in relapse. The data collection was taken up according to the inclusion and exclusion criteria for the study. The sample was collected from In/Out patient department of Central Institute of psychiatry .Before collection of sample the procedure was explained by researcher to primary key care givers about the study, clinical data sheet, written consent and asked about their doubt and clarified was done according to their queries . Informed consent was taken from the patient and primary key caregivers. The primary key caregivers who stayed with patient for two (2) years was taken for study for both the group and the patient who had relapse and duration illness of five years was taken for the study. The socio-demographic and clinical data sheet was applied on both group of primary key care giver of patient with bipolar affective disorder and schizophrenia in relapse. The clinical variables such as Young Mania Rating Scale (YMRS), Hamilton Depression Rating Scale (HAM-D) was applied on patient with bipolar affective disorder in relapse and Positive and Negative Syndrome Scale (PANSS) was applied on schizophrenia patient. Clinical variables of Social occupational functioning scale (SOFS) were applied on both the group of patient. The clinical variables of primary key care giver of patient with bipolar affective disorder and schizophrenia in relapse were administered same on both groups such as: Life event scale, ways of coping, subjective well-being, multidimensional perceived social support and burnout scale. The researcher collected sixty (60) Samples from both group was collected were 30-30 has been divided. Accordingly the data collection was started to fulfill the study purpose.

STATISTICS

1. The standard statistical method was used to analyzed data using Statistical Package For Social Science (SPSS) version 20.0.
2. Descriptive statistics (percentage, mean and standard deviation) were used to describe various sample characteristics.
3. Chi -square test was used for describing and comparing categorical data.
4. “t” test was used for group comparison on continuation data.
5. Pearson r was used for correlation analysis.

V. RESULT:

SOCIO-DEMOGRAPHICS

Table-1: Socio-demographics details of bipolar affective disorder and schizophrenia in relapse (Discrete Variables)

VARIABLES		GROUP N=60		χ^2	Df	p
		BPAD n=30(%)	SCHZD n=30(%)			
Sex	Male	18(51.4%)	17(48.6%)	.069	1	.793
	Female	12(48.0%)	13(52.0%)			
Marital status	Married	18(47.2%)	21(53.8%)	4.649	2	.098
	Unmarried	4(36.4%)	7(63.6%)			
	Single	8(80.0%)	2(20.0%)			
Religion	Hindu	24(50.0%)	24(50.0%)	2.400	2	.301
	Muslim	4(40.0%)	6(60.0%)			
	Christian	2(100.0%)	0(0.0%)			
Education	Illiterate	0(0.0%)	2(100.0%)	3.741	5	.587
	Primary	7(46.7%)	8(53.3%)			
	Secondary	9(56.2%)	7(43.9%)			
	Matriculation	6(54.5%)	5(45.5%)			
	Intermediate	3(75.0%)	1(25.0%)			
	Other	5(41.7%)	7(58.3%)			
Residence	Rural	22(48.9%)	23(51.1%)	.099	2	.952
	Urban	7(53.8%)	6(46.2%)			
	Sub-Urban	1(50.0%)	1(50.0%)			
Occupation	Nil	1(50.0%)	1(50.0%)	1.902	4	.754
	Student	4(66.7%)	2(33.3%)			
	House wife	9(42.9%)	12(57.2%)			
	Labour	5(41.7%)	7(58.3%)			
	Other	11(57.9%)	8(42.1%)			
Family Type	Nuclear	15(57.7%)	11(42.3%)	1.126	2	.570
	Extended	13(44.8%)	16(55.2%)			
	Joint	2(40.0%)	3(60.0%)			
Medical Group	Present	12(57.1%)	9(42.9%)	.659	1	.589
	Absent	18(46.2%)	21(53.8%)			
Psychiatric group	Present	10(62.5%)	6(37.5%)	1.364	.1	.382
	Absent	20(45.5%)	24(54.5%)			

The table 1 shows the Socio-demographics details of Bipolar affective disorder and schizophrenia in relapse. The variables are consisting of sex, which shows Male (51.4%) along with female (48.0%) in bipolar affective disorder in relapse. The variables is consisting of sex : Male (48.6%) and female (52.0%) in schizophrenia in relapse. The variables on marital status in bipolar affective disorder in relapse in married is (47.2%), unmarried is (36.4%) and single is (80.0%). The variables on marital status in schizophrenia in relapse in married is (52.0%), unmarried is (63.6%), single is (20.0%). The variables on religion Hindu in bipolar affective disorder in relapse is (50.0%), Muslim (40.0%), Christian (100.0%). The variables on religion Hindu in schizophrenia in relapse is (50.0%), Muslim(60.0%), Christian (0.0%). Education shows in bipolar affective disorder in relapse in illiterate (0.0%), Primary (46.7%), Secondary(56.2%), Matriculation (54.5%), Intermediate (75.0%) and other (41.7%). Education shows in schizophrenia in relapse in Illiterate ((100.0%), Primary (53.3%), Secondary (43.9%), Matriculation (45.5%), Intermediate (25.0%), and other (58.3%). Residence shows in bipolar affective disorder in relapse in rural is (48.9%), urban (53.8%), sub-urban (50.0%). Residence shows in schizophrenia in relapse in rural (51.1%), urban (46.2%) and sub-urban (50.0%). Occupation in bipolar affective disorder in relapse in Nil (50.0%), Student (66.7%), House wife (42.9%), Labour (41.7%) , Other (57.9%). Occupation shows in schizophrenia in relapse in Nil (50.0%), Student (33.3%), House wife (57.2%) , Labour (58.3%), Other (42.1%). Family Type in bipolar affective disorder in relapse is Nuclear (57.7%), Extended (44.8%), Joint (40.0%). Family Type in schizophrenia in relapse Nuclear (42.3%),

Extended (55.2%) and joint (60.0%). Medical group in bipolar affective disorder in relapse Present(57.1%), Absent (46.2%), Medical group in schizophrenia in relapse Present (42.9%), Absent (53.8%). Psychiatric group in bipolar affective disorder in relapse in Present (62.5%) and absent (45.5%). Psychiatric group in schizophrenia in relapse in Present (37.5%), Absent (54.5%).

There is no significant differences found on both the group.

Table-02: Socio-demographics details of bipolar affective disorder and schizophrenia in relapse (continuous variables)

Variables	Group		t (df=58)	P
	BPAD M±SD (n=30)	SCHZD M±SD (n=30)		
Age	36.90±8.92	33.73±7.84	1.460	.150
Family Income	12383±9611.1	23178.5±57295.2	-1.017	.313
Duration of stay (caregivers years)	22.83±9.21	18.83±7.87	1.807	.076
Total no. of families	5.86±2.40	6.30±2.10	-743	.460

The table 2 shows socio-demographic variables in continuous variables. The mean score of age in bipolar affective disorder in relapse is (36.90±8.92) and mean score of age in schizophrenia in relapse is (33.73±7.84). The mean score of family income of bipolar affective disorder in relapse is (12383±9611.1) and mean score of family income in schizophrenia in relapse is (23178.5±57295.2), The mean score of duration of stay of key care givers of patient with bipolar affective disorder in relapse is (22.83±9.21) and the mean score of duration of stay of key care givers with patient with schizophrenia in relapse is(18.83±7.87). The mean score of total no. of family members with bipolar affective disorder in relapse is (5.86±2.40) and mean score of total no. of family members with schizophrenia in relapse is (6.30±2.10).There is no statistically significant found between the two groups.

CLINICAL CHARACTERISTICS

Table-3: Clinical characteristics of patient with Bipolar affective disorder in relapse

Variables	BPAD (n=30) Mean±SD
Young mania rating scale	40.46±7.381
Hamilton rating scale	69.50±10.60

Table 3 shows the mean score of young mania rating scale of bipolar affective disorder in relapse is (40.46±7.381). The mean score of Hamilton rating scale is (69.50±10.60)

Table-4: Clinical characteristics of patient with schizophrenia in relapse

Variables	SCHZD (n=30) Mean±SD
Positive syndrome(PANSS)	38.66±15.91
Negative syndrome(PANSS)	37.93±22.05
General psychopathology(PANSS)	72.06±22.05

Table 4 shows the mean score of Positive syndromes in PANSS of patient with schizophrenia in relapse is (38.66±15.91) and the mean score of Negative syndromes is (37.93±22.05). The mean score of general psychopathology score is (72.06±22.05)

Table-5: Comparison on Socio occupational functioning of patient with bipolar affective disorder and schizophrenia in relapse

Variables	Group		t (df=38)	P
	BPAD (N=30) Mean ± SD	SCHZD (N=30) Mean ± SD		
Socio-Occupational Functioning Scale (Patient)	45.53±8.480	51.16±7.09	-2.799	.007*

Table 5 shows comparison on clinical characteristics of patient with bipolar affective disorder and schizophrenia in relapse on socio- occupational functioning .The mean score of bipolar affective disorder in relapse (45.53±8.480) and schizophrenia in relapse mean score is (51.16±7.09).

Table-6: Comparison of Ways of coping between Primary key care givers of patient with Bipolar affective disorder and Schizophrenia in relapse

Variables	BPAD M±SD (n=30)	SCHZD M±SD (n=30)	t (df=58)	P
Confrontive coping	11.10±2.29	10.53±1.47	1.137	.260
Distancing	10.60±1.79	10.86±1.69	-.592	.556
Self-Control	10.86±1.88	10.16±2.21	1.317	.193
Seeking social support	10.63±2.20	10.20±2.36	.733	.466
Accepting responsibility	7.16±1.34	6.73±1.46	1.197	.236
Escape avoidance	15.03±2.73	14.53±1.87	.826	.412
Planful problem	10.26±2.54	10.56±2.90	-.425	.672
Positive reappraisal	13.03±2.45	12.96±2.44	.105	.916

Table 6 shows comparison of both the group of primary key care givers in ways of Coping. In Bipolar affective disorder Group the mean of variables in confrontive coping is (11.10) and schizophrenia is (10.53), same as the mean distribution of variables in distancing coping is (10.60) and schizophrenia is (10.86). Self control coping (10.86) in Bipolar affective disorder and (10.16) in schizophrenia, were as in seeking social support (10.63) in Bipolar affective disorder and (10.20) in schizophrenia. Mean distribution of variables in accepting responsibility in Bipolar affective disorder is (7.16) and (6.73) in schizophrenia. Mean distribution of variables escape avoidance is (15.03) and (14.53) in schizophrenia. Mean distribution of variables in planful problem solving in Bipolar affective disorder is (10.26) and (10.56) in schizophrenia. Mean distribution of variables in positive reappraisal in Bipolar affective disorder is (13.03) and (12.96) in schizophrenia. There was no significant difference found between both the groups in various variables in ways of coping.

Table-7: Comparison on burnout on primary key care givers of patient with Bipolar affective disorder and Schizophrenia in relapse

Variables	Group		t (df=58)	P
	BPAD M±SD (n=30)	SCHZD M±SD (n=30)		
Emotional Exhaustion	10.63±2.65	10.26±2.44	.556	.581
Personal accomplishment	9.13±2.02	9.83±3.37	-.974	.334
Depersonalization	10.16±2.36	10.16±2.80	.000	1.000

Table 7 shows the comparison of burnout of primary key care givers of patient with bipolar affective disorder and schizophrenia in relapse which consist of 3 domains. High score in each domain indicates more level of burnout functioning in each particular dimension. The mean score variables on emotional exhaustion is (10.63) in bipolar affective disorder and (10.26) in schizophrenia. The mean score variable on personal accomplishment is (9.13) bipolar affective disorder and (9.83) in schizophrenia. There was no significant difference found in both the group in two variables, while the two variables have similar burnout. There is significant difference found on the variables of depersonalization.

Table-8: Comparison on Life event of primary key care givers of patient with Bipolar affective disorder and schizophrenia in relapse

Variables	Group		t (df=58)	p
	BPAD M±SD (n=30)	SCHZD M±SD (n=30)		
Life event	1345.76±101.65	2533.56±3303	1.969	.050*

*P value significant at < 0.05 level

Table 8 shows the Comparison on Life event of primary key care givers of patient with Bipolar affective disorder and schizophrenia in relapse. The mean score of primary key care givers of patient with Bipolar affective in relapse is (1345.76±101.65) and the mean score of primary key care givers of patient with schizophrenia in relapse (2533.56±3303). There is statistically significant found on both the of primary key care givers (.050*) at 0.05 level of significance, which reveals primary key care givers of both group had stressful life event.

Table-9: Comparison on Perceived social support of primary key care givers of patient with Bipolar affective disorder and schizophrenia in relapse

Variables	Group		t (df=58)	p
	BPAD M±SD (n=30)	SCHZD M±SD (n=30)		
Perceived social support	46.33±782	48.60±7.71	-1.130	.263

Table 9 shows perceived social support of primary key care givers of patient with bipolar affective disorder and schizophrenia in relapse. The mean variables of perceived social support in bipolar affective disorder is (46.33) and (48.60) in schizophrenia. It indicates there is no significant difference found in both the groups.

Table-10: Comparison on Subjective well-being of primary key care givers of patient with bipolar affective disorder and schizophrenia in relapse

Variables	Group		t (df=58)	p
	BPAD M±SD (n=30)	SCHZD M±SD (n=30)		
General well-being (positive affect)	6.63±1.77	6.33±1.42	.723	.472
Expectation	7.00±1.57	6.76±1.61	.567	.572
Confidence	7.16±1.23	7.10±1.42	.194	.847
Transcendence	6.83±1.51	6.93±1.91	-.225	.823
Family support group	6.13±1.77	5.93±1.61	.456	.650

Social support	6.70±1.72	6.73±1.76	-074	.941
Primary group concern	8.80±2.41	7.86±2.20	1.563	.124
Inadequate mental	14.66±3.00	14.53±4.09	.144	.886
Percieved health	11.86±2.43	12.53±3.10	-926	.358
Deficiency social contact	7.10±1.49	7.06±1.68	.081	.936
Geneneral well-being (Negative affect)	6.43±1.63	6.73±2.59	-535	.594

P=not significant

The table 10 shows the subjective well-being of primary key care givers of patient with bipolar affective disorder and inrelapse. The mean variables of subjective well-being of primary key care givers of patient with bipolar affective disorder in relapse in general well-being is (6.63±1.77) and primary key care givers of patient with schizophrenia is (6.33±1.42). Primary key care givers of patient with bipolar affective disorder in expectation achievement is (7.00±1.57) and primary key care givers of patient with schizophrenia is (6.76±1.61). Confidence in coping in of primary key care givers of patient with bipolar affective disorder is (7.16±1.23) and schizophrenia is (7.10±1.42). Transcendence in bipolar affective disorder is (6.83±1.51) and schizophrenia is (6.93±1.91). Family group support of primary key care givers of patient with bipolar affective disorder is (6.13±1.77) and schizophrenia is (5.93±1.61). Social support of primary key care givers of patient with bipolar affective disorder is (6.70±1.72) and schizophrenia is (6.73±1.76). Primary group concern of primary key care givers of patient with bipolar affective disorder is (8.80±2.41) and schizophrenia is (7.86±2.20).

Inadequate mental mastery of primary key care givers of patient with bipolar affective disorder is (14.66±3.00), and schizophrenia is (14.53±4.09). Percievedill support of primary key care givers of patient with bipolar affective disorder is (11.86±2.43) and schizophrenia is (12.53±3.10). Deficiency in social contacts of primary key care givers of patient with bipolar affective disorder is (7.10±1.49) and schizophrenia is (7.06±1.68). General well being (negative affect) is (6.43±1.63) and schizophrenia is (6.73±2.59). There are no significant differences found between the groups.

Table-11: Correlation of socio-demographics & clinical Variables with Ways of coping of primary key care givers of patient with in bipolar affective disorder in relapse

Variables		Confrontive (WC)	Distancing (WC)	Self control (WC)	Seeking Social support (WC)	Accepting Responsibility (WC)	Escape Avoidance (WC)	Planful Problem solving(WC)	Positive Reappraisal (WC)
Age	r	-.294	.271	.194	.173	.304	.423*	.264	.371*
	p	.115	.147	.305	.360	.102	.020	.159	.043
Family Income	r	-.095	.004	.217	.178	.099	-.095	.030	.025
	p	.618	.982	.250	.347	.602	.618	.877	.896
Duration stay of caregiver	r	-.073	-.470**	-.081	-.149	-.134	.047	-.026	-.091
	p	.703	.009	.672	.432	.479	.806	.892	.632
Total no. of family member	r	.140	.187	-.012	.069	.392*	.284	.215	.299
	p	.460	.322	.951	.719	.032	.128	.255	.109
YMRS	r	.168	.168	-.129	.020	-.113	.112	-.147	-.159
	p	.392	.392	.512	.918	.567	.571	.456	.420
HAMD		-1.000**	1.000**	1.000**	-1.000**	. ^c	-1.000**	1.000**	. ^c
SOFASS	r	-.040	-.137	.200	-.214	.046	-.219	-.290	-.355
	p	.834	.469	.287	.256	.807	.244	.121	-.054

WC=Ways of coping

YMRS=Young mania rating scale

HAM-D=Hamilton depression rating scale

SOFAS= Social occupational functioning scale

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The table 11 shows the correlation of socio-demographic variables and ways of coping of primary key care givers of patient with bipolar affective disorder in relapse. Results have shown a significantly positive correlation of age with escape avoidance ($r=.423^*$) and Positive Reappraisal ($r=.371^*$) at 0.05 level of significance. Negative correlation have shown in duration of stay with distancing ($r=-.470^{**}$) at 0.01 level of significance. Results have again shown a significantly negative correlation of Hamilton depression rating scale with Confrontive (-1.000^{**}) and Escape Avoidance (-1.000^{**}) at 0.01 level of significance. Positive correlation of Hamilton depression rating scale with Self control (1.000^{**}) and Planful Problem solving (1.000^{**}) at 0.01 level of significance.

Table 12: Correlation of socio-demographics & clinical variables with Burnout, stressful life events, perceived social support and subjective well- being with primary key care givers of patient with bipolar affective disorder in relapse

		Burnout 1	Burnout 2	Burnout 3	LE	PSS	SWB
Age	r	.419*	.003	-.020		-.101	.036
	p	.021	.989	.915	.162	.596	.849
Family Income	r	.020	-.186	.090	-.126	-.094	-.401*
	p	.917	.326	.638	.507	.621	.028
Duration stay of caregiver	r	.405*	-.288	.014	-.206	.136	.125
	p	.027	.123	.942	.274	.473	.509
Total no. of family members	r	.057	-.152	-.251	.065	.168	.283
	p	.765	.423	.181	.733	.376	.130
YMRS	r	.246	.148	.135	.137	.477*	.304
	p	.206	.452	.492	.486	.010	.115
HAMD		-1.000**	1.000**	1.000**	-1.000**	-1.000**	-1.000**
SOFS	r	-.104	.332	.291	-.268	.369*	.068
	p	.584	.073	.118	.153	.045	.722
WC=Ways of coping YMRS=Young mania rating scale HAM-D=Hamilton SOFAS= Social occupational functioning scale B1=Emotional exhaustion B2=Personal Accomplishment B3=Depersonalization				LE=Life event PSS=Perceived Social support SWB=Subjective well-being			

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 12 shows the correlation of socio-demographics and clinical variables of primary key care givers of patient with bipolar affective disorder in relapse. The table shows the result of significantly positive correlation of age with emotional exhaustion (B1) at 0.05 level of significance. The result have shown significantly negative correlation of duration stay of caregiver with emotional exhaustion (B1), ($r=.405^*$) at 0.05 level of significance. Young mania rating scale have significantly positive correlation with perceived social support ($r=.477^*$) at 0.05 level of significance. The result again shows the significant negative correlation of Hamilton depression rating scale with emotional exhaustion (B1), ($r=-1.000^{**}$), life event (-1.000^{**}), perceived social support (-1.000^{**}) and subjective well-being (-1.000^{**}) at 0.01 level of significance. The significant positive correlation have shown on Hamilton depression rating scale with Personal Accomplishment (B2), (1.000^{**}) and Depersonalization (B3), (1.000^{**}) at 0.01 level of significance. The significant positive correlation of social occupational functioning is shown with perceived social support ($.369^*$) at 0.05 level of significance.

Table-13: Correlation of socio-demographics & clinical variables with Ways of coping of primary key care givers of patient with schizophrenia in relapse

		Confrontive (WC)	Distancing (WC)	Self control (WC)	Seeking Social support (WC)	Accepting Responsibility (WC)	Escape Avoidance (WC)	Planful Problem solving(WC)	Positive Reappraisal (WC)
Age	R	-.008	.142	.320	-.003	.057	.102	.005	.115
	P	.966	.453	.084	.989	.766	.593	.978	.546
Family Income	R	.167	.206	-.377*	-.137	.249	.037	-.375*	.443*
	P	.396	.293	.048	.488	.202	.851	.049	.018
Duration stay of caregiver	R	-.094	-.171	-.088	.308	.018	-.063	-.297	-.121
	P	.622	.365	.643	.098	.925	.742	.111	.525
Total no. of family members	R	-.098	-.037	.063	.216	.083	-.252	-.203	-.434*
	P	.608	.847	.741	.252	.663	.178	.281	.016
PS	R	.053	-.003	-.341	-.015	-.032	.004	.025	-.074
	P	.780	.988	.065	.939	.866	.984	.895	.698
NS	R	-.033	-.262	.054	-.289	-.284	.100	.346	-.026
	P	.861	.162	.775	.122	.128	.598	.061	.893
GP	R	-.166	.054	.156	-.213	.010	.051	-.018	.013
	P	.381	.778	.411	.257	.957	.789	.926	.946
SOFS	R	-.176	-.064	-.085	-.154	-.185	-.069	.216	-.284
	P	.351	.737	.654	.417	.327	.716	.252	.128

WC=Ways of coping
 PS=Positive syndrome
 NS=Negative syndrome
 GS=General psychopathology
 SOFS=Social occupational functioning scale

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 13 shows the correlation of socio-demographics and ways of coping of primary key care givers of Patient with schizophrenia in relapse. Significantly negative correlation have shown on family income with Self-control ($r=-.377^*$), Planful Problem solving ($r=-.375^*$) at 0.05 level of significance and family income is positive correlation with Positive Reappraisal (.443*) at 0.05 level of significance. The total no. of family members have negatively significance with Positive Reappraisal (.443*) at 0.05 level of significance.

Table-14: Correlation of socio-demographics & clinical characteristic with Burnout, stressful life events, perceived social support and subjective well- being with primary key care givers of patient with schizophrenia in relapse

		Burnout 1	Burnout 2	Burnout3	LE	PSS	SWB
Age	r	-.287	-.032	.300	.277	.063	.205
	p	.124	.868	.107	.138	.740	.276
Family income	r	.403*	.461*	-.269	-.157	.145	-.662**
	p	.033	.014	.166	.424	.461	.000
Duration stay of caregiver	r	-.037	-.058	.062	-.044	.365*	-.130
	p	.845	.761	.745	.816	.047	.494
Total no. of family members	r	.011	.221	.301	.131	-.139	.008
	p	.955	.240	.106	.489	.464	.967
PS	r	-.256	.003	.435*	.039	.261	-.190
	p	.172	.988	.016	.840	.164	.314
NS	r	-.177	-.089	.072	-.033	-.366*	-.003
	p	.349	.639	.706	.861	.047	.987
GP	r	.164	-.184	-.295	-.018	-.385*	.163
	p	.385	.331	.113	.925	.036	.389
SOFS	r	-.326	-.285	.248	-.147	-.271	.059
	p	.079	.126	.186	.440	.148	.755
PS=Positive syndrome NS=Negative syndrome GS=General psychopathology SOFS=Social occupational functioning scale B1=Emotional exhaustion B2=Personal Accomplishment B3=Depersonalization				LE=Life event PSS=Perceived Social support SWB=Subjective well-being			

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 14 shows the correlation of socio-demographics and clinical variables of primary key care givers of patient with schizophrenia in relapse. Results have shown a significantly positive correlation of family income with emotional exhaustion (B1) ,($r=.403^*$) and personal accomplishment (B2),($r=.461^*$)at 0.05 level of significance. Family income is negatively significance with subjective well being ($r=-.662^{**}$) at 0.01 level of significance. Also the result have shown significantly positive correlation of duration of stay of primary key caregivers with perceived social support is ($r=.365^*$) at 0.05 level of significance. The positive syndrome (PANSS) is significantly positive correlation with personal accomplishment (B=2) ,($r=.435^*$) at 0.05 level of significance. The negative syndrome (PANSS) is significantly shown negative correlation with perceived social support ($r=-.366^{**}$) at 0.01 level of significance. As general psychopathology has shown negative correlation with perceived social support ($r=-.385^*$) at 0.05 level of significance.

VI. DISCUSSION

GENERAL CONSIDERATIONS

The present study was conducted to assess stressful life events, coping, social support, subjective well-being and burnout in primary key care givers of patients with schizophrenia and bipolar affective disorders in relapse, as compared within key care givers. Based on findings from literature and behavioral perception in general, it was hypothesized that there would be no difference in both groups. Generally, we expected to observe a relation in the stressful life events, coping, social support, subjective well-being and burnout in primary key care givers of patients with schizophrenia and bipolar affective disorders in relapse. So, it was hypothesized that there will be no significant correlation between selected variables.

For the study sixty primary key care givers with inpatient/outpatient department from Central Institute of Psychiatry Ranchi, Jharkhand who fulfilled the inclusion & exclusion criteria were taken up for the study. All participants were explained about the aims, objective and purpose of the study to take their consent. They were also informed about the confidentiality of the information provided and given opportunity to participate or refuse to participate. Following this the questionnaires/scales were administered.

VII. METHODOLOGICAL CONSIDERATION

DESCRIPTION OF THE SCALES

Positive and negative syndrome scale (PANSS) (x, et al. 1987):

The PANSS, developed by SR Kay et al. is a 30-item rating scale that is specifically developed to assess individuals with schizophrenia and is used widely in research settings. One of the study done on these scale found that the Positive and Negative Syndrome Scale and General Psychopathology (PANSS) - developed to assess the severity of symptoms and measure general psychopathology and drug-related change is one of the most widely used instruments to evaluate psychotic symptom (Cinthia H. Higuchi et al 2014). Studies done by researcher revealed that it is well characterized and standardized techniques are a clear prerequisite for meaningful study of these syndromes, their relationship to other features of schizophrenia, and their response to medication (Stanby R, key et al 2014). Another researcher revealed about the scale that it has good reliability and validity, the positive and negative subscales are used to differentiate between positive and negative schizophrenia (Niranjan Prasad et al 2016).

Young mania rating scale (YMRS- x, et al., 1978):

Developed by RC Young et al, at the year 1978, is probably the most frequently utilized rating scale to assess the manic symptoms. One of the study done on sensor motor gating deficits in bipolar disorder Patients with Acute Psychotic Mania the researcher found that psychosis on the Young Mania Rating scale (thought content) was revealed, such that the degree of disturbed thinking the lower the level (William et al,2001). Other studies revealed that YMRS used to derive clinically meaningful information about mood disorders (Barbara L. Gracious et al 2002) . The studies found that YMRS scale has high reliability and validity coefficients (Vilela et al 2005).

Hamilton Depression rating scale (x, 1960):

Since its development in 1960 by Dr. Max. Hamilton of the University of Leeds, England, the scale has been widely used in clinical practice and become a standard in pharmaceutical trials. The researcher found that the scale has significant and qualitative findings out the result (Joseph et al 1998). In the studies found that the Hamilton depression scale has been the standard for the assessment of depression for more than 40 years and it is also a policy makers charged with the task of providing standards to evaluate treatment outcomes in depression are faced with three possible solutions: retain, revise, or reject.(R. Michael et al ,2004). Also the researcher found that the scale is known to be considered the gold standard for assessing severity of depression and is widely used in research field, (Barry A et al, 2010).

Life event scale:

Life event scale (The University of Texas at El Paso) is adapted from Holmes and Rabe in the year 1967. It has a 43-item questionnaire containing a wide range of stressful life events and incidents in normal life. The past studies found that people experiencing serious illnesses also had high scores on the Life Event Scale (Rabe 1967). Another studies done on this scale revealed that finding affirms the accomplishment of original intent, to construct an instrument suitable for obtaining reports of characteristic experiences from persons (Mardihorwitz et al (1979).The researcher found in their studies that scale is associated to Social Readjustment Rating Scale which gives the consensual weights for life events occurred (Rahe, Lundberg, Theorell, & Bennett, 1971).

Ways of coping (Revised) (x, & y, 1985):

The Ways of Coping is been developed by (Lazarus and folkman 1985), containing a wide range of thoughts and acts that people use to deal with the internal and/or external demands of specific stressful encounters. The researcher has found the scale have tested its constructs through exploratory factor analyse y (Abramovitch, Schreier, &Koren, 2000; Howells & Stewart, 2003; Latack&Havlovic, 1992). The scale evaluate the finding coping strategies are related to stress levels (Evers, Kraaimaat, Geenen, and Bijlsma ,1997). The researcher found that problem focused coping strategies were negatively related to stress level and health (Caligiuri 2005) . Another researcher found that scale provides validity evidence for alpha coefficients (Folkman& Lazarus, 1980, 1985).

Social occupational functioning scale (SOFS) (x, et al, 2005):

The SOFS was developed by (Nirmal .s et al, 2005) is a new scale that differs from the Global Assessment of Functioning (GAF) scale in that it focuses exclusively on the individual's level of social and occupational functioning and is not directly influenced by the overall severity of the individual's psychological symptoms. The studies done by researcher found that scale has comprehensive, easy to administer measure of social functioning for use in busy clinical settings and it has adequate psychometric properties in terms of reliability and validity. It also focuses only on functioning and does not include symptom assessment (Nirmalsaras et al. 2005). The researcher found that scale focuses only on functioning and does not include symptom assessment N.Saras et al 2006). The scale has a brief, yet comprehensive, easy to administer measure of social functioning for use in busy clinical settings. It has adequate psychometric

properties in terms of reliability and validity. Exploratory factor analysis revealed a three-factor structure comprising of adaptive living skills, social appropriateness and interpersonal skills, accounting for 59% of the variance in total SOFS score (Roak et al 2006).

Maslach Burnout Inventory (x and y, 1981):

Maslach and Jackson in the year (1981) developed this scale. The MBI is a widely used self-rating scale for measuring hypothetical aspects of burnout syndrome. It consists of representing three aspects (emotional, exhaustion, depersonalization and personal accomplishment). Reliability MBI subscales 0.50 to 0.82. The researcher found that scale has a standard measure of occupational burnout and has been significantly correlated with other measures of job burnout, job stress, and other indices of job satisfaction and performance (Brookings, Bolton, Brown & McEvoy, 1985; Jackson, Schwab, & Schuler, 1986; Maslach & Jackson, 1981).

Another studies researcher found that measures of various outcomes that had been hypothesized to be related to burnout. All three sets of correlations provided substantial evidence for the validity of the MBI (Christina and susane 1981).

Multidimensional Scale of Perceived Social Support (x, et. al, 1988):

(Multidimensional Scale of Perceived Social Support MSPSS) was developed by (Zimet et al, 1988): The Multidimensional Scale of perceived social Support is a 12-item, uni-dimensional tool to measure how one perceive social support system, including an individual's source of social support (i.e., family, friends & significant others). The past studies revealed about scale that it demonstrated excellent internal consistency including construct validity (Kee- Lee Chou 1999). The researcher also found that high levels of perceived social support were associated with low levels of depression (Gregory et al, 2010). Another research also found that the scale has internal consistency reliability, measurement invariance, and differential correlates of the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988).

Subjective well-being scale (x and y, 1992):

The subjective well-being inventory was developed by (Sell.H and Nagpal.R.1992), is an inventory that has eleven dimensions. In the studies done on these scale the researcher found that it has high inter-rater reliability, inter-scores reliability, and test-retest reliability also highly significant and satisfactory in validity., (Patil, M.S. and Haloyal, P.S 1999). Another studies found that the scale points out the need for a thorough conceptual mapping process as exemplified (M.E Sharpe et al 1994). Researcher found that scales revealed that people interpret them as cardinal, and intend to provide responses that reflect this as accurately as possible (Van Praag 1991; Parducci 1995; Schwartz 1995).

Socio-demographic Characteristics

DISCRETE VARIABLES:

In the present study there were two groups: Primary key care givers of patients with schizophrenia and primary key care givers of patient with bipolar affective disorder. Sixty primary key care givers with patients were selected. The two groups were compared along important socio demographic variables like age, gender, marital status, religion, and education, and occupation, total no. of family members, duration stay of care givers, habitat, presence and absence of medical/psychiatric illness. The discrete variable of sex on both the group, male 18(51.4%) in bipolar affective disorder and 17(48.6%) in schizophrenia and female 12(48.0%) in bipolar affective disorder and 13(52.0%) in schizophrenia. The males were almost twice as high as females reasons being cultural issues and stigma (Jayakrishna et al 2018). In the variables of marital status of both the group married in bipolar affective disorder patient 18(97.2%) and in schizophrenia 21(53.8%), unmarried in bipolar affective disorder in 4(36.4%) and in schizophrenia 7(63.6%), were as in single patient in bipolar affective disorder 8(80.0%) and 2(20.0%) in schizophrenia patient. In the past studies researcher has found that 66% of the subjects were married where in marriage is a social norm and divorce is not very common (Evid, 2018). In our study Hindu religion has higher majority 24(50.0%) in bipolar affective disorder in relapse and schizophrenia in relapse 24(50.0%) than muslim in bipolar affective disorder in relapse 4(40.0%) and schizophrenia in relapse is 6(60.0%) and Christian in bipolar affective disorder in relapse 2(100.0%) and schizophrenia in relapse 0(0.0%). In other study revealed that Hindus were maximum (73.4%) (Maryy H et al 2005). In our present study also revealed that hindu religion was maximum in number, and perhaps this might be due to the existence of the Institute in the heart of a Hindu dominated area. There were no significant differences found on the both group.

On socio demographic variables chi-square test shows that the two groups do not differ significantly on age, givers, habitat, presence and absence of medical/psychiatric illness. (Refer table 2). This shows that both the groups have similar socio-demographic characteristics. Though findings reveal that majority of the respondents in both groups were males.

In the variables of duration of stay of caregivers of patient with bipolar affective disorder (22.83 ± 9.21) and stay of caregivers of patient with schizophrenia (18.83 ± 7.87). In past studies found that about 50%–90% of people with chronic psychiatric illness live with their families or friends and informal caregivers provide an important service (Gater et al., 2014). Another studies revealed that about 25%–50% of people with schizophrenia stay with their families after being discharged from the hospital and depend on the assistance and care of their families, depend on the family for care provision (S. Chan, 2011).

Comparison of Ways of coping between Primary key cares givers of patient with bipolar affective disorder and Schizophrenia in relapse

There were no significant differences found in ways of coping between the two groups. The mean score of ways of coping between Primary key cares givers of patient with bipolar affective disorder Confrontive coping (11.10 ± 2.29) and Schizophrenia (10.53 ± 1.47). Distancing coping of Primary key cares givers of patient with bipolar affective disorder (10.60 ± 1.79) and Schizophrenia (10.86 ± 1.69).

The mean score of Self-Control coping of Primary key cares givers of patient with bipolar affective disorder (10.86 ± 1.88) and Schizophrenia (10.16 ± 2.21).

The mean score in seeking social support coping of Primary key cares givers of patient with bipolar affective disorder (10.63 ± 2.20) and Schizophrenia (10.20 ± 2.36).

The mean score in accepting responsibility coping of Primary key cares givers of patient with bipolar affective disorder (7.16 ± 1.34) and Schizophrenia (6.73 ± 1.46), Escape avoidance coping of Primary key cares givers of patient with bipolar affective disorder is (15.03 ± 2.73) and Schizophrenia (14.53 ± 1.87).

The mean score of Playful problem solving coping of Primary key cares givers of patient with bipolar affective disorder is (10.26 ± 2.54), and Schizophrenia (10.56 ± 2.90).

The mean score of Positive reappraisal coping is of Primary key cares givers of patient with bipolar affective disorder (13.03 ± 2.45) and Schizophrenia (12.96 ± 2.44). The similar studies were found by (Chakrabarti et al. 1995, 2003), coping of bipolar affective disorder is remarkably similar to schizophrenia with regard to parameters such as problems faced and distress associated with them, levels of patient-dysfunction and caregiver. Another study done by (Chakrabarti and Gill 2002) reveals that coping pattern between bipolar affective disorder and schizophrenia caregivers several similarities were noticed between both sets of caregivers. Our study also reveals same ways of coping pattern in both the group of primary key care givers of patient with bipolar affective disorder and of primary key care givers of patient with schizophrenia in relapse.

Comparison on burnout on primary key care givers of patient with Bipolar affective disorder and Schizophrenia in relapse

The present study revealed that, the mean score of burnout on primary key care giver with bipolar affective disorder patient on variables on emotional Exhaustion (10.63 ± 2.65) and burnout on primary key care giver with schizophrenia patient (10.26 ± 2.44), variables on Personal accomplishment of burnout on primary key care giver of bipolar affective disorder patient (9.13 ± 2.02), and burnout on primary key care giver with schizophrenia patient (9.83 ± 3.37). There is no statistical significant found on both the two variables on exhaustion and personal accomplishment. The past studies research reveals that being unhappy and dissatisfied with their work, caregivers develop a poor self image; daily work tasks are neglected as they feel incompetent and struggle with focusing on their responsibilities (Maslach et al., 2001; Montero-Morin et al., 2014; NIH, 2013). In another past studies done by researchers found that inefficacy, the feelings of being an underachiever on the job lead to reduced personal feelings of accomplishment (Maslach et al, 2001; Montero-Morin et al., 2014), emotional exhaustion depletes an individual's psychological resources with regard to care and concern for others (Awa et al., 2010; Maslach, 1978; Maslach et al., 2001). Same has been revealed in our studies on the variables of emotional exhaustion and personal accomplishment on burnout of primary key care giver with bipolar affective disorder and burnout of primary key care giver with schizophrenia in relapse. The mean score of burnout on primary key care giver with bipolar affective disorder patient on variables on depersonalization (10.16 ± 2.36), and burnout on primary key care giver with schizophrenia patient is (10.16 ± 2.80). There is statistical significant found on the variables on depersonalization (1.000^{**}) at the level 0.01 level of significance. One of the studies reveals 70% of working caregivers suffer work-related difficulties due to their dual caregiving roles (National Alliance for Caregiving, 2009). In the other past studies found that depersonalization is a emotionally distancing one self and detaching and disengaging from all aspects of the work environment (Demerouti et al., 2014; Maslach et al., 2001; Shin et al., 2014). Also depersonalization may be associated with negative reactions and responses towards work activities (National Institute of Health 2013). In our present studies also revealed that both the group have higher depersonalization, these could be because of over burden of the work load.

Comparison on Social OCCUPATIONAL FUNCTIONING of patient with bipolar affective disorder and schizophrenia in relapse

The mean score of Social occupational functioning scale of bipolar affective disorder in relapse (45.53 ± 8.480) and schizophrenia patient is (51.16 ± 7.09). There is a statistically significant ($.007^{*}$) at 0.05 level. The past studies found that Schizophrenia patients have demonstrated deficits in affect recognition. Schizophrenia patients have general face processing deficits, but affect recognition deficits may lead to more problems in social behavior (Kristine Hooker 2002). Another studies show that among patients with bipolar disorder is not as severe as that seen in schizophrenic patients (Marry cannon et al 1997). Past research suggest that affective psychoses, such as with bipolar psychotic feature have been generally considered to have better outcome outcomes than nonaffective psychosis (Marneros et al., 1990; McGlashan, 1984). Researcher again found evidence suggests that as few as one third of patients with bipolar disorder (BD) achieve functional recovery over time (Huxley and Baldessarini, 2007). In our present study also revealed that there is a severe impairment of schizophrenia patient than bipolar affective disorder these could be because of cognitive impairment and negative symptoms of schizophrenia patient.

Comparison on Life event of primary key care givers of patient with Bipolar affective disorder and schizophrenia in relapse

The mean value of Life event of primary key care givers of patient with Bipolar affective disorder is (1345.76 ± 101.65) and schizophrenia mean value (2533.56 ± 3303), the life event is found higher in primary key care givers of patient with schizophrenia than bipolar affective disorder. There is statistical significant found on both group, the significant level at 0.05 level of significance. One of the studies has

depicted that major life stress appears to be associated more strongly with first episodes of major affective disorder than with later episodes. Life stress and major depression have generally supported this observation (Monroe & Harkness, 2005). The past researcher found bipolar affective disorder (BPAD) is a chronic, relapsing condition which is associated with significant negative outcomes for patients and their caregivers (grover et al 2017). In another study researcher found Bipolar disorder has generally been regarded as having a better functional outcome than schizophrenia. (Sanchez et al 2009). Other studies revealed that demonstrated an association between various forms of psychological stress and health complaints use of primary care services (Katon, 1984; Olfson and Klerman, 1992; Salovey et al., 2000). Prior studies of perceived stigma among caregivers have found that higher levels of mental illness stigma were associated with less adaptive coping and/or mental health outcomes, specifically with less use of social support (Fadden et al., 1987; Rose et al., 2002; Stengler-Wenzke et al., 2004) and increased report of depressive symptoms (Mickelson, 2001). though major difficulties have been found to predict the onset of a depressive episode (Brown & Harris, 1978, 1989). The other studies found major life events in the onset of depression (Brown & Harris, 1989; Hammen, 2005; Mazure, 1998; Monroe & Hadjiyannakis, 2002). In our study finding also revealed that Life event were the most of the primary key care givers has gone through depressed phased. As in the care givers of bipolar affective disorder in relapse has more functioning rather than schizophrenia, these could be because of bipolar affective patient has more functioning than schizophrenia patient, which could lead to focus more on patient.

Comparison on Perceived social support of primary key care givers of patient with Bipolar affective disorder and schizophrenia in relapse

The mean score of perceived social support of primary key care givers of patient with Bipolar affective disorder in relapse (46.33 ± 7.82) and mean score of primary key care givers of patient with schizophrenia in relapse (48.60 ± 7.71). There were no statistically significant found in the both group. In the past studies indicates that caregivers may put their own health and well-being at risk while assisting loved ones (Burton et al. 1997; Tang and Chen 2002). Another studies also reveal that schizophrenia and affective disorders, have a considerable impact on the lives of not only patients but also their caregivers imposes high costs on patients with respect to personal suffering, on caregiver due to a shift of burden from hospital to families and ultimately on society at large with regard to costs of frequent hospitalizations, the need for long-term psychosocial and economic support, and the lost productivity (Awad & Voruganti, 2008). Other studies show that about 70% of patients with schizophrenia live with their family. They depend on the family for care provision (S. W. Chan, 2011). The studies illustrate daily difficulties, burdens and quality of life of family members of people with schizophrenia and mood disorders (Chan, et al, 2011). In our studies revealed that perceived social support of both group of primary care givers has equal perceived social support.

Comparison on Subjective well-being of primary key care givers of patient with Bipolar affective disorder and schizophrenia in relapse

The mean variables of subjective well being of primary key care givers of patient with bipolar affective disorder in relapse in general well-being is (6.63 ± 1.77) and primary key care givers of patient with schizophrenia is (6.33 ± 1.42) primary key care givers of patient with bipolar affective disorder in expectation achievement is (7.00 ± 1.57) and primary key care givers of patient with schizophrenia is (6.76 ± 1.61). Confidence in coping in of primary key care givers of patient with bipolar affective disorder is (7.16 ± 1.23) and schizophrenia is (7.10 ± 1.42). Transcendence in bipolar affective disorder is (6.83 ± 1.51) and schizophrenia is (6.93 ± 1.91). Family group support of primary key care givers of patient with bipolar affective disorder is (6.13 ± 1.77) and schizophrenia is (5.93 ± 1.61). Social support of primary key care givers of patient with bipolar affective disorder is (6.70 ± 1.72) and schizophrenia is (6.73 ± 1.76). Primary group concern of primary key care givers of patient with bipolar affective disorder is (8.80 ± 2.41) and schizophrenia is (7.86 ± 2.20). Inadequate mental mastery of primary key care givers of patient with bipolar affective disorder is (14.66 ± 3.00), and schizophrenia is (14.53 ± 4.09). Percievedill support of primary key care givers of patient with bipolar affective disorder is (11.86 ± 2.43) and schizophrenia is (12.53 ± 3.10). Deficiency in social contacts of primary key care givers of patient with bipolar affective disorder is (7.10 ± 1.49) and schizophrenia is (7.06 ± 1.68). General well-being (negative affect) is (6.43 ± 1.63) and schizophrenia is (6.73 ± 2.59).

In the past studies it has revealed that care of patients can become a significant burden for families, including increased stress, worsened subjective well-being, physical deterioration, and self-value reduction. Patients' families generally experienced both objective and subjective burden, which can foster family dysfunction (Xia Wang et al 2017). Another study found mood disorders as a major cause of impaired functioning and well-being, the original study was criticized (Jencks, 1990). In another research also has a finding that impairments in functioning and well-being reported by Wells and colleagues in patients with active major depressive disorder (Wells et al., 1989). In our studies also found that there is no significant finding between both the groups as both groups has equal subjective well-being, these could be valid if the sample size will be large.

Correlation of Socio-demographics & Clinical Variables with Ways of coping of primary key care givers of patient with bipolar affective disorder in relapse:

The correlation of socio-demographic variables and ways of coping of primary key care givers of patient with bipolar affective disorder in relapse has shown a significantly positive correlation of age with escape avoidance ($r = .423^*$) and Positive Reappraisal ($r = .371^*$) at 0.05 level of significance. Negative correlation has shown duration of stay of caregivers with distancing ($r = -.470^{**}$) at 0.01 level of significance. Again significantly negative correlation of Hamilton depression rating scale with Confrontive (-1.000^{**}) and Escape Avoidance (-1.000^{**}) at 0.01 level of significance. Positive correlation of Hamilton depression rating scale with Self control (1.000^{**}) and Planful Problem solving (1.000^{**}) at 0.01 level of significance. In the past studies revealed that younger adults, older adults used

more distancing and positive reappraisal to cope with stressful situations (Folkman, Lazarus, Pimley, and Novacek (1987). In another studies revealed that Women were more likely than men to utilize turning against self, seeking social support, and escape-avoidance as coping strategies (Labouvie-Vief et al., 1987, 1989). Again another study indicate that core aspects of self and coping vary significantly by sex, early in development, sex differences in defense mechanisms become more pronounced with age (Cramer 1979, 1991). In other studies described the caregiving process as a chronic stressor due to persistent, often physically demanding responsibilities (Hochberg et al 2010). Past research revealed that deleterious effect of BPAD on families in terms of high levels of disability, burden of care, distress associated with symptoms (Chakrabarti et al. 1992, 2003; Perlick et al. 1999). In other past studies revealed that caregiving process is in itself a chronic stressor, which gives rise to strains from several areas, and, ultimately, leads to increased risk for psychiatric distress and diagnosable disorders, including depression (Joling et al. 2010). In our study also revealed that most of the care givers used coping strategies to cope with the situation while taking care of the patient and it was there most tragedy in their life and almost all caregivers had gone through difficult phase of their life while taking care relapse patient.

Correlation of socio-demographics & clinical characteristic with Burnout, stressful life events, perceived social support and subjective well-being with primary key care givers of patient with Bipolar Affective Disorder in relapse

The correlation of socio-demographics and clinical variables of primary key care givers of patient with bipolar affective disorder in relapse shows that significantly positive correlation of age with emotional exhaustion (B1) at 0.05 level of significance. In the past studies revealed that patients illness and its impact on the caregiver are the main sources of stress (Gill and Chakrabarti, 2002). Significantly negative correlation of duration stay of caregiver with emotional exhaustion (B1), ($r = -.405^*$) at 0.05 level of significance. In the previous study revealed that Burden in general and emotional exhaustion were the aspects of subjective burden best predicted by objective burden (Pim and Heleen, 2000). In our studies also found that the age of the patient matters, according to the age of patient, the responsibility increased by caregivers, these could be because by taking care of patient the care givers emotionally burnout. Young mania rating scale have significantly positive correlation with perceived social support ($r = .477^*$) at 0.05 level of significance. In the past studies revealed that perceived social support helps the patient to find help and comply with the proposed treatment (Janson et al., 2003). The significant negative correlation of Hamilton depression rating scale with emotional exhaustion (B1), ($r = -1.000^{**}$), life event ($r = -1.000^{**}$), perceived social support ($r = -1.000^{**}$) and subjective well-being ($r = -1.000^{**}$) at 0.01 level of significance. The significant positive correlation have shown on Hamilton depression rating scale with Personal Accomplishment (B2), ($r = 1.000^{**}$) and Depersonalization (B3), ($r = 1.000^{**}$) at 0.01 level of significance. The significant positive correlation of social occupational functioning is shown with perceived social support ($r = .369^*$) at 0.05 level of significance. In the past studies revealed that caregivers who are prone to depression or anxiety often overestimate the threat posed by the patient's illness and underestimate their own coping abilities leading to ineffective coping (Barrowclough and Parle 1997). In the other studies found caregivers personality, quality of family relationships, or degree of social support may influence the appraisal outcomes in terms of psychological or physical (Szmukler et al 1996). In our studies also revealed that care giver has problem focused strategies, these could be positive outcomes to only give the patient early recovery.

Correlation of socio-demographics & clinical variables with Ways of coping of primary key care givers of patient with schizophrenia in relapse:

The correlation of socio-demographics and ways of coping of primary key care givers of Patient with schizophrenia in relapse has shown significantly negative correlation on family income with Self-control ($r = -.377^*$), Planful Problem solving ($r = -.375^*$) at 0.05 level of significance and family income is positive correlation with Positive Reappraisal ($.443^*$) at 0.05 level of significance. In the past studies revealed that schizophrenia impose considerable personal, social, and economic burden on individuals (Van et al. 2003). In another studies researcher found that the patient's behavioral problems, the caregiver's worries, the patient's dependency, and family disruption were predictors of the levels of problem solving (Lefley 1998). In other research found that Indian caregivers perceived difficulties in several areas such as finance, family relationship, well-being and health, they still perceived burden (Prashant and Shevonne 2010). In our present study also revealed that most of the care givers has a hardship with financial issues, apart from these the care giver used problem focused, these could be because of the resilience throughout their life while taking care of the patient and to give better life.

Correlation of socio-demographics & clinical characteristic with Burnout, stressful life events, perceived social support and subjective well-being with primary key care givers of patient with schizophrenia in relapse

The correlation of socio-demographics and clinical variables of primary key care givers of patient with schizophrenia in relapse have shown a significantly positive correlation of family income with emotional exhaustion (B1), ($r = .403^*$) and personal accomplishment (B2), ($r = .461^*$) at 0.05 level of significance. In the past studies revealed that. Family income is negatively significance with subjective well-being ($r = -.662^{**}$) at 0.01 level of significance. In another studies revealed that Vast majority (44%) of the caregivers in India said that the current financial position is not adequate to look after the patient compared to 22% of the Malaysian caregivers (Prashant and Shevonne 2010). Also the result have shown significantly positive correlation of duration of stay of primary key caregivers with perceived social support is ($r = .365^*$) at 0.05 level of significance. Researcher have revealed that care as an alternative to hospital care, or crisis intervention, providing overnight placement and focusing more on patients than care givers (Breakey 1996, Hoge et al., 1997). The positive syndrome (PANSS) is significantly positive correlation with personal accomplishment (B=2), ($.435^*$) at 0.05 level of significance. Researcher have found that (Runions and Prudo, 1983), reported having more difficulties with problems related to typical positive symptoms. The negative syndrome (PANSS) is significantly

shown negative correlation with perceived social support (-.366**) at 0.01 level of significance. As general psychopathology has shown negative correlation with perceived social support ($r = -.385^*$) at 0.05 level of significance.

In other researcher revealed that negative symptoms have more burdensome than positive ones (Fadden et al., 1987; Schene, 1990). Educated relatives expressed more distress about negative symptom behaviors (e.g., forgetfulness, slowness) than about positive symptom behaviors (Gopinath and Chaturvedi, 1992). In our present study found that the caregiver find most challenging task while handling the patient with schizophrenia in relapse these could be of schizophrenia positive and negative syndrome.

VIII. SUMMARY AND CONCLUSION

1. The aim of the study was to assess stressful life event, coping, social support, subjective well-being and burnout in primary key caregivers of patient with bipolar affective disorder and schizophrenia in relapse. The present study was conducted at Central Institute of psychiatry (CIP), Ranchi, Jharkhand. It was a hospital based cross sectional study. The purposive sampling was used to collect the study sample. The study sample has two group i.e. 30 primary key care givers of patient with bipolar affective disorder in relapse and 30 primary key care givers of patient with schizophrenia in relapse. Informed consent was taken from the patient and primary key care givers. As per the criteria primary key care givers who's stay with less than 2 years was drop out which included the patient duration of illness blow five years was also counted on drop out. The study sample was taken those who full fill the inclusion and exclusion criteria was taken up for the study. Before collection of sample the procedure was explained by researcher to primary key care givers about the study, clinical data sheet, written consent and asked about their doubt and clarified was done according to their queries. The socio-demographic and clinical data sheet was applied on both group of primary key care giver of patient with bipolar affective disorder and schizophrenia in relapse. The clinical variables such as Young mania rating scale (YMRS), Hamilton depression rating scale (HAM-D) was applied on patient with bipolar affective disorder in relapse and Positive and Negative Syndrome Scale (PANSS) was applied on schizophrenia patient. Clinical variables of Social occupational functioning scale (SOFS) were applied on both the group of patient. The clinical variables of primary key care giver of patient with bipolar affective disorder and schizophrenia in relapse were administered same on both group such as: Life event scale, ways of coping, subjective well-being, multidimensional perceived social support and burnout scale. The standard statistical method was used to analyzed data using Statistical package for social Science (SPSS) version 20.0. Descriptive statistics (percentage, mean and standard deviation) were used to describe various sample characteristics. Chi square test was used for describing and comparing categorical data. "t" test was used for group comparison on continuation data and Pearson r was used for correlation analysis.

Over all findings of the studies:

1. The socio demographic profile revealed that there is no significant different found in the terms of age, sex, marital status, religion, education, residence, occupation, family income, family type, total no. of families, family history on both the group of primary key care giver of patient with bipolar affective disorder and schizophrenia in relapse.
2. Significant differences were noted in duration of stay of primary key care givers of both the group of primary key care giver of patient with bipolar affective disorder and schizophrenia in relapse.
3. There was a significant findings in the clinical profile of sample studied, in young mania rating scale and positive - negative syndrome scale, were the result noted that intensity of psychopathology were higher in schizophrenia patient in relapse rather than bipolar affective disorder in relapse.
4. Significant differences were noted in Life event, were the primary key care givers of schizophrenia in relapse has higher stressful life event than bipolar affective disorder in relapse.
5. There was no significant difference found in the ways of coping of both the group of primary key care givers of patient with bipolar affective disorder and schizophrenia in relapse.
6. There was no significant difference found in social support of both the group of primary key care givers of patients with bipolar affective disorder and schizophrenia in relapse.
7. There was no significant difference found in subjective well-being of primary key care givers of patient with bipolar affective disorder and schizophrenia in relapse.
8. Significant differences were noted in burnout on the domain of depersonalization were schizophrenia primary key care giver has higher depersonalisation than primary key care givers of schizophrenia in relapse.
9. Results have shown a significantly positive relation of age with escape avoidance and Positive Reappraisal in ways of coping in primary key care givers of patient with bipolar affective disorder in relapse.
10. Results have shown a significantly negative relation of duration of stay of key care givers with distancing in ways of coping in primary key care givers of patient with bipolar affective disorder in relapse.
11. Results have shown a significantly negative relation of Hamilton depression rating scale with Confrontive in ways of coping in primary key care givers of patient with bipolar affective disorder in relapse.
12. Results have shown no significant relation of social occupational functioning with ways of coping in primary key care givers with bipolar affective disorder in relapse.

13. Results have shown a significantly positive relation of age with emotional exhaustion in burnout in primary key care givers of patient with bipolar affective disorder in relapse.
14. Results have shown a significantly negative relation of duration stay of caregiver with emotional exhaustion in burnout in primary key care givers with bipolar affective disorder in relapse.
15. The young mania rating scales have significantly positive relation with perceived social support in primary key caregivers of bipolar affective disorder in relapse.
16. Results have shown a significantly negative relation of Hamilton depression rating scale with emotional exhaustion in burnout, life event, perceived social support and subjective well-being in caregivers of patients with Bipolar affective disorder in relapse
17. The significant positive relation has shown on Hamilton depression rating scale with personal accomplishment and depersonalization in primary caregivers of Patients with Bipolar affective disorder in relapse
18. The significant positive relation has shown on social occupational functioning with perceived social support in primary caregivers of patients with bipolar affective disorder in relapse
19. Results have shown a significantly negative relation of family income with Self-control, planful problem solving in ways of coping in primary key caregivers of patients with Schizophrenia in relapse
20. Results have shown a significantly positive relation of family income with Positive Reappraisal in primary key caregivers of patients with Schizophrenia in relapse
21. Results have shown a significantly negative relation of total no. of family member with positive reappraisal in primary key caregivers of patients with Schizophrenia in relapse
22. Results have shown a significantly positive relation of family income with emotional exhaustion in burnout in primary key caregivers of patients with Schizophrenia in relapse
23. Results have shown a significantly negative relation of family income with subjective well-being in primary key caregivers of patients with Schizophrenia in relapse
24. The result has shown significantly positive relation of duration of stay of primary key caregivers with perceived social support in primary key caregivers of patients with Schizophrenia in relapse
25. The result has shown significantly positive relation of positive syndrome (PANSS) with personal accomplishment in burnout in primary key caregivers of patients with Schizophrenia in relapse
26. The result has shown significantly negative relation of negative syndrome (PANSS) with perceived social support in primary key caregivers of patients with Schizophrenia in relapse
27. The result has shown significantly negative relation with perceived social support in primary key caregivers of patients with Schizophrenia in relapse.

LIMITATIONS

- The study was conducted in /out – patient Department of Central Institute of psychiatry, Ranchi, Jharkhand.
- The study has a cross sectional design and hence patient and primary key care givers were assessed once.
- Both sexes were not equally distributed in the selected sample.

The sample used for the present study may not represent the entire population from which it has drawn because of the small sample size and heterogeneity in relation to various socio-demographic and cultural variables

FUTURE DIRECTIONS

- The study can be further conducted on a large sample size.
- In future, stratification of the population can be done to ensure appropriate representation of people of all socio-demographic group.
- Both the sexes should be equally represented in the study sample.
- To get the actual representation of the primary key care givers of patient with bipolar affective disorder and schizophrenia in relapse, sample should collected from community if possible.
- In future similar types of study can be conducted on adolescent age below 18 years.
- The scope for intervention by mental health professionals, especially psychiatric social workers in planning and delivering adequate therapeutic services in the clinical context for key caregiver can be conducted.

REFERENCES

- [1] Jefferies, H. B., et al. "Rapamycin selectively represses translation of the" polypyrimidine tract" mRNA family." *Proceedings of the national academy of sciences* 91.10 (1994): 4441-4445.
- [2] Hermanns, Melinda, and Beth Mastel-Smith. "Caregiving: A Qualitative Concept Analysis." *Qualitative Report* 17 (2012): 75.
- [3] Drentea, Patricia. "Caregiving." *The Blackwell Encyclopedia of Sociology* (2007): 1-2.
- [4] Dudley, David T., et al. "A synthetic inhibitor of the mitogen-activated protein kinase cascade." *Proceedings of the National Academy of Sciences* 92.17 (1995): 7686-7689.
- [5] McConnell, S., and J. A. Riggs. "A public policy agenda: Supporting family caregiving." *Family caregiving: agenda for the future*. San Francisco: American Society on Aging (1994).

- [6] Wu, Xingyong, et al. "Immunofluorescent labeling of cancer marker Her2 and other cellular targets with semiconductor quantum dots." *Nature biotechnology* 21.1 (2003): 41-46.
- [7] Shakeel, Sidra, Shabbir Ahmad Rana, and Najma Iqbal Malik. "Burden of care, mental health and subjective well being of family caregivers of elderly patients." *Pakistan Journal of Professional Psychologists Vol 6.1* (2015).
- [8] Hahn, Rainer, Robert Schlegel, and Alois Jungbauer. "Comparison of protein A affinity sorbents." *Journal of Chromatography B* 790.1-2 (2003): 35-51.
- [9] Jefferies, H. B., et al. "Rapamycin selectively represses translation of the" polypyrimidine tract" mRNA family." *Proceedings of the national academy of sciences* 91.10 (1994): 4441-4445.
- [10] Nolan, Peter. *China and the global economy: national champions, industrial policy and the big business revolution*. Springer, 2001.
- [11] Brennan, Teresa. *The transmission of affect*. Cornell University Press, 2004.
- [12] Hammen, Constance, Josephine H. Shih, and Patricia A. Brennan. "Intergenerational transmission of depression: test of an interpersonal stress model in a community sample." *Journal of consulting and clinical psychology* 72.3 (2004): 511.
- [13] Kwan, Mei-Po. "Interactive geovisualization of activity-travel patterns using three-dimensional geographical information systems: a methodological exploration with a large data set." *Transportation Research Part C: Emerging Technologies* 8.1-6 (2000): 185-203.
- [14] Gorgey, Ashraf S., et al. "Effects of spinal cord injury on body composition and metabolic profile—Part I." *The journal of spinal cord medicine* 37.6 (2014): 693-702.
- [15] Sajjadi, Homeira, et al. "A systematic review of the prevalence and risk factors of depression among Iranian adolescents." *Global journal of health science* 5.3 (2013): 16.
- [16] Dore, Glenys, and Sarah E. Romans. "Impact of bipolar affective disorder on family and partners." *Journal of affective disorders* 67.1-3 (2001): 147-158.
- [17] Gallagher, Sally K., and David Mechanic. "Living with the mentally ill: effects on the health and functioning of other household members." *Social Science & Medicine* 42.12 (1996): 1691-1701.
- [18] Kaliski Jr, Burton S. "Cryptographic key escrow system having reduced vulnerability to harvesting attacks." U.S. Patent No. 5,633,929. 27 May 1997.
- [19] Tang, Sanyi, and Lansun Chen. "Density-dependent birth rate, birth pulses and their population dynamic consequences." *Journal of Mathematical Biology* 44.2 (2002): 185-199.
- [20] Schulz, Waldean A. "Apparatus for determining the position and orientation of an invasive portion of a probe inside a three-dimensional body." U.S. Patent No. 5,622,170. 22 Apr. 1997.
- [21] MICHAEL, J. BROWN, E. LAWSON ROBERT, and C. A. LONG BEACH. "Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545." (2000).
- [22] Kay, Stanley R., Abraham Fiszbein, and Lewis A. Opler. "The positive and negative syndrome scale (PANSS) for schizophrenia." *Schizophrenia bulletin* 13.2 (1987): 261-276.
- [23] Machado-Vieira, Rodrigo, et al. "Decreased plasma brain derived neurotrophic factor levels in unmedicated bipolar patients during manic episode." *Biological Psychiatry* 61.2 (2007): 142-144.
- [24] Hooijer, Chris, et al. "The Hamilton Depression Rating Scale (HDRS): changes in scores as a function of training and version used." *Journal of affective disorders* 22.1-2 (1991): 21-29.
- [25] Byrne, Donn, William Griffitt, and Daniel Stefaniak. "Attraction and similarity of personality characteristics." *Journal of Personality and social Psychology* 5.1 (1967): 82.
- [26] Kim, Kwang-Iel, et al. "Students' stress in China, Japan and Korea: A transcultural study." *International Journal of Social Psychiatry* 43.2 (1997): 87-94.
- [27] Saraswat, Nirmal, et al. "The Social Occupational Functioning Scale (SOFS): a brief measure of functional status in persons with schizophrenia." *Schizophrenia research* 81.2-3 (2006): 301-309.
- [28] Wheeler, Denna L., et al. "A reliability generalization meta-analysis of coefficient alpha for the Maslach Burnout Inventory." *Educational and Psychological Measurement* 71.1 (2011): 231-244.
- [29] Zimet, Gregory D., et al. "The multidimensional scale of perceived social support." *Journal of personality assessment* 52.1 (1988): 30-41.
- [30] Nagpal, R., and H. Sell. "Assessment of Subjective Well-being: The subjective well-being inventory." *World Health Organisation* (1992).
- [31] Higuchi, Cinthia H., et al. "Factor structure of the Positive and Negative Syndrome Scale (PANSS) in Brazil: convergent validation of the Brazilian version." *Brazilian Journal of Psychiatry* 36.4 (2014): 336-339.
- [32] Pashkov, Vasily, Alexander Shalimov, and Ruslan Smeliansky. "Controller failover for SDN enterprise networks." *2014 International Science and Technology Conference (Modern Networking Technologies)(MoNeTeC)*. IEEE, 2014.
- [33] Gautam, Sneha, et al. "Characterization of PM2. 5 generated from opencast coal mining operations: A case study of Sonepur Bazari Opencast Project of India." *Environmental Technology & Innovation* 6 (2016): 1-10.
- [34] Reddy, William M., and William M. Reddy. *The navigation of feeling: A framework for the history of emotions*. Cambridge University Press, 2001.
- [35] Barreto, P. R. P., A. F. A. Vilela, and R. Gargano. "Int. J. Quantum Chem." (2005).
- [36] Joseph, Eugene, et al. "Bar code reader for reading both one dimensional and two dimensional symbologies with programmable resolution." U.S. Patent No. 5,710,417. 20 Jan. 1998.
- [37] Hayhoe, Katharine, et al. "Emissions pathways, climate change, and impacts on California." *Proceedings of the national academy of sciences* 101.34 (2004): 12422-12427.
- [38] Chang, WL William, and Peter A. Barry. "Attenuation of innate immunity by cytomegalovirus IL-10 establishes a long-term deficit of adaptive antiviral immunity." *Proceedings of the National Academy of Sciences* 107.52 (2010): 22647-22652.
- [39] Levick, Stephen E. "Commentary by Stephen E. Levick (Philadelphia)." *Neuropsychanalysis* 4.1 (2002): 106-110.
- [40] Rahe, Richard H., et al. "The social readjustment rating scale: A comparative study of Swedes and Americans." *Journal of Psychosomatic Research* 15.3 (1971): 241-249.
- [41] Abramovitch, Henry, et al. "A tale of two exposures: a comparison of two approaches to early clinical exposure." *Education for Health: Change in Learning & Practice* 15.3 (2002).
- [42] Squires, Matthew S., et al. "Relevance of mitogen activated protein kinase (MAPK) and phosphatidylinositol-3-kinase/protein kinase B (PI3K/PKB) pathways to induction of apoptosis by curcumin in breast cells." *Biochemical pharmacology* 65.3 (2003): 361-376.
- [43] Ridder, Denise De. "What is wrong with coping assessment? A review of conceptual and methodological issues." *Psychology and health* 12.3 (1997): 417-431.

- [44] Evers, A. W. M., et al. "Determinants of psychological distress and its course in the first year after diagnosis in rheumatoid arthritis patients." *Journal of behavioral medicine* 20.5 (1997): 489-504.
- [45] Stahl, Günter K., and Paula Caligiuri. "The effectiveness of expatriate coping strategies: The moderating role of cultural distance, position level, and time on the international assignment." *Journal of Applied Psychology* 90.4 (2005): 603.
- [46] Brief, Arthur P., and Jennifer M. George. "Psychological stress and the workplace: A brief comment on Lazarus outlook." *Occupational stress: a handbook*. Philadelphia: Taylor and Francis (1995): 15-19.
- [47] Rouette, Mélisa. "Expériences et perceptions des rapports de genre chez les femmes voyageant en Inde." (2017).
- [48] Hasibuan, Nelda Rosita, Lucia Ratna Kartika Wulan, and Putri Asmita Wigati. "Analysis The Standard of Medical Record Resources Needed, Based on Workload at Ken Saras Hospital Medical Record Instalation 2013." *Jurnal Kesehatan Masyarakat (e-Journal)* 2.2 (2014): 140-147.
- [49] Magiera, Kathleen, et al. "On the Road to More Collaborative Teaching: One School's Experience." *Teaching Exceptional Children Plus* 2.5 (2006): n5.
- [50] Wolpin, Jacob, Ronald J. Burke, and Esther R. Greenglass. "Is job satisfaction an antecedent or a consequence of psychological burnout?." *Human relations* 44.2 (1991): 193-209.
- [51] Jackson, Susan E., Richard L. Schwab, and Randall S. Schuler. "Toward an understanding of the burnout phenomenon." *Journal of applied psychology* 71.4 (1986): 630.
- [52] Raquepaw, Jayne M., and Rowland S. Miller. "Psychotherapist burnout: A componential analysis." *Professional Psychology: Research and Practice* 20.1 (1989): 32.
- [53] Maslach, Christina, and Susan E. Jackson. "The measurement of experienced burnout." *Journal of organizational behavior* 2.2 (1981): 99-113.
- [54] Chou, Kee-Lee. "Social support and subjective well-being among Hong Kong Chinese young adults." *The Journal of Genetic Psychology* 160.3 (1999): 319-331.
- [55] Cullen, J. P., J. L. Gregory, and L. A. Noto. "The Teacher Attitudes Toward Inclusion Scale (TA-TIS) Technical Report (ED509930)." (2010).
- [56] Zimet, Gregory D., et al. "The multidimensional scale of perceived social support." *Journal of personality assessment* 52.1 (1988): 30-41.
- [57] Cargill, Michele, et al. "Characterization of single-nucleotide polymorphisms in coding regions of human genes." *Nature genetics* 22.3 (1999): 231-238.
- [58] Glaser, Philippe, et al. "Dynamic, mitotic-like behavior of a bacterial protein required for accurate chromosome partitioning." *Genes & development* 11.9 (1997): 1160-1168.
- [59] Van Praag, H. J., et al. "Root growth inhibition of the hologenic layer of moder humus under spruce (*Picea abies* KARST.) and beech (*Fagus silvatica* L.)." *Plant and soil* 135.2 (1991): 175-183.
- [60] Parducci, Allen. Happiness, pleasure, and judgment: The contextual theory and its applications. Lawrence Erlbaum Associates, Inc, 1995.
- [61] Schwartz, Martin A., Michael D. Schaller, and Mark H. Ginsberg. "Integrins: emerging paradigms of signal transduction." *Annual review of cell and developmental biology* 11.1 (1995): 549-599.
- [62] Safri, Syafiqah Nur Azrie, et al. "Impact behaviour of hybrid composites for structural applications: A review." *Composites Part B: Engineering* 133 (2018): 112-121.
- [63] Anheier, Helmut K., Mary Kaldor, and Marlies Glasius, eds. *Global civil society 2005/6*. Sage, 2005.
- [64] Gorgey, Ashraf S., et al. "Effects of spinal cord injury on body composition and metabolic profile—Part I." *The journal of spinal cord medicine* 37.6 (2014): 693-702.
- [65] Morin, Ryan D., et al. "Frequent mutation of histone-modifying genes in non-Hodgkin lymphoma." *Nature* 476.7360 (2011): 298-303.
- [66] Godbole, S., et al. "Preparation and characterization of biodegradable poly-3-hydroxybutyrate–starch blend films." *Bioresource technology* 86.1 (2003): 33-37.
- [67] Chakrabarti, Subho, and Sapna Gill. "Coping and its correlates among caregivers of patients with bipolar disorder: a preliminary study." *Bipolar disorders* 4.1 (2002): 50-60.
- [68] Maslach, Christina, Wilmar B. Schaufeli, and Michael P. Leiter. "Job burnout." *Annual review of psychology* 52.1 (2001): 397-422.
- [69] Marsh, Herbert W., et al. "Exploratory structural equation modeling: An integration of the best features of exploratory and confirmatory factor analysis." *Annual review of clinical psychology* 10 (2014): 85-110.
- [70] Deroide, Nicolas, et al. "MFGE8 inhibits inflammasome-induced IL-1 β production and limits postischemic cerebral injury." *The Journal of clinical investigation* 123.3 (2013): 1176-1181.
- [71] Maslach, Christina, Wilmar B. Schaufeli, and Michael P. Leiter. "Job burnout." *Annual review of psychology* 52.1 (2001): 397-422.
- [72] Dix, Debra Marie. "The relationship between coping strategies and burnout for caregivers of adjudicated youth." (2017).
- [73] Awa, Wendy L., Martina Plaumann, and Ulla Walter. "Burnout prevention: A review of intervention programs." *Patient education and counseling* 78.2 (2010): 184-190.
- [74] Rafferty, James P., et al. "Validity of the Maslach Burnout Inventory for family practice physicians." *Journal of clinical psychology* 42.3 (1986): 488-492.
- [75] Maslach, Christina, Wilmar B. Schaufeli, and Michael P. Leiter. "Job burnout." *Annual review of psychology* 52.1 (2001): 397-422.
- [76] Grady, Patricia A., and Louise M. Rosenbaum. "The science of caregiver health." *Journal of Nursing Scholarship: An Official Publication of Sigma Theta Tau International Honor Society of Nursing/Sigma Theta Tau* 47.3 (2015): 197.
- [77] Xanthopoulou, Despoina, et al. "The role of personal resources in the job demands-resources model." *International journal of stress management* 14.2 (2007): 121.
- [78] Maslach, Christina, Wilmar B. Schaufeli, and Michael P. Leiter. "Job burnout." *Annual review of psychology* 52.1 (2001): 397-422.
- [79] Lim, Seong Jae, Hwi Tae Lim, and Cheol Woong Shin. "Mobile phone." U.S. Patent Application No. 29/433,913.
- [80] Cyranowski, Jill M., et al. "Assessing social support, companionship, and distress: National Institute of Health (NIH) Toolbox Adult Social Relationship Scales." *Health Psychology* 32.3 (2013): 293.
- [81] Lin, Susan X., et al. "Do nurse practitioners make a difference in provision of health counseling in hospital outpatient departments?." *Journal of the American Academy of Nurse Practitioners* 16.10 (2004): 462-466.
- [82] Cannon, Byron. *Politics of Law and the Courts in Nineteenth-century Egypt*. Salt Lake City, UT: University of Utah Press, 1988.
- [83] Deister, A., et al. "Long-term outcome of affective, schizoaffective, and schizophrenic disorders: a comparison." *Affective and Schizoaffective Disorders*. Springer, Berlin, Heidelberg, 1990. 157-167.
- [84] Fenton, Wayne S., and Thomas H. McGlashan. "Risk of schizophrenia in character disordered patients." *The American journal of psychiatry* (1989).
- [85] Huxley, Nancy, and Ross J. Baldessarini. "Disability and its treatment in bipolar disorder patients." *Bipolar disorders* 9.1-2 (2007): 183-196.
- [86] Monroe, Scott M., et al. "Life stress and the long-term treatment course of recurrent depression: III. Nonsevere life events predict recurrence for medicated patients over 3 years." *Journal of Consulting and Clinical Psychology* 74.1 (2006): 112.

- [87] Ruggles, Steven, et al. "Integrated public use microdata series: version 7.0. Minneapolis (MN): University of Minnesota, 2017." (2017).
- [88] Ryan, Caitlin, et al. "Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults." *Pediatrics* 123.1 (2009): 346-352.
- [89] Katon, Wayne J. "Chest pain, cardiac disease, and panic disorder." *The Journal of clinical psychiatry* (1990).
- [90] Olfson, Mark, and Gerald L. Klerman. "The treatment of depression: prescribing practices of primary care physicians and psychiatrists." *Journal of Family Practice* 35 (1992): 627-627.
- [91] Ciarrochi, Joseph V., Amy YC Chan, and Peter Caputi. "A critical evaluation of the emotional intelligence construct." *Personality and Individual differences* 28.3 (2000): 539-561.
- [92] Fadden, Grainne, Paul Bebbington, and Liz Kuipers. "The burden of care: the impact of functional psychiatric illness on the patient's family." *The British Journal of Psychiatry* 150.3 (1987): 285-292.
- [93] Rose, Colin, and Murray D. Smith. "MathStatica: mathematical statistics with mathematica." *Compstat. Physica*, Heidelberg, 2002.
- [94] Stengler-Wenzke, Katarina, et al. "Reduced serotonin transporter-availability in obsessive-compulsive disorder (OCD)." *European archives of psychiatry and clinical neuroscience* 254.4 (2004): 252-255.
- [95] Bahr, Jeffrey L., et al. "Dissolution of small diameter single-wall carbon nanotubes in organic solvents?." *Chemical Communications* 2 (2001): 193-194.
- [96] Brown, George W. "Tirril O. Harris. 1978. Social Origins of Depression." (1989).
- [97] Strauman, Timothy J. "Self-discrepancies in clinical depression and social phobia: Cognitive structures that underlie emotional disorders?." *Journal of Abnormal Psychology* 98.1 (1989): 14.
- [98] Hammen, Constance. "Stress and depression." *Annu. Rev. Clin. Psychol.* 1 (2005): 293-319.
- [99] Mazure, Carolyn M. "Life stressors as risk factors in depression." *Clinical Psychology: Science and Practice* 5.3 (1998): 291-313.
- [100] Church, Lincoln Memorial United Methodist. "2002-08-24; Pamphlets; In Celebration of the Life of Gerald Lawrence Higgs." (2002).
- [101] Kaliski Jr, Burton S. "Cryptographic key escrow system having reduced vulnerability to harvesting attacks." U.S. Patent No. 5,633,929. 27 May 1997.
- [102] Tang, Sanyi, and Lansun Chen. "Density-dependent birth rate, birth pulses and their population dynamic consequences." *Journal of Mathematical Biology* 44.2 (2002): 185-199.
- [103] Durmaz, Hatice, and Ayşe Okanlı. "Investigation of the effect of self-efficacy levels of caregiver family members of the individuals with schizophrenia on burden of care." *Archives of Psychiatric Nursing* 28.4 (2014): 290-294.
- [104] Chan, Siew Wee, et al. "Hippo pathway-independent restriction of TAZ and YAP by angiotenin." *Journal of Biological Chemistry* 286.9 (2011): 7018-7026.
- [105] Ng, Kok-Yee, et al. "Rating leniency and halo in multisource feedback ratings: Testing cultural assumptions of power distance and individualism-collectivism." *Journal of Applied Psychology* 96.5 (2011): 1033.
- [106] Elgrishi, Noémie, et al. "Molecular polypyridine-based metal complexes as catalysts for the reduction of CO₂." *Chemical Society Reviews* 46.3 (2017): 761-796.
- [107] Jencks, Christopher, and Susan E. Mayer. "The social consequences of growing up in a poor neighborhood." *Inner-city poverty in the United States* 111 (1990): 186.
- [108] Wells, Charles H. "Graphics display system with arbitrary overlapping viewports." U.S. Patent No. 4,812,834. 14 Mar. 1989.
- [109] Folkman, Susan, et al. "Age differences in stress and coping processes." *Psychology and aging* 2.2 (1987): 171.
- [110] Labouvie-Vief, Gisela, Marlene DeVoe, and Diana Bulka. "Speaking about feelings: Conceptions of emotion across the life span." *Psychology and aging* 4.4 (1989): 425.
- [111] Cramer, Duncan, and Jonsanto Fong. "Effect of rational and irrational beliefs on intensity and "inappropriateness" of feelings: A test of rational-emotive theory." *Cognitive Therapy and Research* 15.4 (1991): 319-329.
- [112] Zhang, W1, et al. "OARS recommendations for the management of hip and knee osteoarthritis: part III: Changes in evidence following systematic cumulative update of research published through January 2009." *Osteoarthritis and cartilage* 18.4 (2010): 476-499.
- [113] Georgiadis, M. M., et al. "Crystallographic structure of the nitrogenase iron protein from *Azotobacter vinelandii*." *Science* 257.5077 (1992): 1653-1659.
- [114] Godbole, S., et al. "Preparation and characterization of biodegradable poly-3-hydroxybutyrate-starch blend films." *Bioresource technology* 86.1 (2003): 33-37.
- [115] Perlick, Deborah, et al. "Burden experienced by care-givers of persons with bipolar affective disorder." *The British Journal of Psychiatry* 175.1 (1999): 56-62.
- [116] Joling, Karljin J., et al. "Incidence of depression and anxiety in the spouses of patients with dementia: a naturalistic cohort study of recorded morbidity with a 6-year follow-up." *The American Journal of Geriatric Psychiatry* 18.2 (2010): 146-153.
- [117] Chakrabarti, Subho, and Sapna Gill. "Coping and its correlates among caregivers of patients with bipolar disorder: a preliminary study." *Bipolar disorders* 4.1 (2002): 50-60.
- [118] Cuijpers, Pim, and Heleen Stam. "Burnout among relatives of psychiatric patients attending psychoeducational support groups." *Psychiatric services* 51.3 (2000): 375-379.
- [119] Janson, Torsten. *Your Cradle is Green: The Islamic Foundation and the Call to Islam in Children's Literature*. Vol. 18. Lund University, 2003.
- [120] Barrowclough, Christine, and Michael Parle. "Appraisal, psychological adjustment and expressed emotion in relatives of patients suffering from schizophrenia." *The British Journal of Psychiatry* 171 (1997): 26.
- [121] Szmukler, G. I., et al. "Caring for relatives with serious mental illness: the development of the Experience of Caregiving Inventory." *Social psychiatry and psychiatric epidemiology* 31.3-4 (1996): 137-148.
- [122] Eagly, Alice H., Mary C. Johannesen-Schmidt, and Marloes L. Van Engen. "Transformational, transactional, and laissez-faire leadership styles: a meta-analysis comparing women and men." *Psychological bulletin* 129.4 (2003): 569.
- [123] Lefley, Harriet P. "Families, culture, and mental illness: Constructing new realities." *Psychiatry* 61.4 (1998): 335-355.
- [124] Talwar, Prashant, and Shevonne Tresa Matheiken. "Caregivers in schizophrenia: A cross cultural perspective." *Indian journal of psychological medicine* 32.1 (2010): 29.
- [125] Talwar, Prashant, and Shevonne Tresa Matheiken. "Caregivers in schizophrenia: A cross cultural perspective." *Indian journal of psychological medicine* 32.1 (2010): 29.
- [126] Hoge, Steven K., et al. "The MacArthur adjudicative competence study: diagnosis, psychopathology, and competence-related abilities." *Behavioral Sciences & the Law* 15.3 (1997): 329-345.
- [127] Runions, Joanne, and Raymond Prudo. "Problem behaviours encountered by families living with a schizophrenic member." *The Canadian Journal of Psychiatry* 28.5 (1983): 382-386.

- [128]Fadden, Grainne, Paul Bebbington, and Liz Kuipers. "The burden of care: the impact of functional psychiatric illness on the patient's family." *The British Journal of Psychiatry* 150.3 (1987): 285-292.
- [129]Schene, A. H. "Objective and subjective dimensions of family burden." *Social Psychiatry and Psychiatric Epidemiology* 25.6 (1990): 289-297.
- [130]Gopinath, P. S., and S. K. Chaturvedi. "Distressing behaviour of schizophrenics at home." *Acta Psychiatrica Scandinavica* 86.3 (1992): 185-188.

AUTHORS

First Author – Ms. Techi Mekap: PhD scholar , Psychiatric Social Work (Ranchi Institute of Neuro- Psychiatry and Allied Science).
Second Author – Mrs. Mittu Muthu Varghese : Assitant Professor of Psychiatric Social Work(Central Institute Of Psychiatry).
Third Author – Dr. Manisha Kiran :Associate Professor & Head Of Department of Psychiatric Social work (Ranchi Institute of Neuro- Psychiatry and Allied Science).
Fourth Author – Dr. Nishant Goyal : Assistant Professor of Psychiatry (Central Institute of Psychiatry)