

CHILDREN'S REACTION TO HOSPITALIZATION

Illness and hospitalization are too frequent occurrences in the lives of children. It is estimated that 2-3% of all children have illnesses severe enough to affect growth, development and functioning. The children's view of the concept of illness is the vital determinants of their adjustment to illness. In India children's view is often not sought. While reviewing literature on this topic I came across the views of children taken into account in matters affecting them is a key principle of the National service framework for children, young people and maternity services- Standards for hospital services (Department of health, 2003). It emphasizes that hospital services should be child centered. Children should be consulted and involved in all aspects of their care. Children's view and their experiences are important in providing services which are responsive to their needs. It is of utmost importance as their views are often not heard due to illness, developmental status, limited communication abilities or professional attitudes. Instead parents are given importance and their inference of illness is sought. Usually care givers (parents) act as proxies for children.

Children's reaction

Although responses to illness and hospitalization are typical of persons of all ages, hospitalization is a stressful experience for children in particular. Children less than 3 years of age view illness as an external agent which causes pain and discomfort. While children in the age range of 4 and 13 years view an illness as punishment for real or perceived indiscretion. They fear loss of control, pain or discomfort, lagging behind in school performance, destruction of body image, separation from significant others, disruption of peer relationships and death (Thompson, 1994). Similar kind of reactions are noticed in adolescents under stress who have the ability to understand their illness like adults. These

reactions vary according to various stages of development, biological, psychological, social and illness related factors.

A small portion of children develop mental disorders during the course of their illness. One should not discard symptoms as a normal reaction to illness. Diagnoses often encountered by the consultation-liaison psychiatrist in a pediatric hospital include adjustment disorder, acute stress reaction, posttraumatic stress disorders, anxiety disorders and depression.

Factors affecting children's reaction

For the comprehensive understanding the factors which might influence children's reaction, the following variables are to be looked into:

- Developmental - Developmental stage of the child, Premorbid functioning level and cognitive maturity
- Genetic- Genetic endowment, response to medication, perceptual skills, learning abilities, temperament predisposition to mental illness and physical illnesses.
- Psychological- Ones own perception and reaction to illness, ability to attach and maintain relationships.
- Social- Strengths and weaknesses of care taking environment including individual, cultural, societal and national values, intelligence, temperament or personality of caregivers, pre-existing mental or physical disorder, religious values, socio-cultural views about illness.
- Illness-related- Chronic versus acute illness, Age (early childhood and adolescent patients), Delayed diagnoses or Misdiagnosis, treatment regimens and disabilities.

Management issues:

- Health professionals need to promote a safe environment in the hospital. Children should be encouraged to bring bare minimum of home items to hospital to personalize their bed space (Coyne, 2006).
- Encourage visitors i.e. friends, family, school to reduce adverse effects of hospitalization (Coyne, 2006).
- Allow the children to speak for themselves about illness and hospitalization.
- Age appropriate explanation for children about their illness and hospitalization. The language should be plain and simple. Relaxation techniques prior to invasive procedures can be of help.
- Children should be involved in planning their care while hospitalization which can reduce their fear and anxiety.
- Any intervention to be explained to children beforehand. Information should not be forced on children who are disinterested, as information-limiting is an effective coping behaviour for some children (Thompson, 1994).
- Ward environment should be patient friendly rather than health professionals.
- Treat pain aggressively and simultaneously painful intramuscular injections should be avoided.
- Psychiatric consultation- Certain cases do require psychiatric consultation. Indications for psychiatric referral include:
 - Difficulty in overcoming child's denial or regression which interferes treatment procedures
 - Suspected depression
 - Delirium

In an Indian setting, apart from medical schools only a very few specialized hospitals for children are available. Children and adults are often treated along. Special services such as primary mother and child health care facilities prove however that special care for children as children, gives much better

outcomes in terms of psychological recovery from illness. Apart from a more child centered treatment, more pediatric hospitals are therefore recommended.

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Dr. Vinod K. Sinha, D.P.M., M.D.
Professor of Psychiatry
Central Institute of Psychiatry,
Kanke, Ranchi-834006, Jharkhand
E-mail : vinod_sinhacip@yahoo.co.in

DOES ALMOST EVERYBODY SUFFER FROM A BIPOLAR DISORDER?Sujit Sarkhel¹, Arnab Bhattacharya², Shashi K.Pande³**ABSTRACT**

The concept of bipolar disorder has evolved over centuries beginning from Greek physicians in second century AD to Kraepelin's manic depressive psychosis, finally culminating in unipolar-bipolar dichotomy of Leonhard, Perris and Angst. Subsequent research has expanded the concept of 'soft bipolar spectrum' to include bipolar II, pharmacological hypomania, affective temperaments, borderline personality disorder, impulse control disorders, substance use disorders, schizoaffective disorder, eating disorders, migraine and post-partum highs. Alteration of the existing diagnostic criteria for hypomania and mixed states has been proposed. Several indicators of bipolar diathesis in unipolar depression have been identified. Studies incorporating a broader view of bipolarity have reported prevalence rates upto 8.2%. Recent studies have favoured continuity between unipolar and bipolar disorders, lending further support to the spectrum concept. Such adaptive traits as creativity and leadership have been linked to bipolarity. However, widening of the boundaries of bipolarity has faced criticism from several quarters. Concern has been expressed that undue expansion would lead to dilution of core concept of bipolarity. For others, 'disease mongering' to market mood stabilizers seems to be the ulterior motive behind such expansion. On the other hand, the proponents of the spectrum concept argue that early recognition of underlying bipolarity with consequent use of mood stabilizers would improve long-term course and outcome of the illness. Properly designed epidemiologic and genetic studies seem to be the only option to find an apt answer to the ongoing debate.

Keywords: *Bipolarity, spectrum, temperament, creativity*

INTRODUCTION

Kraepelin's description of manic depressive psychosis reflects a unitary view of mood disorders which has been subsequently dichotomized into bipolar disorder and major depressive disorder. Bipolar disorders involve the presence (or history) of manic episodes, mixed episodes, or hypomanic episodes, usually accompanied by the presence (or history) of major depressive episodes (American Psychiatric Association, 2000). Studies based on current nosological criteria have reported prevalence rates of about 1% (Weissman et al, 1996) for bipolar disorders. However, research data accumulated over the last two decades favour a broader concept of bipolarity, encompassing several related psychiatric disorders.

BIPOLAR DISORDER: AN HISTORICAL OVERVIEW

The origin of bipolar disorder could be traced as far back as 150 AD when the Greek physician Arataeus of Cappadocia in Anatolia described the connection between the two major mood states: mania and melancholia. The concept re-emerged 17 centuries later in France in Falret's "folie circulaire" and Baillarger's "folie a double forme," both of which were published in 1854. Kraepelin in 1899 grouped together all affective disorders under the single entity of manic depressive psychosis with mixed states serving as a link between manic and depressive states. About half a century later, working independently Karl Leonhard in 1957, Jules Angst in 1966, Carlo Perris in 1966 and George Winokur in 1969 formulated the distinction between unipolar and bipolar disorder (Marneros, 2001).

EMERGENCE OF A BROADER CONCEPT OF BIPOLARITY

The unipolar-bipolar dichotomy left out several affective conditions lying in between, such patients being typically encountered in the pedigrees of bipolar probands. Thus, the next step in the development of the concept of bipolar disorders was the extension of the group (Marneros, 2001). Dunner et al (1976) introduced the distinction between bipolar I (with manic episodes) and bipolar II (with hypomanic episodes). Klerman (1981) expanded it further to include bipolar III for patients having antidepressant-induced switch. Workers such as Akiskal et al (1977) gave rebirth to the concept of cyclothymia, originally coined by Kahlbaum and Hecker a century ago. Finally, Akiskal and Mallya (1987) proposed the concept of a "soft bipolar spectrum" to include bipolar II, cyclothymic and hyperthymic traits, familial bipolarity and treatment-emergent hypomania. Endicott, Klerman, Cassano, Akiskal and Pinto extended the spectrum further.

CONDITIONS RELATED TO BIPOLAR DISORDERS

Hypomania

Hypomania was described, conceptualized and named by Erich Mendel in 1881 to characterize the types of mania having a lower intensity (Angst & Marneros, 2001). Akiskal et al (2000) have proposed that the DSM-IV duration criteria of four days for hypomania is unnecessarily long, as substantiated in the Memphis (Akiskal et al, 1979) and Zurich (Wicki & Angst, 1991) studies. Moreover, the Zurich study identified recurrent and sporadic varieties of brief hypomania as important diagnostic groups with longitudinal prevalence of 2.8 %.

Bipolar II Disorder

Bipolar II disorder, consisting of episodes of hypomania superimposed on major depressive episodes, was conceptualized by Dunner et al (1976). In such cases, patients are usually hospitalized for major depression and only upon further enquiry history of hypomanic episodes is elicited (Akiskal, 2002). Since this diagnosis depends on patient's memory and the clinician's repeated probing, it is often missed.

It has been found that 30-55 % of all major depressions conform to bipolar II or its variants (Akiskal & Mallya, 1987; Koukopoulos et al, 1980). According to Akiskal (2002), characteristics that predict bipolar II converters include early age of onset of first depression, high rates of scholastic and job maladjustment, isolated "antisocial" acts, drug abuse and in such converters the index depressive episode is characterized by phobic anxiety, interpersonal sensitivity, somatization, worsening in evening, demanding behaviour, subjective or overt anger, underlying cyclothymic temperament marked by mood lability, energy, activity and day dreaming.

Bipolar III Disorder (Pharmacological Hypomania)

After the description of antidepressant-induced switch by Bunney et al (1972), the issue has become relevant to psychiatrists. Klerman (1981) classified such patients under the rubric of bipolar III. Current evidence suggests that depression with bipolar family history should be closely observed for eventual bipolar transformation; observed hypomania on antidepressants may represent the first gross indication for such transformation (Akiskal et al, 1983), which may also occur in dysthymia (Rosenthal et al, 1981), social phobia, obsessive compulsive illness, and other anxiety states (Himmelhoch, 1998).

Rapid Cycling

Patients with rapid cycling disorder present a minimum of four episodes per year, i.e., mania / hypomania and major depression (Maj et al, 1994). They are most likely to arise from a base of bipolar II (Coryell et al, 1992). Rapid-cycling patients lie along a spectrum based on the duration of episodes: rapid (> 4/ year), ultra-rapid (> 4/ month) and ultradian (> within a day) cycling patterns. They are distinct from cyclothymic disorder, which pursues a sub-threshold course as far as symptoms are concerned (Akiskal et al, 2000). Rapid cycling occurs in 13-56% of bipolar patients (Kilzieh & Akiskal, 1999) and appears to be a transient phase in the course of bipolar disorder; risk factors include female sex, cyclothymic temperament, borderline hypothyroidism and excessive use of antidepressants (Koukopoulos et al, 1980).

Studies have shown that rapid cycling is distinct from mixed states (Perugi et al, 2000; Himmelhoch et al, 1976).

Affective Temperament

The concept of 'affective temperament' derives from Greco-Roman and continental European psychiatry and refers to specific constitutionally based affective dispositions. It is a dimensional construct that only in its extremes can be considered abnormal in a statistical and perhaps clinical sense (Perugi & Akiskal, 2002). In ancient Greek medicine, four temperaments were regarded as basic: melancholic, choleric, sanguine and phlegmatic. Through the contributions in modern times of Kraepelin (1920), Kretschmer (1929), Schneider (1962), and, in recent years of Akiskal et al (1979) and Akiskal (2005), the basic temperaments are now considered to be: the dysthymic, the hyperthymic, the irritable and the cyclothymic. The validation of these basic temperaments was carried out in a large study involving 1010 students without psychiatric disorders (Akiskal et al, 1998). Akiskal (2005) maintains that each temperament is at the root of various affective disorders. Individuals with hyperthymic and cyclothymic temperaments characteristically develop bipolar I and bipolar II disorders respectively (Koukopoulos et al, 2006). A smaller segment of bipolar I patients has a dysthymic premorbid temperament; these patients often suffer from mixed dysphoric manias (Akiskal et al, 1998).

Among dysthymic subjects, characterized by brooding and low confidence, there exist some driven individuals who might be mobilized by anti-depressants, particularly SSRIs, into short-lived hypomanic states and sometimes protracted hyperthymia. Family history is often bipolar in these individuals. This condition is called "driven dysthymia" and might be considered a putative sub-bipolar dysthymic subtype within the soft bipolar spectrum (Akiskal, 2002).

Mixed States

The conceptual description of mixed states was given by Kraepelin and his co-worker Weygandt in 1899 (Marneros, 2001). It consisted of six types of which anxious mania and

agitated depression are the most prevalent in current clinical practice (Akiskal, 2002). The concept re-emerged in 1980s in the works of Himmelhoch (1979), Akiskal (1992, 1996) and McElroy et al (1992, 1995). Akiskal (1992) formulated three types of mixed states based on admixture of temperaments and symptoms:

- Type I (depressive temperament + mania)
- Type II (cyclothymic temperament + major depression)
- Type III (hyperthymic temperament + major depression)

A large literature from both European and US centres (McElroy et al, 1995; Perugi et al, 1997; Akiskal et al, 1998) suggests that few depressive symptoms would suffice in diagnosing mixed mania. In the large French EPIMAN study (Akiskal et al, 1998), the rates of DSM-IV mixed states were 6.7%, but using a cut-off of two or more depressive symptoms the value jumped to 37% (Akiskal, 2002).

Borderline Personality Disorder (BPD)

According to DSM-IV-TR (American Psychiatric Association, 2000), the basic factor distinguishing mood disorders and BPD is the course of illness, which is episodic in former and relatively stable in the latter. However, BPD may have an oscillating course including remissions, and mood disorders may not fully remit (American Psychiatric Association, 2000; Akiskal, 2004). Recent reviews on BPD-bipolar disorders relationship (Akiskal, 2004; Magill, 2004) have reached opposite conclusions. Some features suggesting link between the two are: symptoms and behaviours largely in the domain of affective and impulse control (Akiskal, 2004); affective instability predicted major depressive disorder shift to bipolar-II disorder (Akiskal et al, 1995), and bipolar II, BPD; cyclothymic temperament and trait affective instability were closely associated (Perugi et al, 2003). Some features suggesting no link between the two are: only BPD showed high impulsivity (Henry et al, 2001), and impulsivity is much more stable in BPD than affective instability (Links et al, 1999). Hence, more systematic research needs to be done on the complex interface of borderline and soft bipolar disorders (Akiskal, 2002).

Alcohol and Substance Use Disorders

There is increasing realization that a close link exists between affective and substance/ alcohol use disorders (Chengappa et al, 2000; Wu et al, 1999). The clinician, however, has greater difficulty in sorting out the mood swings (short of mania) of patients with addictive disorders. Such patients meet criteria for bipolar II and related disorders, if exclusionary decisions of DSM-IV-TR were to be ignored (Camacho & Akiskal, 2005). It is not uncommon for mood swings to persist following detoxification, suggesting that these disorders may have much in common with bipolar spectrum conditions. This entity has been referred to as bipolar III ½ (Akiskal & Pinto, 1999). The paradigm being used is that just like bipolar III requires a familial genetic diathesis for antidepressants to mobilize hypomania, bipolar III ½ requires such a diathesis for stimulants to mobilize a bipolar spectrum disorder (Akiskal & Pinto, 1999). This has also led to the proposal for a bipolar stimulant spectrum (Camacho & Akiskal, 2005).

Schizoaffective Disorder

A further step in the extension of the group of bipolar disorders is the embracing of the schizoaffective disorders (Marneros, 1999). It was proposed that schizoaffective disorder should also be dichotomized into unipolar and bipolar types (Marneros, 2001). Many psychotic symptoms in bipolar disorders are of an explanatory nature, whereby the patient tries to make sense of the core experiences of manic excitement. Such explanatory delusional process can be carried over into the interepisodic period. These patients would thereby be delusional in the absence of prominent mood symptoms and, by DSM-IV criteria, might be considered schizoaffective (Akiskal, 2002). Taylor & Amir (1994) have argued for greater emphasis to be placed on Bleulerian signs - formal thought disorder and affective blunting - rather than mood incongruent positive features in the interepisodic period as emphasized in DSM-IV. According to Akiskal (2002), schizodepressive patients are heterogenous (many of them are more allied with schizophrenia), but schizobipolar patients can be more confidently assigned to the psychotic end of the bipolar spectrum.

Impulse Control Disorders (ICDs)

The essential feature of impulse control disorders is the failure to resist an impulse, drive or temptation to perform an act that is harmful to the person or to others (American Psychiatric Association, 2000). It has been proposed that ICDs may be particularly closely related to bipolar disorder (McCornick et al, 1984) - as suggested by preliminary phenomenological (McElroy et al, 1989), comorbidity (Linden et al, 1986) and psychopharmacological (McElroy et al, 1991) observations. A review of available evidence regarding a possible relationship between ICDs and bipolar disorder by McElroy et al (1996) showed that both disorders shared a number of features such as:

1. Phenomenologic similarities, including harmful, dangerous or pleasurable behaviours, impulsivity and similar affective symptoms and dysregulation;
2. Onset in adolescence or early adulthood and episodic and/or chronic course;
3. High comorbidity with one another;
4. Elevated familial rates of mood disorder;
5. Possible abnormalities in central serotonergic and noradrenergic neurotransmission; and
6. Response to mood stabilizers and antidepressants.

However, the disorders also varied in several aspects, and some ICDs may be more closely related to OCD than bipolar disorder.

McElroy et al (1996) suggested that the two conditions may be related and thus may show at least one common pathophysiologic abnormality.

Eating Disorders

McElroy et al (2005) carried out an extensive review of studies examining the relationship between bipolar and eating disorders. Epidemiological studies showed an association between subthreshold bipolar disorder and eating disorder in adolescents, and hypomania and eating disorders,

especially binge eating behaviour, in adults. Of the clinical studies, most showed that patients with bipolar disorder had elevated rates of eating disorders and vice versa. Finally, the phenomenology, course, comorbidity, family history and pharmacologic treatment response of these disorders showed considerable overlap on all these parameters. Therefore, clinicians should look for and assess syndromal and subsyndromal eating disorders in patients presenting with bipolar disorder, and, conversely, for bipolar spectrum disorders in patients presenting with eating disorders (McElroy et al, 2005).

Bipolar Disorder in Children and Adolescents

Commonly, bipolar disorder in children and adolescents can present in three ways (Nottelmann et al, 2001):

- Patients with typical DSM-IV bipolar characteristics;
- Patients with typical DSM-IV characteristics having symptoms of shorter durations;
- Patients with constant mood lability, irritability and severe temper outbursts.

In the second group, shorter periods of mania or hypomania can be easily overlooked and they can be misdiagnosed with unipolar depressions, ADHD plus major depression and personality disorder (e.g. borderline) (Birmaher & Axelson, 2005). Since children in the third group have "continuous manic symptoms" without accompanying elation or grandiosity, it is difficult to differentiate them from other psychiatric disorders, particularly ADHD and oppositional defiant disorder (Birmaher & Axelson, 2005).

Migraine and Bipolarity

In patients with bipolar disorders, a 26% prevalence of migraine has been reported (Mahmood et al, 1999). There seems to be preferential association between migraine and bipolar II disorder (Fasmer, 2001; Fasmer & Odegaard, 2001). The high prevalence of affective temperament in the unipolar patients with migraine, which is in line with prevalence found in the Bipolar II group, may possibly reflect increased mood

lability in migraine patients and represent a linkage to Bipolar Disorders (Odegaard & Fasmer, 2005).

Post-partum Highs and Bipolarity

Research into postnatal mood disorders has focused mostly on depressive syndromes of varying severity and full-blown acute puerperal mania. However, clinical experience and existing literature indicates that milder hypomanic symptoms also occur in the early puerperium (Heron et al, 2005). It is often difficult to distinguish from normal happiness following childbirth. Clustering of mood symptoms rather than happiness occurring in isolation, points to the legitimacy of the concept. A number of small studies of early puerperal mood have noted a high incidence of elation in postpartum women (Ballinger et al, 1982; Handley et al, 1977). There remains, however, a paucity of evidence about all aspects of mild euphoria in the puerperium.

CREATIVITY AND BIPOLARITY

Background

The controversial association between creativity and bipolarity has been a raging debate in the last century. Reviewing available evidence in 1948, Brain concluded that though geniuses were probably not especially prone to insanity they were certainly more "nervous." When insanity occurred, the commonest kind was "cyclothymia, the manic depressive state" (Hare, 1987). This issue has received new vigor after the seminal works of Andreasen (1987) and Jamison (1989; 1993).

Basis of Hypothesized Relationship:

There are several similarities between intense creative episodes and hypomania (Jamison, 1989; Goodwin & Jamison, 1990).

- In successful artists, very powerful mood and sleep changes often occur just before periods of intense creative activity.
- The increase in speed of thought may exert its influence on creative production in several ways.

- The ability to function well on a few hours of sleep and to work at a high energy level, an integral part of most hypomanic states, is important to accomplishment.
- Cyclic patterns are common to both mood disorders and nature of creative work.

Several research methods have been used to study relationship between mood disorders and creativity (Jamison, 1989):

- Biographical studies;
 - Assessing living artists and writers and their family members for bipolarity;
 - Assessing creativity in patients with bipolarity.
- Biographical studies use historical and biographical sources to provide anecdotal evidence for high rates of affective disorders in eminently creative individuals. Among those showing bipolarity or cyclothymia are: E. Dickinson, E. Hemingway, V. Woolf, Lord Byron, J.W. Goethe, Vincent VanGogh, G. Rossini and several others (Ludwig, 1992; Jamison, 1993; Post, 1994). Similarly, Wills (2003) found that 28.5% of a group of eminent jazz musicians had mood disorders.
 - In two studies assessing living artists and writers, a higher incidence of affective disorders (40%-80%) was found (Andreasen, 1987; Jamison, 1989).
 - Richards and Kinney (1988) reported that adults with cyclothymia and first degree relatives of patients with bipolar disorder had significantly higher scores of creativity scales compared to controls.
 - Studies have also shown higher levels of creativity in first-degree relatives (FDR) of writers diagnosed with affective disorder, as well as in the FDR of bipolar and cyclothymic adults (Andreasen, 1987; Richards & Kinney, 1988). Another study (Simeonova et al, 2005) found high scores on creativity in parents with BD and

their offspring with BD or ADHD compared to controls. This was consistent with co-transmission of creativity and affective disturbance (Simeonova et al, 2005).

The increasing literature on bipolarity and creativity has also been criticized. According to Rothenberg (1990; 2001), creative individuals use healthy janussian and homospatial processes in producing new ideas. He has also pointed out serious flaws in sampling, methodology, presentation of results and conclusion in studies linking creativity with bipolarity.

PROPOSAL FOR CONTINUITY BETWEEN BIPOLAR AND DEPRESSIVE DISORDERS

The current diagnostic systems divide mood disorders into bipolar and depressive disorders. Recent studies have instead supported a continuity/spectrum of mood disorders, ranging from bipolar I and bipolar II disorders to major depressive disorder (Angst et al, 2003; Akiskal, 2003; Dunner, 2003). Some features supporting a continuity/ spectrum of mood disorders include presence of mixed state; the most common mood disorder in relatives of bipolar probands is Major Depressive Disorder (MDD) (Duffy et al, 2000).

Features supporting a categorical distinction between bipolar and depressive disorders include differences in family history, age at onset, gender, clinical picture in unipolar or bipolar depression and course of illness (Winokur et al, 1995).

According to Kendell and Jablensky (2003), finding a bimodal distribution of distinguishing, cross-sectional symptoms between two related syndromes would support a categorical distinction. BP-II being the closest of bipolar disorders to MDD could be the one to be compared to MDD. Studies conducted on this hypothesis found no bi-modality in distinguishing symptoms, thus supporting the continuity view (Benazzi, 2006; Bauer et al, 2005; Cassano et al, 2002). Whether the "bimodality view" is better than classic diagnostic validations is yet to be shown (Benazzi, 2006).

GENETIC BASIS OF BIPOLAR SPECTRUM

It is a common clinical observation that patients with bipolar disorder have positive family history of mood disorders. It is not only bipolar disorder that occurs in these families but a variety of mood syndromes and symptoms that differ both qualitatively and quantitatively from bipolar disorder itself (Gershon et al, 1982). Family studies reveal that about 7% of first degree relatives of bipolar patients have bipolar disorder (Gershon et al, 1982; Fieve et al, 1984). Complex non-Mendelian genetics like incomplete penetrance, variable expressivity and genetic heterogeneity have been supported by segregation analyses in bipolar disorders (Rice et al, 1987). In polygenic inheritance, the effects of the polygenes either simply add together or combine in a greater than additive fashion (epistasis) to produce a cumulative quantitative effect. In bipolar disorder, partial support for the quantitative trait model comes from variations in prevalence of subsyndromal affective states across studies (Szadoczky et al, 1998; Angst, 1998) and the fact that in families of Bipolar I probands, Bipolar II is the most common form of illness (Simpson et al, 1993). Another model of overlapping phenotypes has support from recent studies showing shared vulnerability of bipolarity with alcoholism and panic disorder (Winokur et al, 1998; McKinnon et al, 1998). Further support for this model has come from molecular genetic linkage studies. When one addresses the cause of clustering of bipolar spectrum conditions in families of bipolar probands, both the major locus model and the polygenic model provide partial answers. Hence, the third and the more likely possibility of a mixed model emerge. The phenotype may derive from the action of a few major loci acting on a background of polygenes (Kelsoe, 2003).

From the genetic perspective, bipolar disorder is a spectrum of qualitative and quantitative phenotypes. Clearly, the identification of the underlying genes will lead to a much more detailed understanding of the complex genotype-phenotype relationships operating for bipolar traits (Kelsoe, 2003).

BIPOLAR SPECTRUM - NEED FOR EXPANSION OR RESTRAINT ?

There has been debate over the need to expand the bipolar spectrum or to limit it, especially with studies bringing forward values of upto 8.3% of general population as having spectrum diagnoses (Angst, 1998).

However, the spectrum expansion idea has faced opposition, emphasizing caution towards premature and potentially misleading widening and dilution of the bipolar disorder concept (Baldessarini, 2000). Baldessarini argues that the human species has finite limits of reacting psychopathologically, hence affective instability and mood fluctuations are found in many, if not most other disorders, which would be included in the bipolar spectrum.

One reason for urging restraint in spectrum expansion is that classic bipolar disorder is as close to a 'disease' as we have in modern psychiatry and offers hope of being a good candidate for genetic, biological and experimental therapeutic studies (Baldessarini, 1999).

Other authors like Cassano et al (2004) declare that the bipolar spectrum is a clinical reality in search of diagnostic and assessment methodology. But Akiskal et al (2000) have observed that practice conditions in a clinical setting do not necessarily require the strict methodological designs and unwieldy assessment instruments that are needed in research operations (which is the area of commonality between the Cassanos' and Baldessarini's approaches).

Another area of debate is that the bipolar spectrum is in need of more robust support from family studies (Coryell, 1999). Akiskal (1996) has stated that the bipolar spectrum is a clinical rather than a genetic spectrum.

EVOLUTIONARY ASPECTS OF MOOD DYSREGULATIONS

Bipolar spectrum phenotypes raise some interesting issues about their role in evolution. These traits are clearly harmful for those individuals who are most seriously affected. And yet

these disorders seem to have existed in the human race around the world from antiquity, suggesting that the presence of these alleles for a very long time (Kelsoe, 2003). What then has perpetuated the presence of bipolar susceptibility alleles in the human population over the successive millennia?

It is easy to imagine how in 'low doses' the symptoms of hypomania could work to one's advantage. To have just a very slight amount of euphoria, faster thoughts and to require less sleep may be advantageous; these fleeting periods of hypomania may be associated with genuine accomplishment. Creativity has been shown to occur with increased frequency in both bipolar patients as well as their first degree relatives (Andreasen, 1987; Andreasen & Glick, 1988). Hence, one may speculate that the same susceptibility alleles that cause illness in some may be related to affective temperaments like hyperthymic or cyclothymic temperaments and in turn to creativity among some non-ill individuals.

In terms of a selective advantage conveyed to these individuals, a simplistic explanation is that hypersexuality associated with bipolarity leads to more offspring. The trait may be valuable for the survival and expansion of the social group. Moreover, persons with bipolar traits may be more likely to serve as leaders within a social group (Gardner Jr., 1982).

There have been arguments for the adaptive functions of low mood. Researchers have argued for a role of low mood as a strategy to conserve energy and resources (Engel, 1980; Beck, 1996), a way to reassess failing plans (Watson & Andrews, 2002), or as means of social communication (Klerman, 1974; Watson & Andrews, 2002). Thus, whether or not there may be a selective advantage to the bipolar trait alleles, a polygenic model suggests that the bipolar trait alleles are primarily transmitted via individuals who do not have the disorder, but have the susceptibility alleles. At the population level, the impact of the phenotype of these mildly affected individuals may be much more important (in terms of selection and genetic transmission) than the smaller number of persons with the disorder. It may only need a small increase in selective

fitness in this larger number of individuals to offset the loss of fitness in those who have a more severe disorder (Kelsoe, 2003).

DISEASE MONGERING - SELLING BIPOLAR ILLNESS?

Disease mongering is the selling of sickness that widens the boundaries of illness and grows the markets for those who sell and deliver treatment (Payer, 1992). It is exemplified explicitly by the pharmaceutical industry funded disease awareness campaigns, more often designed to sell medications than to inform, educate or illuminate a illness prevention and health maintenance. The sudden burgeoning of bipolar disorder and its variants has been attributed to disease mongering.

In the past two decades, after studies have suggested an increased prevalence of bipolar spectrum disorders, there has been a surge in the number of companies keen to make the "bipolar market". There have been increasing numbers of web sites, patient help lines, bipolar societies, and annual conferences - many heavily funded by pharmaceutical companies. Related journals like *Bipolar Disorders* and *Journal of Bipolar Disorders* focusing on the issue have come up recently. Also there has been a dramatic increase in the number of articles yielded by Medline searches using the term "mood stabilizer" in the past six years (Healy, 2006).

CONCLUSION

Our knowledge about the enigma presented by the concept of bipolar disorder is still very much in its infancy and we have a long road ahead of us. The boundaries between normal and abnormal mood changes are still nebulous. The debate between categorical and dimensional approaches to bipolarity is yet to be resolved. A clear consensus is awaited as to the limits to which the affective spectrum is to be expanded, with a goal to both retaining the identity of the bipolar disorder concept and not missing out such conditions which may confer upon patients the benefits of mood stabilizer therapy. However, any expansion of knowledge (to both the

mental health clinicians as well as non clinical persons) must be on the basis of genuine research findings and not upon the motives of commercially interested agencies.

FUTURE DIRECTIONS

- Future research needs to explore far more robust evidence in favour of familial and genetic basis of bipolar spectrum disorder.
- Focus should be on conditions like attention-deficit hyperactivity disorder, eating disorders, impulse control disorders, personality disorders, substance abuse, and even migraine to probe further their relation with the broad bipolar spectrum.
- Nosological systems in the coming days may take a broader view and adopt an optimal balance between the categorical and dimensional approaches.
- Potential changes include axes for genetic, neuro-developmental, cultural and pharmacological aspects.

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1. **Dr. Sujit Sarkhel**, D.P.M., Junior Resident, Central Institute of Psychiatry, Ranchi-834006
 2. **Dr. Arnab Bhattacharya**, Junior Resident, Central Institute of Psychiatry, Ranchi-834006
 3. **Dr. Shashi K. Pande**, Dip.Psych (McGill), MD (John Hopkins), (Corresponding author), Professor of Psychiatry, 624 Colorado Avenue, Baltimore-MD 21210, U.S.A., E-mail: shashi_piret@mac.com
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TRIBAL MENTAL HEALTH- AN INDIAN PERSPECTIVE

Neha Sayeed¹, Vibha Pandey², Narendra Kumar Singh³, Sayeed Akhtar⁴

ABSTRACT

In India there are a substantial number of tribal populations living in various parts of the country. They suffer from different mental health problems, although their clinical presentation might be different. Being multicultural, India presents a diversity of causes of mental illness. Apart from this, tribal population is far away from the mainstream they lack opportunities, and are poor and illiterate. They suffer from discrimination from societies. In addition to this, there are differences in expression of symptoms, understanding of causation of illness, language for communicating their sickness and pain, and healing practices. This paper deals with the tribal view for causes of mental illness, healing practices, and role of cultural factors in mental illness. It also emphasises the need of research in the mental health problems of tribal in India.

Key Words: *mental health, tribal, India*

INTRODUCTION

India is a country with vast cultural, linguistic, religious and ethnic diversity. Tribal communities in India have lived along with non-tribal communities belonging to different religions and cultures for several centuries. Tribal populations generally have poor health outcomes, often because healthcare delivery system does not cater to their needs. The Indian constitution gives the status of Scheduled Tribes to over four hundred communities (Agrawal et al, 1999). About 8.08 % of the Indian population belongs to the Scheduled Tribes (Alvares & Billorey 1998). 461 tribal communities have been identified in India (Areeparampil 1987) which is unevenly spread across the country. A large concentration of tribal communities is found in the Central part of India, the middle belt and the north eastern states. About 92 % of the tribal people in India live in rural areas (Government of India, 1991), almost all of them in areas which are either dry, forested or hilly (Shah et al, 1998). Most of them depend on agriculture and minor forest produce to sustain their life.

Mental health is a term used to describe either a level of cognitive or emotional wellbeing or an absence of a mental

disorder (Nesse, 2005). From perspectives of the discipline of positive psychology or holism mental health may include an individual's ability to enjoy life, procure a balance between life activities, and efforts to achieve psychological resilience (Witmer & Sweeny,1992).The World Health Organization states that there is no single "official" definition of mental health. Cultural differences, subjective assessments, and competing professional theories all affect how "mental health" is defined (World Health Report, 2001).Mental health among the tribal remains a neglected subject despite preponderance of tribal population in different parts of the country and mental health problems being as prevalent in tribal population as in the general population albeit presenting in different form due to cultural and ethnic differences.

TRIBALS VIEW FOR CAUSES OF MENTAL ILLNESSES IN INDIA

Being multicultural, India presents a diversity of causes of mental illness. Tribes in India are the most under privileged, especially in their health needs. The view held in tribal and peasant societies is that, it is the supernatural visitation that causes a change in the psychology of a person. If the supernatural entity is of a higher order - for instance, a form of

the mother goddess - then the medium is not regarded as sick, although his behavior may be significantly altered and aberrant. In people's nomenclature, such a person will not be regarded as mentally ill (Srivastava, 2002). In some cases, questions about the community affairs - such as the adequacy of rains, quality and quantity of crops, safety of the livestock, possible epidemics - are placed before these "possessed" beings, which are considered gods and goddesses for the period of trance, and if perils are involved in human affairs, these divine beings are appealed for assistance (Fuller 1992). It must also be stressed that these people generally enjoy a healthy lifestyle. Their daily life with periods of work and rest are linked to seasonal cycles. They often have a balanced diet procured through hunting, agriculture and food gathering. In this group the concept of health is more functional than biomedical. The person is considered healthy unless the person is incapable of doing work assigned for a person of that age and sex in that culture. The reason of 'ill health' is often attributed to either some specific act of commission, a 'devil spirit', or in some cases to some physical factors in the environment. In one of the study of modern civilisation and mental health by Jilek (1999) quoted that situations of rapid sociocultural change have often been implicated with causing psychopathology; this has been confirmed for tradition-directed tribal societies undergoing rapid transformation under modern western influence.

THE PRACTICE OF HEALING IN TRIBAL POPULATION

The practice of healing is by the tribal heads or shamans; it may be by pleasing the god by sacrifices, or by an act of atonement or by herbal preparation suggested by the healers. At the other spectrum are the tribes displaced completely from the forest, who have taken up the modern life. They share all the problems of our age. They are far away from the mainstream, lack opportunities, and are poor and illiterate. They suffer from discrimination from societies. Through interaction with other strata of the society they tend to follow more biomedical and clinical model of health and disease. But, at the same time, there are differences in expression of

symptoms, understanding of causation of illness, language for communicating their sickness and pain, and last but not the least different healing practices. In the list of illness, suffering is similar to their non-tribal counterparts. They suffer from communicable and non-communicable diseases, malnutrition genetic disorders as Glucose 6 Phosphates deficiency, thalassemia, sickle cell disease, and other disorders induced by life-style. The mental health of the tribal population can be understood as not just the physical well being of the individual, but emotional and cultural well being of the whole community in which each individual is able to achieve their full potential as human being thereby bringing about the total well being of their community. It is the whole life view and includes the cyclical concept of life-death-life.

ROLE OF CULTURE IN MENTAL ILLNESS

In the Third World transient psychotic or psychosis-like reactions are reported to be common and seem to occur with particular frequency among African and Afro-Caribbean populations (Jilek & Jilek 1970). These psychotic reactions have been given various diagnostic labels by English-speaking authors. Typically, transient psychotic reactions in African and Afro-Caribbean populations have certain symptoms in common with acute schizophrenic psychoses, such as hallucinations and paranoid delusions, but they are of relatively brief duration and of sudden onset in discernable connection with culturally validated fears of magic persecution. The incidence of transient reactive psychoses in Africans appears to be increasing. It is noteworthy that the sorcery and witchcraft beliefs, in which these reactions are culturally embedded, persist even after the traditional resources of protection and redress are no longer available due to Westernization and urbanization (Vancouver, 1999) The majority of transient psychoses are not associated with toxic-organic, but rather with sociocultural factors; notably the stressors due to imposed acculturation and marginalization through rapid sociocultural change (Pfeiffer, 1995). Some investigators assume that transient psychotic reactions in developing countries will tend to develop into chronic

psychoses once the process of Westernizing has become irreversible (Sizaret et al,1987).

The tribal population suffer from a large variety of mental illness, which may be classified on the basis of International Classification of Diseases-10th Ed (WHO, 1992). There have been various studies across the globe shows that the prevalence of psychiatric illnesses is not uncommon in this population. They suffer from Schizophrenia, Depressive illnesses, Manic depressive illness, Mental retardation and neurotic disorders viz., obsessive compulsive disorders, phobic disorders or anxiety disorders. The population exposed to modern life also suffer from conduct disorder in childhood, antisocial personality traits, alcoholism and alcohol related psychiatric problems. There has been a lack of community surveys for prevalence and incidence of psychiatric disorders in India. In a study by Prabhakar & Manoharan (2005) who evaluated a current healthcare model for tribal and concluded that the base tribal hospital is important in administering primary and secondary healthcare, health education, disease surveillance, community outreach and for continued confidence in allopathic medicine. Also, the formulation of mental health programmes and long term educational initiatives at the village level are critical in reducing suicide and infant mortality. Further epidemiological studies are required to gain a complete picture of health within the population, and successful implementation of the model elsewhere.

In a study by Hackett et al (2007) reported that the main associations of common mental disorder are social and the association with physical symptoms may also be socially mediated. The symptom of psychosis reflects the simplicity of life-style. A paranoid schizophrenic will not be controlled by wireless, controlled through an Internet site or feel prosecuted by Bin-Laden but will feel prosecuted by neighbour who tries to defecate on his face. 'The classical symptoms of depression will not be told, it will only reflect in his behaviour and work. It may be attributed to weakness. Psychological symptoms are transformed into physical symptoms. They

lack proper communication to reflect their distress. The traditional society attributes an abnormality of behaviour as an act of 'witchcraft', magic, curse from gods or as a result of a specific act of commission. It is no wonder, an abnormal behaviour, a serious illness or death in the community leads to extensive search for sacrificial scapegoat 'witches' in the community. A large number of innocent women have been victimised for alleged witchcraft in the Jharkhand state itself. A serious effort has to be made by the Government, NGOs and media to stop such practices.

They lack understanding of mental health problems and mental illness, including inadequate reorganisation of the significant symptoms of mental disorders and lack of awareness of common methods of treatment. The topic of mental illness arouses deep-seated fears in all level of societies, and the tribals are no exception. Poor mental health literacy contributes to stigma and discrimination experienced by people of mental illness. Community awareness programmes raises some awareness and improved attitude about mental health disorders. Improved attitude does not necessarily mean changed behaviour; awareness may reflect media weight (merely for discussion) rather than change in individual belief and intentions. Even if such a change has occurred, the 'help seeking behaviour' may be determined by other forces in the community.

As a part of one study conducted at Central Institute of Psychiatry, Ranchi regarding utilization of services by the underprivileged, the researchers chose the most underprivileged: 'a female child, mentally retarded who is also a tribal 'as the representative of the "most disadvantaged " who uses the tertiary psychiatric services. Out of 1600 children seen during one year only 2 such patients could be identified who had contacted the facility (Akhtar & Saji, 1993), this clearly shows that the services are not utilised by the unprivileged group i.e. tribal, females and the mentally retarded. One has to reach the unreached, but it is not an easy task. There is a stiff resistance to outside help by the religious tribal heads .It needs to take the head of the tribe in confidence by using

local links at the community and develop a self-sustaining community based services to look after the mental health needs. It cannot be governments effort alone. We are pleased to see some of the volunteers from funded NGOs or Christian missionary sisters, working day in and day out, with the tribal in bringing tribal patients for treatment at the out patient department of the Central Institute of Psychiatry, Ranchi from remote corners of Jharkhand. One of the female volunteers informally told us that they have learnt themselves to identify psychotic illness by regularly bringing such patients and getting them treated at the psychiatric centres. People with no training or meagre training coming from tribal background could identify the psychiatric illness among tribal. This augers well for development of community based programme for the mentally ill tribal and can be seen as silver lining in the cloud.

Adverse mental health outcomes are correlated with broader psychosocial problems including malnutrition, poverty, illiteracy, substance misuse. Health, either physical or mental is a function not only of medical care but also of the overall integrated development of socio-cultural, economic, education or political status. Good society and good health exist together. This is only possible when supportive services such as nutrition, education and environment are taken care of. The Indian tribes have been exposed to literacy only recently. Area-wise, lowest rate of literacy was found in Andhra (14.5%) and highest in Mizoram (80%). Among the Individual tribes, literacy rates (3.3 %) was found high/1000 in Abhujamaria Tribe of Bastar district, Madhya Pradesh (Census of India, 2001). Likewise, the females and children also suffer from malnutrition. Diets are generally deficient in Calcium, Vitamin A, vitamin C, Riboflavin and animal protein. Diets in south Indian tribes in general and Kerala in particular, were grossly deficient in terms of protein and calories. Studies carried out by the Planning commission of India (6th Five year Plan, Government of India) it was found that diets in south Indian tribes in general and Kerala in particular, were grossly deficient in terms of protein and calories. A high incidence of malnutrition is observed (Ali, 1980; Basu et al, 1990; Mahapatra & Das, 1990) in primitive tribes in Phulbani, Koraput and

Sundergarh district of Orissa. Needless to say that the nutritional deprivation in the pregnant and the developing child leads to array of cognitive and intellectual and psychiatric problems, which include mental retardation. Maternal child health and child rearing practices are generally neglected in various groups (Bastar, Kutia Kondh of Orissa, Santhals, Jaunsaris and Kharias). The continuum of reproductive causality results in development of psychiatric illness and epilepsies. The fact that the mental illness cannot be seen in isolation needs to be stressed. It needs concentrated efforts from all that is, the Government, NGOs, national and international agencies to come forward to improve the overall social, economic, political condition of the tribal.

PROPOSAL FOR FUTURE PLANNING OF TRIBAL MENTAL HEALTH SERVICES IN INDIA

The prioritised mental health targets could be to improve the emotional and social well-being of the tribal within a holistic framework, to increase links between the tribal population and mainstream, to decrease incidence, prevalence and risk factors of mental health morbidity specially depression, psychosis and alcohol abuse, to increase mental health literacy among the tribal communities and to decrease social disadvantage. Rationale for tribal mental health intervention are, manifold population experience poor physical and mental health, poor nutrition, poor housing facility, lower level of education, unemployment poverty and discrimination. There are high rate of psychological distress, psychotic breakdown and alcohol related problems. In addition, stigma, incarceration and lack of cultural standing have inhibited the people from acknowledging mental health problems. Our mental health system is not attuned to meet the mental health needs of the tribals. Besides, misdiagnosis in mainstream mental health services is common due to failure to understand the indigenous social and emotional context of the presenting problems.

Thus, a national programme in tribal mental health should start. The Central institute of Psychiatry, Ranchi, being situated strategically in tribal heartland, and being the only psychiatric

institution under the direct control of ministry of health & family welfare, Government of India may be recognised as the nodal centre for research in tribal mental health. Apart from this, program may be initiated for community controlled awareness programme with community efforts. There is need to develop and evaluate the effectiveness of culturally valid holistic model of mental health prevention and promotion (models such as narrative therapy, psychosocial drama, and appropriate therapeutic model or loss and grief), evidence based methodologies need to be developed for the communities for treatment, need for preparation and evaluation of programme incorporating health promotion and education, screening, parenting skill, postpartum depression, and research into the herbal medicine used by the tribal for treatment of mental illness and research into the religio-magical practices, their usefulness and short-term training of the lay therapists also needed.

CONCLUSION

With regards to the mental health of tribals, new approaches are needed in service delivery to address cultural differences among consumers. The essential point for mental health providers is that one should develop different approaches in response to their life circumstances and cultural differences. Mental health providers should realize that cultural competence in diversity is an important component in providing effective mental health services especially in the developing countries like India where tribal representation is quite high. Therefore, it is important that mental health providers are aware of the underlying pattern and history of India's diversity. Tribal health and mental health must be tackled on priority basis so that the underprivileged communities may benefit from the progress made in the field. They remain unreached and efforts may be made to reach them through various community based efforts in collaboration with private sectors and NGOs. Last but not the least, there should be adequate number of researches in this field in order to properly understand the diverse presentation of mental health problems and effectiveness of different socio-religious practice in healing so that these may be incorporated

in modern practice in order to improve the acceptability of the modern treatment methods.

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1. **Ms. Neha Sayeed**, Post graduate Department of Psychology, Ranchi University, Ranchi-834004
 2. **Ms. Vibha Pandey**, M.Phil (Psychiatric Social Work), Student, Central Institute of Psychiatry, Ranchi-834006
 3. **Mr. Narendra Kumar Singh**, MSW, M.Phil (Psychiatric Social Work), Student, Central Institute of Psychiatry, Ranchi-834006
 4. **Dr. Sayeed Akhtar**, M.D., D.N.B., C.M.O., (Corresponding author), Central Institute of Psychiatry, Ranchi-834006, Jharkhand, Email : sayeedranchi@yahoo.co.in.
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GHEEL CONNECTION: HISTORY OF PSYCHIATRIC FOSTER FAMILY CARE IN OCCIDENTAL AND ORIENTAL CONTEXTS

Akira Hashimoto^{*}

ABSTRACT

Psychiatric foster family care in Gheel near Antwerp in Belgium has been a role model for European and Oriental countries. Over the years many western countries tried to replicate the Gheel model. This paper discusses history of Gheel and subsequently incorporation of similar model in Japan and India.

Key word : Gheel, foster family care, Iwakura, Ranchi

Key Words: *Family distress, expressed emotions, schizophrenia, mental illness, quality of life.*

INTRODUCTION

The recent trend towards globalization and the structural changes of international society, especially in European countries, have produced a new dimension in historiography, which will possibly overcome the limitations of descriptions from the viewpoint of a single nation's history that has been common up to the present, and depict social history in a transnational context (Werner & Zimmermann, 2002). The history of modern medicine, influenced by the same methodological approach, has looked at the transfer and reception of medical concepts, knowledge and systems that crossed national borders. The development of psychiatric foster family care in Gheel, Belgium, is recognized as a subject of comparison and transfer analysis in the history of medicine and is a focus of special interest (Müller, 2004). From the second half of the nineteenth century onward, people were attracted by psychiatric foster family care in Gheel, where normally two to three patients lodged with foster families all over the village and helped them with farm work or housework. In a time when confinement in mental hospitals was dominant, such extramural care was thought to be a more human and economical treatment. The international interest

in Gheel was not confined to Europe, but spread to other continents as well, and reached its peak in the beginning of the twentieth century.

This article provides, first, a short history of Gheel, the changing context of foster family care in Europe and compares and introduces foster family care in Europe - particularly Germany - with that in Asia - Japan and India - from the historical viewpoint of the changes in medicine. While many studies have been published on the history of psychiatric family care, emphasizing its chronological development and decline in each country (Bufe, 1939), we see few comparative studies between countries. Particularly, Asian family care has never been the subject of such a study.

Birth and rebirth of Gheel

The origin of psychiatric foster family care goes back to the legend of St. Dimpna in the sixth century. According to the legend, a heretic king in Ireland looked in vain for a new wife after his first wife's death. He was possessed by a demon and asked his daughter Dimpna to marry him. She ran away with her confessor Gerebernus from Ireland to the continent. However, they were found in Gheel near Antwerp, and Dimpna

was beheaded by her own father, who was in a rage. Later, when the relics were dug up to be reburied in a church, they were found in two white sarcophagi made of an unknown kind of stone. People then believed that the martyrs had been previously buried by angels. They prayed to them in order to heal all sorts of diseases (Koyen, 1973).

By the fifteenth century, St. Dimpna was recognized as a patron saint of the mentally ill; believers thought that Dimpna's martyrdom led the king to overcome his madness, i.e., demonic possession. A nine-day church ritual, novena, was the main treatment for mentally ill pilgrims. Although St. Dimpna Church had a sickroom to accommodate pilgrims for novena, as their number grew, some patients, while waiting for the ritual, stayed with farmers near the church. Also, after completing the ritual, some continued to stay there. This is the inception of *gezinsverpleging*, or family care. At first, it relied on the farmers' charity in taking care of the patients. Later, when the church council was established in St. Dimpna Church in 1532, a whole system was organized: accepting patients into a sickroom, conducting novena and introducing patients to a foster family.

On the other hand, the community of Gheel strictly controlled the influx and the settlement of patients. In the thirteenth century, Gheel became a municipality, gaining freedom from the feudal lord. At the beginning of the second half of the fifteenth century, a *drossaard* (bailiff) and seven *schepenen* (aldermen), who governed the municipality, began to control the influx of mentally ill pilgrims. They feared that the poor from other communities would be a burden to Gheel's *armentafel* (poor table), a philanthropic organization which was common in northern France, Belgium and the southern Netherlands at the time.

Such double control of the patients in Gheel conducted by the church and the municipality was changed with the influx of poor people from the *armentafels* of big cities in Brabant (Antwerp and its vicinities) in the seventeenth century. The poor patients did not participate in the church system and were placed in foster families by brokers. Moreover, these

patients were not a burden because the cost of caring for them was paid by the *armentafels* of their own community, and they stimulated the economy in Gheel. Eventually the poor made up the majority of the patients in Gheel, and the religious aspect there began to disappear.

During the French Revolution, however, the Gheel system was totally shut down. In 1797 St. Dimpna Church was closed and its council was dissolved. Gheel's municipal organization was destroyed. For a time the foster family care system disappeared. But then, from the beginning of the nineteenth century onward, the number of poor patients sent by big cities gradually increased again. Gheel then encountered a new era of modern medicine. The medical attention to Gheel as a colony of psychiatric foster family care seems to have been first evoked by a report by the French psychiatrist Étienne Esquirol (1838), who visited the village in 1821. While he respected such free treatment, he criticized the abuse of patients and proposed to the Dutch government, which ruled the region at the time, that a mental hospital should be established there. Other authors also complained about the lack of medical treatment, hasty use of chains for patients and undernourishment of patients in the care of foster families (Veraghtert, 1972).

In order to avoid such criticism toward this so-called old-fashioned treatment, the local authority in Gheel organized a medical system: An order of 1838 (*Reglement voor de krankzinnige geplaetst in de gemeente Gheel*) included a plan to introduce a doctor who would exclusively take care of the patients in Gheel. Later, in 1840, the local authority established a medical commission composed of four doctors. They were supposed to visit the patients in their foster families weekly and report the results to the mayor. This trial was abandoned, however, within a short time. In 1848 the *Commissie van de Burgerlijk Godshuizen* (Commission of Municipal Poorhouses) in Brussels decided to call on a medical specialist who would be engaged in the care of the patients in Gheel. Through this organization, a good number of poor patients had already been sent to foster families there. In 1849, the psychiatrist Julien Parigot was named as the

doctor to oversee the patients. Subsequent to a law of 1850, the village of Gheel was organized as a national colony under the Belgian government, and special rules of 1851 provided hygienic-medical services and organizations for foster family care in the colony. In 1852 the Minister of Justice appointed Parigot as the first medical director of the colony. Under him and the second medical director, J. Bulckens, an infirmerie (mental hospital) which administered foster family care was finally established in Gheel after long discussion, opening its doors on March 14th, 1862 (Veraghtert, 1972).

Despite the improvement to the organization and the support of it by some authors, Gheel's reputation was not always positive. The French academic society, *la Société Médico-Psychologie*, discussed the treatment of chronic patients who did not need to be kept in closed mental hospitals, and the psychiatrists thought that Gheel offered a possible solution for what to do with such patients. Moreau de Tours proposed a trial introduction of the Gheel system in France, citing as positive aspects the moral and hygienic treatment practiced there. On the contrary, Guillaume Ferrus argued that they could not leave patients in the hands of "campagnards incultes" (uncultured villagers), who made good money from taking care of them (Séance du 30 juillet 1860). In 1860, the commission of the society carried out an inspection of the Gheel colony, on which Jules Falret reported at the meeting in 1861: "In reference to the introduction of foster family care or the establishment of a 'nouveau Gheel (new Gheel)', we came to no positive conclusion" (Falret, 1862). In Germany foster family care was understood to be an alternative to psychiatric institutions in the debate on psychiatry in the 19th century (Schmidt, 1983). Wilhelm Griesinger (1868) in particular argued that foster family care would provide opportunity for a "whole existence of underhealthy people, the return from an artificial and monotonous to a natural social medium, and the welfare of family life, which the best organized mental hospital in the world could never provide." But he was an exception and most prominent psychiatrists in the 1850s and 1860s were strongly critical of the Gheel colony (Schmidt, 1983). According to Roller (1858), no one would recommend

this institution (in Gheel), although Dr. Parigot and Jules Duval (a French journalist) praised it very highly as the only and main form of care for mental patients.

Around 1900 discussion of Gheel again came to the fore. Because of the consistent increase of mental patients, the introduction of a system such as foster family care was an urgent task in order to lighten the burden of mental hospitals. In 1892 in France, foster family care modelled after Gheel began in Dun-sur-Auron, 266 kilometers from Paris. Success in the village of Lierneux near Liège, Walloon Belgium, where foster family care just like in Gheel had been set up in 1884, encouraged the Département de la Seine (Seine Department) to establish a colony in Dun-sur-Auron. Their intention was to develop a way to deal with the overspilling population in mental hospitals (Paetz, 1900). On the other hand, a private mental hospital in Germany, the Institution at Ilten near Hannover, had already started foster family care in 1880. The provincial authority of Hannover asked the institution in 1878 whether it would be ready to admit a number of calm male patients, who were a burden to other mental hospitals in the province. Inspired by the case of Ilten, foster family care was introduced in the Municipal Mental Hospital at Dalldorf in Berlin in 1884. In the 1880s and 1890s, foster family care also began in other places in Germany (Bufe, 1939).

The First International Congress of Care for Mental Patients, which was held in Antwerp from September 1st to 7th 1902, symbolized a climax of a worldwide interest in foster family care and the Gheel colony. There were about 250 participants from Europe, North and South America, and Asia. Congress participants discussed the former and present situation of psychiatric treatment and care, especially the situation of foster family care introduction in their own countries. On September 4th about 100 participants went on an excursion to Gheel. They visited St. Dimpna Church, the mental hospital (infirmerie), and patients staying with foster families. On September 6th, the last day of the discussion, a conclusion was adopted: It was general opinion of the congress that foster family care should be applied to the highest degree

(Congrès international de l'assistance des aliénés et spécialement de leur assistance familiale, 1903).

However, the outbreak of the First World War and the following economic crisis made it difficult to sustain foster family care. Most of the protagonists in European countries also seemed to have lost interest in Gheel. As for Gheel itself, the foster family care was soon normalized after going through the state of confusion during the First World War. In 1938, when the population of Gheel was about 20,000, the number of patients reached its peak of 3,736.

Today we are able to refer to a wealth of articles and books which deal with the uniqueness of Gheel written in various languages by authors who visited there from the nineteenth to the twenty-first centuries. However, since most of these are written by prominent doctors and writers, the overall trends in Gheel visits are unclear. The visitors' register book (1892-1935) is available as a primary source, which enables us to analyze the trends statistically and to explore the global attention to the Gheel family care system before the Second World War. The book named "Registre des permis de visiter l'établissement" is kept in the Openbaar Psychiatrisch Ziekenhuis Geel (Geel Public Psychiatric Hospital, the former infirmerie). The register book was probably started due to the enactments of the Ministry of Justice in Belgium (Wouters, 1892).

According to the register book, a total of 901 persons visited Gheel from 1892 to 1935, excluding some group visitors like students near Gheel, whose number is unclear. Of these 901 visitors, the nationalities of 818 are known: 306 were from Belgium and 512 were from other countries (Here "nationality" does not always mean the visitor's legal affiliation to a certain state. For example, the British colonists who lived and worked in their colonies such as India and South Africa are counted among visitors from these colonial countries). Of the 512 foreign visitors, 403 were from Europe, 54 from North America, 31 from Central and South America, 18 from Asia, 4 from Africa, and 2 from Oceania. Further, if 65 visitors from the

Netherlands, where they speak Dutch as in Gheel, are excluded, the following countries are the so-called "big 4" in number of visitors: Germany (65 visitors), France (53), UK (51), and USA (50).

There were two peak periods for foreign visitors. If we look at the number of visitors in 5-year periods, the first peak period was from 1901 to 1905, and the second was from 1931 to 1935. The fall in number from 1916 to 1920 can probably be attributed to the First World War. However, there is a clear difference in the peak periods, for example, between Germany and the USA. Visits from Germany peaked in the period from 1901 to 1905, which corresponded to the climax of international interest in the Gheel colony at the beginning of the 20th century, as mentioned above. On the contrary, most of the Americans visited after 1926. In Northern America the attention to the Gheel system, which must have been evoked by the discussion at the First International Congress on Mental Hygiene held in Washington in May, 1930, flourished from the 1930s onward. In this way it is thought that the trend of Gheel visits from each country were deeply connected with the context of psychiatry there. In the following we will go into the history of introducing the Gheel system into Europe and Asia from the comparative point of view.

Context in Germany: the case of two provinces in Prussia

As European example, let us look at Gheel visits from Germany. The register book lists 65 visitors from Germany (according to the register book, Konrad Alt, medical director of Mental Hospital at Uchtspringe, visited Gheel in 1897 and in 1899. He is counted here as two persons). The register book includes some important persons in the field of medical history. But close observation of the visitors draws our attention to certain visits, which seem to have something to do with the reform of psychiatric institutions and the discussion of foster family care on the local level. The examples of two provinces are worth mentioning: The inspection by five persons from Saxony Province on March 4th and 5th, 1899 and a visit by eight visitors from Brandenburg Province around 1900.

At first we will look at the example of Saxony Province and its history. In 1876 the second provincial mental hospital was founded at Altscherbitz near Leipzig. Johannes M. Köppe, the first medical director of the Institution at Altscherbitz, pointed out as a fundamental mistake of all present mental hospitals that "they could not be expanded because of concentration [of patients] in a few big main buildings, when modification of facilities would be required from scientific and hygienic viewpoints" (Giesau, 1926). Therefore, the so-called "colonial system (Kolonialsystem)" was preferred: Köppe planned to establish, on a large ground, a small central institution, administrative buildings, and dwelling-houses. Although he referred to foster family care, he thought it was difficult to carry out in actual practice. His sudden death in 1879, however, seemed to severely endanger the realization of his plan for the colony. Count Wilko von Wintzingerode, governor (Landeshauptmann) of Saxony Province, rescued the situation. He wrote to Julius E. Hitzig, a strong rival psychiatrist of Köppe: "The fact that the Institution at Altscherbitz has won the shape it has so far is proof that we, members of the provincial administration, and the representatives of Saxony Province itself have been ready to follow the new ways of Prof. Köppe" (Giesau, 1926). In 1880 Albrecht Paetz, who had worked under Köppe, took over the direction of Altscherbitz. During his 42-year tenure, the institution came to be regarded as a world-class model.

At the end of the century, psychiatric institutions of Saxony Province entered a new stage under the support of von Wintzingerode. The lack of psychiatric beds was a continuing problem. In particular the Prussian law of July 11th, 1891 increased the demand for admission to mental hospitals: With this law, the care duty of Provinces was extended to all mental patients, including epileptic patients and idiots, who needed institutional care. For this reason in 1894, the third provincial mental hospital was opened at Uchtspringe. Since it was filled with patients by the end of 1895, expanding the institution became inevitable (Giesau, 1926).

At the same time the provincial committee believed in

introducing foster family care as one way to alleviate the situation. At a committee meeting in 1898, Richard Thewes, councilor (Landesrat), reported the discussion from the conference of directors of provincial mental hospitals at Nietleben, Altscherbitz, and Uchtspringe, which had been held on September 9th of the same year in Marseburg, with von Wintzingerode in the chair. "We will not have to establish any large institution in the future if we organize foster family care on a large scale, especially after the Belgian and French models - we don't have any examples in Germany - and found for this purpose two small central institutions (Landesasyll) at proper places in the province" (Provinzial-Ausschuss-Protokolle, 1898). The idea of Landesasyll was derived from Konrad Alt, medical director of Mental Hospital at Uchtspringe. He tried to build a village just like the Gheel colony, whose family care was provided by a small central institution, or infirmerie, and many foster families in the village. In the history of foster family care in Germany, such care was usually practiced in conjunction with a large mental hospital, and the patients were placed in foster families around the hospital (Konrad & Schmidt-Michel, 1993). Alt explained to the provincial committee that at a large mental hospital, like Mental Hospital at Uchtspringe, the principles of family care could be put into practice only to a limited degree, and that greater success would be achieved with the establishment of small institutions (Giesau, 1926).

Finally, by order of the provincial committee, the governor von Wintzingerode made a study trip to Belgium, France, and northern Germany together with the councilor Thewes and three medical directors of provincial mental hospitals: Siegmund Fries of Nietleben, Paetz of Altscherbitz, and Alt of Uchtspringe. According to the register book, they visited the Gheel colony on March 4th and 5th, 1899. In addition, they inspected psychiatric institutions where foster family care had already been practiced for years in Rockwinkel (Bremen), Lierneux (Walloon Belgium), and Dun-sur-Auron (France) (Paetz, 1900). After their return to Saxony, von Wintzingerode reported the inspection findings at the committee meeting on March 16th: "I regard the travel as having been very favorable,

and the medical directors of mental hospitals are now convinced that, for scientific reasons and with regard to the humane treatment of patients, the introduction of colonial care for mental patients (koloniale Irrenpflege) into Saxony Province is desirable" (Provinzial-Ausschuss-Protokolle, 1899). In February 1900, Alt's plan and the necessary means for the beginning of family care was accepted (Alt, 1906). Afterward the number of the family care patients grew dramatically, and Alt's Idea, the Landesasyll, was realized at Jerichow near Uchtspringe.

On the same basis we can observe the context of the visits from Brandenburg Province. There are seven names from this province in the register book: Karl Zinn, Karl Knörr, Adolf Riebeth, Oskar Kluge, Emanuel Roth, Erich Noack and Leonhard Roesen. As Hermann Gock (1903), who was not registered in the book, visited Gheel on the occasion of the congress in Antwerp in September 1902, we will deal with eight visitors from Brandenburg.

In 1865, the first mental hospital of Brandenburg Province was founded in Eberswalde. Then, as in Saxony Province, new provincial mental hospitals were built in 1888 in Landsberg and in 1897 in Neuruppin as a result of growing demand for admission.

At a meeting of the psychiatric association in 1892 in Berlin, Alfred Bothe presented the experiences of family care of Mental Hospital at Dalldorf in Berlin. August Zinn (Zinn Senior), medical director of the Institution at Eberswalde, commented on Bothe's presentation that the advances of their colleagues at Dalldorf was to be greatly appreciated and should serve as a model.

Karl Zinn, who was appointed as medical director of Mental Hospital at Eberswalde to succeed his father August Zinn, played a crucial role in the field of psychiatric institutions in the province. He was interested in promoting family care and, according to the register book, visited Gheel on July 22nd, 1900. At a conference of institution directors in Brandenburg on July 31st, 1901, he read a paper on the present state of

family care for mental patients and its spread in Brandenburg Province, and emphasized that the establishment of family care was recommendable for medical and scientific reasons, for the welfare of patients, and for the relief of mental hospitals filled with patients (Zinn, 1901). He thought that the experiences in Saxony Province would serve as a model for other provinces. On October 12th, 1901 Mental Hospital at Eberswalde introduced foster family care (Chronik der Landesanstalt Eberswalde). Zinn's report provided direct impetus for this, and shortly family care began at all the mental hospitals in Brandenburg (Bufe, 1939).

All eight Brandenburgians who visited Gheel from 1900 to 1907 were medical doctors. With the exception of Emanuel Roth, who was privy medical-councilor (Regierungs-Geheimer Medizinalrat), all were psychiatrists of provincial mental hospitals in Brandenburg Province. According to their biographies, they were often transferred from one provincial hospital to another. Thus, we may assume that the experiences of these Gheel visitors were shared with their colleagues in every provincial mental hospital in Brandenburg.

After about 1910, interest in foster family care began to fade, as the economic crisis following the First World War made it difficult to afford foster family care. Therefore, the number of German visitors in Gheel abruptly declined.

Context in Japan and "a Japanese Gheel"

According to the register book, eight Japanese visited Gheel from 1899 to 1935. They experienced Gheel in a different way from the Germans, and their visits did not have such a great influence on Japanese psychiatry, except for the case of Shuzo Kure, psychiatrist at the University of Tokyo. The following contextualizes Gheel in the modern history of psychiatry in Japan, through observations of Kure's career and discussions of foster family care.

In the second volume of his textbook "Seishinbyogaku-shuyo" ("Compendium of Psychiatry") published in 1895, Kure introduced Gheel and Ilten near Hannover, Germany, as

examples of psychiatric foster family care. In addition, he referred to the tradition at Iwakura near Kyoto, Japan, and wrote that with proper modification it would also become foster family care. This was the first time in which Gheel and Iwakura were described together in the frame of foster family care. This way of describing "the pair of Gheel and Iwakura" played an important role in the history of psychiatry in Japan. But how did this idea of pairing Gheel and Iwakura come to Kure's mind? Before looking at that, we must understand better what Iwakura is.

Iwakura lies a distance of 7-8 kilometers from central Kyoto, in a lovely location on a mountainside. Legend has it that the third daughter of the Emperor Gosanjo (reign: 1068-1072) became mentally ill and was cured by drinking holy water and praying to Kwannon (god of mercy) at the Daiunji Temple at Iwakura. In the 18th century, at the latest, Iwakura was a destination for the mentally ill (Nakamura & Aoyama, 2000). They stayed in the temple or with villagers in the vicinity during the time they were undergoing the ritual of cure. Before long, several yadoyas (small home-style Japanese inns) for the patients were established. On the other hand, Kyoto Prefecture, the modern local authority after the Meiji Restoration of 1868, tried to suppress old customs: The prefecture criticized the tradition at Iwakura, prohibited the accommodation of patients at the villagers' homes as well as in the yadoyas, and established in 1875 Kyoto Tenkyoin (Prefectural Asylum of Kyoto), to which the patients at Iwakura were moved. In 1882, however, Kyoto Tenkyoin was closed due to financial difficulties. As a result, the patients went back to Iwakura and were again taken care of. A fire at a foster family's house in 1887, which was set by the patient staying there, however, drastically reduced the number of the villagers who took in patients. After that, most of the patients in Iwakura were accommodated in several yadoyas.

Although Kure had never been to Europe when he published his textbook in 1895, it was full of the theories of German, French, and English psychiatrists. In other words, he had been able to acquaint himself with such theories in Japan.

The modernization (or westernization) of medicine was an important policy of the new Japanese government in the Meiji era (1868-1912), and many Japanese doctors studied in Europe, especially in Germany and Austria, to bring new knowledge to their home country. Before Kure, two psychiatrists from the University of Tokyo, the only university at that time in Japan, had already studied in German-speaking countries: Hajime Sakaki (Berlin: 1882-1886) and Shun'ichi Shimamura (Berlin and Vienna: 1891-1894). Possibly Kure learned also from these two psychiatrists the trends in psychiatry in Europe, including foster family care in Belgium and Germany, and must have discovered a new interpretation of the tradition at Iwakura; that is, "Iwakura as an analogue of Gheel".

Then, as a student sent abroad by the Ministry of Education, Kure studied in Austria and Germany from 1897 to 1901. In Germany, particularly in Berlin, he must have learned about foster family care, although the practice in Berlin may have been considerably different from that in the Gheel colony. In Berlin he probably met Karl Moeli, medical director of Mental Hospital at Herzberge, who, subsequently to his visit in Gheel, read a paper on foster family care at the annual meeting of German psychiatrists on April 22nd, 1901. Later, in the second edition of his textbook published in 1916, Kure referred to foster family care using the expressions of Moeli. Apart from foster family care, he was very impressed by the agricultural colony in Altscherbitz (Kure, 1902a). At the end of July or at the beginning of August 1901, Kure stopped over at Gheel on his way to Japan. Afterward, via Paris and London, he arrived in Japan on October 17th, 1901. After 6 days he was appointed professor of psychiatry at the University of Tokyo. As Sakaki, the first professor of psychiatry in Japan, was unable to complete his work because of early death, the establishment of modern psychiatry in Japan rested with Professor Kure.

Shortly after his return to Japan, Kure gave two lectures to medical doctors on the organization and facilities of mental hospitals, based on his experiences in Europe, and proposed guidelines for mental hospitals in Japan. In the second lecture

on January 23rd, 1902, he referred to foster family care. He started by explaining about the village of Gheel and its history, and described his visit to a foster family and the patient who worked, ate, and slept together with the family. He could not help envying the comfortable relationship between the foster family and their patient. In the lecture, Kure compared foster family care in Europe with the tradition at Iwakura, and expressed dissatisfaction with the situation at Iwakura at that time. He concluded with the hope that the yadoya, in which a lot of mental patients were accommodated without medical and financial support, would be reorganized to provide real family care (Kure, 1902b).

Regardless of the scientifically poor state of care at Iwakura, the new interpretation of its tradition as "a Japanese Gheel" rose to the fore. At that time, a psychiatrist from Russia (now Latvia) named Wilhelm Stieda played an important role. Starting in 1904 Stieda stayed at Harbin in the Far East and was engaged in the treatment of mental illness on the battlefield of the Russo-Japanese War (Brennsohn, 1929). After the war he came to Japan, but his official mission is unknown. Perhaps it had something to do with Russian prisoners who were still in camps all over Japan. He met Kure and inspected several psychiatric institutions including the yadoyas at Iwakura. Stieda (1906) published his experiences in Japan in a German medical journal. This paper was immediately translated into Japanese. As a whole, positive expressions toward Japanese psychiatry seemed to dominate in the article. The following sentence in particular was most impressive to Japanese readers: "In this village [Iwakura] - a Japanese Gheel - they have taken care of mental patients for many centuries". When he visited Iwakura in January 1906, however, he must have seen few foster families who took care of the patients. He wrote: "Japanese psychiatrists tried to persuade the government not to prohibit foster family care at Iwakura, but to reorganize it and to put it under medical control, in vain" (Stieda, 1906). According to Stieda, in each yadoyas (there were about six at that time) around 5 to 45 patients were living. Although he appreciated the free atmosphere of the yadoyas, their organization was

different from the foster family care in Gheel (Hashimoto, 2003), where at the most two or three patients lived with each foster family.

If we carefully consider the context of the phrase "a Japanese Gheel", which Stieda used for Iwakura in his paper, we come to realize that Stieda must have meant by it only the historical likeliness as a place of pilgrimage for mental patients. It is very possible that his phrase was not intended as praise of the yadoyas. On the contrary, he worried about the crisis in Iwakura, where foster family care in villagers' homes was declining, even if he may have considered the accommodation at the yadoyas to be a kind of familial care. Nevertheless, the phrase "a Japanese Gheel" went beyond Stieda's control and was understood as an expression of appreciation by a psychiatrist from Europe.

It seems, however, that Kure had a different opinion. In the second edition of his textbook in 1916, Kure described three forms of foster family care after Moeli (1901): 1) family care without relation to institutional treatment (in Scotland), 2) family care as a colony where a lot of patients live in a selected area, with an institution only for exceptional patients (in Gheel, Lierneux, Dun-sur-Auron, and Jerichow near Uchtspringe), and 3) family care in connection with ordinary institutional treatment (at many mental hospitals in Germany). It is interesting that there is no description of Iwakura in the second edition, whereas Kure had referred to Iwakura in the first edition in 1895. Although authors in the second half of the twentieth century, for instance Konrad & Schmidt-Michel (1993), showed no reluctance to classify Iwakura as being the "concentration type" (the second type according to Moeli), Kure must have hesitated at the time he was writing to include Iwakura as the second type.

On the other hand, Kure tried to introduce new practices from European psychiatry at the Prefectural Mental Hospital at Sugamo in Tokyo. At that time the professor of psychiatry at the University of Tokyo also held the post of medical director of that hospital. When the mental hospital was moved in 1919 from Sugamo to the suburb of Matsuzawa village, he planned

an agricultural colony like that at Altscherbitz in Germany. The plan for the colony, however, was not realized completely because of the weak financial state after the First World War and the sudden death of Tomoichi Inoue, Governor of Tokyo Prefecture, who strongly supported the plan (Okada, 1982). Foster family care was also planned for the new hospital at Matsuzawa: "Now we are looking for families that are suitable for foster family care, and some of them have agreed". Probably for financial reasons, this plan also did not materialize (Okada, 1994). At the end, not only at the mental hospital at Matsuzawa in Tokyo, but also at other institutions all over Japan, foster family care organized by hospital psychiatrists was never realized.

By contrast, the yadoyas at Iwakura became more active from the 1920s onward. It must have been due to an increasing demand from mental patients in the whole country at a time when psychiatric beds were very less. Watanabe Hoyojo (sanatorium, if literally translated) was established by Kensuke Watanabe. At that time people did not call them yadoya any more, but instead used the word "hoyojo". Watanabe Hoyojo was the first one that did not arise from a traditional yadoya. Afterward a succession of new hoyojos were built in Iwakura village: Yamamoto/Fukui (1928), Muramatsu (1929), Kajita (1932), Kato (1933), and Horiuchi (1934) (Nakamura & Aoyama, 2000). In 1935 there were ten hoyojos (including four hoyojos that originated from former traditional yadoyas), where about 300 mental patients in total were accommodated (Kan, 1937) and were residing in a homely atmosphere.

Seeing this situation, the Japanese tried to grasp the phenomenon of Iwakura in the context of modern developing medicine and welfare of the 19th and 20th centuries. Some characterized the situation at Iwakura as an ideal village of foster family care comparable to Gheel. Eikichi Tsuchiya (1930), medical director of Iwakura Byoin (the private mental hospital at Iwakura), argued that his hospital functioned as the central clinic for mental patients of the Iwakura colony. He seems to have overestimated the function of his mental hospital and its relationship with the hoyojos. Majority of the

psychiatrists, however, had the same idea as Tsuchiya. Professor Koichi Miyake, Kure's successor at the University of Tokyo, also agreed with Tsuchiya, saying that "Our Iwakura Byoin [mental hospital at Iwakura] is the pride of the world." Miyake also projected the Gheel colony onto the mental hospital in Iwakura and its supposed relationship with the hoyojos. On the contrary, some maintained a very cool attitude toward Iwakura. In 1935 Kyoto City reported on the institutions in the region. In reference to Iwakura it said, "These hoyojos are making good money out of the patients with no intention of providing social welfare and support" (Kyoto City Office, 1935). Meanwhile, Yasumasa Nagayama, psychiatrist at the Prefectural Nakamiya Mental Hospital in Osaka, recalled with displeasure that the hoyojos at Iwakura were nothing more than boarding houses for rich persons (Hasegawa et al, 1994). During the Second World War, most of the patients at Iwakura went back to their homes. The hoyojos fell in financial difficulty and were closed. In this way, the long tradition at Iwakura ended.

Context in colonial India and Berkeley-Hill in Ranchi

The modern history of psychiatry in India is given a distinctive character by its former colonial status (Ganju, 2000). On one hand, large asylums, built in cities such as Bombay, Calcutta and Madras, aimed at taking care of the Europeans who fell mentally ill while they were in India. On the other hand, a network of dozens of other smaller institutions confined Indian mental patients. The racial difference was crucial to everyday practices of confinement and treatment: It was rare that European and Indians were interned together, and segregation left the few Europeans with better living conditions (Keller, 2001).

In such a colonial Indian context, a European lunatic asylum was established in Ranchi in 1918. The idea of establishing this asylum went back to the fact that people had begun to realize that the old asylum in Calcutta was a disgrace to their fair city, about which "something should be done", as stated by Owen Berkeley-Hill (1939), who grew up in an upper middle

class family in London, was educated at Rugby and Oxford and, after working at University College Hospital, entered the Indian Medical Service in 1907. In 1919 he was appointed Superintendent of the European Mental Hospital in Ranchi, "the most prominent psychiatric position in India" (Jones, 1944). After a long discussion it was decided to build two large asylums, one for Indians and the other for Europeans and Anglo-Indians. At the end, Kanke at Ranchi was selected as the site for these asylums, "this dismal spot as the very place for lunatics." When Berkeley-Hill first reached Ranchi and made an intensive inspection of the whole institution, he was completely overcome with a feeling of impotent despair: The patients had no proper clothing; there was no attempt at any garden; there were no facilities for recreation or for the occupation of the patients; the feeding arrangements were shockingly inadequate. He thought that every conceivable aspect of the institution was in urgent need of alteration in some direction or another. Under his direction, reform of the asylum was carried out: The staff was reorganized; electric lighting was introduced; football, cricket, hockey, tennis and croquet were introduced; a very fine building was erected and equipped to accommodate Occupational Therapy, and so on (Berkeley-Hill, 1939). In fact, Berkeley-Hill was very eager to adopt new trends and therapies in psychiatry. For example, as one of the first Englishmen who took an interest in psychoanalysis, his chief writings were devoted to psychoanalytic problems of Indian people (Jones, 1944). Berkeley-Hill was also the founder of the Indian Association for Mental Hygiene (Parkar et al, 2001). It is no wonder that he would pay attention to extramural treatment such as a foster family care.

In India, the idea of psychiatric foster family care was probably first explored in the 1920s at the latest, as Berkeley-Hill (1925) stated in an article: "Recently I have come to know that a body of representative opinion in this country decided unanimously that familial care of the insane in India is 'impossible'." Against such a negative opinion, Berkeley-Hill proposed establishing experimental colonies of family care at such places as Ranchi and Bangalore. He thought: "For years, I have held that familial

treatment of Anglo-Indian and Indian insanes is not only a possible but an inevitable development", and "[I] have made a thorough examination on the spot of the greatest experiment in familial treatment of the insane to be found in the whole world, namely the colony at Gheel in Belgium." According to the register book and his autobiography "All too human", he visited Gheel with his two sons in 1925.

But it seems that he chose an easy way of expressing his view on family care. In the 1925 article he based his description largely on a quotation from the account of C. Stanford Read (1921), physician to Fisherton House Mental Hospital at Salisbury in England, in the *Journal of Mental Science*. If we scrutinize Berkeley-Hill's text, it is also clear that the rest of the article, other than the direct quotation, mostly consists of slight changes to Read's text. For example, while Read wrote: "It is quite true that the Gheel system is the slow and successive product of centuries, and that in a day one could not imitate it in England", Berkeley-Hill wrote: "It is quite true that the Gheel system is the slow and successive product of centuries and that in a day one could not imitate it in India." Or, as for the same text between two authors' articles, "the supposed impracticability of the adoption of some familial system in this country is much over-rated and founded largely upon conservatism [Berkeley-Hill deletes "conservatism" from his text], inertia, ignorance and apathy," Read meant England by "this country", whereas Berkeley-Hill meant India by the same words. In short, Berkeley-Hill for the most part simply replaced "England" in Read's article with "India" in his.

What did he think about the differences of social and cultural contexts between England and India or Europe and Asia in terms of introducing the Gheel system? In the same article Berkeley-Hill argued (although most of his argument again consisted of a slight revision from Read's text) that the objection to the introduction into India of the Gheel system, or some modification, was that it was incompatible with the manner of life of the people. According to him, while want of pity, which was more characteristic of Asiatics than of Europeans, stood in the way of introducing the family care, at

the present moment in India a good deal was being done to remedy that defect by societies for the welfare of children, the prevention of cruelty to animals, and so on. However, he never referred to a definite prescription for establishment and administration of the family care based on the life of Anglo-Indian or Indian people and the "Indian mind".

One of the reasons Berkeley-Hill was unable to design family care in colonial India may lie in the fact that the introduction of the Gheel system had not spread very successfully in England. At the end of nineteenth century, when family care flourished in other European countries, especially in Germany, the German psychiatrist Paetz (1893) wrote that only some mental patients in England were looked after in family care. Then, in 1939, Ernst Bufe, German psychiatrist and director of Allenberg Mental Hospital in Eastern Prussia, reported on England and Wales, "where the admission into mental hospital was regulated so differently from that in other European countries": "In mental hospitals in England many persons are staying, who from our [German] standard do not need to be hospitalized any more; before the final discharge from the hospital they are for the transitional period accommodated in private single care, in the care of relatives, or in a kind of public sanatorium, where no medical control is conducted." At any rate, the foster family care proposed by Berkeley-Hill seems to have not been realized in Ranchi, though after his retirement from the hospital he started a private nursing home for psychiatric patients (Hartnack, 2001).

According to the register book, after Berkeley-Hill's visit in Gheel, there were three more visits from India, which seem to reflect the increasing Indianization of staffing in the hospitals (Mills, 2001): J. C. Dhunjibhoy (Major, Indian Medical Service, Indian Mental Hospital in Ranchi) visited Gheel in July 1929; D. M. Batliwala (State Mental Hospital in Baroda) in October 1930; and Sandar Bahadur (Indian Red Cross, New Delhi) in 1933. As written in a letter attached to the register book, Batliwala, who had been sent to England by the Maharajah Gaekward of Baroda for the special study of psychological medicine, desired that upon the conclusion of his work he

should visit Gheel. This letter, asking whether his visit in Gheel would be acceptable, was sent on September 29th, 1930 from the Secretary to the High Commissioner for India, London, to the director of the Gheel colony. But other details of their visit remain to be elucidated.

Conclusion

By comparing the history of psychiatry in Europe and Asia, we not only confirm that the contexts of introduction and discussion of psychiatric foster family care differ according to each country, but also, in terms of the transfer of knowledge and system - in this case experiences in Gheel - that a huge difference lies between "from Europe to Europe" and "from Europe to Asia."

For Europeans it was relatively easy to find the reason why they wanted to introduce the Gheel system in their own countries. For example, the Germans visited Gheel because of a common need of the time: reform of psychiatric institutions in each land or province was an urgent task, since the demand for psychiatric beds was increasing rapidly on one hand, and extramural treatment was expected from a humanitarian viewpoint on the other. The introduction of foster family care to psychiatric institutions was a promising solution. It was known from the register book that someone in Germany sent groups of inspectors to Gheel to gather information for use in reforming their own psychiatry systems and to discuss the medical, institutional and financial practicability of family care. These Germans used their experiences in Gheel to realize foster family care in their own lands.

On the other hand, in Asia, where psychiatry stood in the process of formation after the Western model and institutionalization of the mentally ill had not become "mature" yet, the idea of psychiatric foster family care just went round and round and reached no practical spot. As for India, the "colonist" doctor Berkeley-Hill looked into psychiatric family care. As mentioned above, he commented on family care: "I have held that familial treatment of Anglo-Indian and Indian insanes is not only a possible but an inevitable development."

But it is not clear how he thought family care could be realized for Indian (Hindu) people, whose character traits he sharply contrasted with British ones (Keller, 2001). On the contrary, in his discussion of introducing the Gheel system into India he simply appropriated a discussion of introduction into England. Moreover, it does not seem that Indian people took any part in the discussion or proposed their own way of family care. As Edward W. Said (1979) described in his work "Orientalism," "In each case the Oriental is contained and represented by dominating frameworks." That is, India was recognized by the Orientalists (and Westerners) to be interpreted, civilized, relieved from its miserable state and brought into the contemporary world by the West.

Although India and Japan are grouped as Oriental in the Western view, their historical, religious and philosophical background, which has characterized their psychiatry, is of a totally different nature. However, such a discourse of Orientalism asserted by Said partly applies to Japan which was not colonized but rather colonized Asian countries: Japan as an Oriental country might be a subject to be represented by the Western Orientalists, but at the same time the Japanese intellectual, including leading psychiatrists, who studied in Europe in the modern period intended to modernize their own country as if they were "Japanese Orientalists." While they were not able to establish the foster family care modeled after Europe, Germany in particular, they tried to interpret the tradition of mental patients' stay in the village of Iwakura near Kyoto as a form of foster family care in a Western medical context. Some praised Iwakura, when they could refer it to Western medicine; some criticized it, when they could not. In any case, both sides were bound by the thought of Japanese Orientalists, to whom "the Oriental was always like some aspect of the West" (Said, 1979).

But the greatest tragedy to the tradition of Iwakura - and probably that of Japan and the Orient as well - is that, by being thrown into a medical and scientific context from the West, it lost the aspects that had really supported the care of mental

patients in the community over a long time. We should remember that patients have been supported not only by medical concepts and treatment but rather by, as it were, social capital such as the social relatedness of human beings, which cannot easily be manipulated in a quasi-technological way (Edmondson, 2003).

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* **Prof. Akira Hashimoto**, (Corresponding Author) Doctor of Health Sciences, Department of Social Welfare, Aichi Prefectural University, Aichi, 480-1198, Japan. E-mail: aha@itr.aichi-pu.ac.jp

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STUDY OF FACTORS ASSOCIATED WITH RECURRENCE IN ADOLESCENT PSYCHOTIC DISORDERS

Arnab Bhattacharya¹, Vinod K. Sinha², Pushpal Desarkar³

ABSTRACT

Background: Various workers have observed different factors to be associated with recurrence in adolescent psychotic disorders. **Aim:** To find factors associated with recurrence in adolescents suffering from psychotic disorders. **Methods:** The guardians of 51 patients with recurrent psychotic disorder were interviewed with Schedule for Affective Disorders and Schizophrenia for School age children-Present and Lifetime Version (K-SADS-PL) and those who fulfilled screening criteria were subjected to the relevant supplements for obtaining a DSM-IV diagnosis. Subsequently, Brief Psychiatric Rating Scale for Children (BPRS-C), and Attitude Questionnaire and Medication Adherence Rating Scale were used to rate current severity of psychopathology, expressed emotions and medication adherence respectively. **Results:** Pregnancy complications were more common in mothers of subjects with highly recurrent illness ($P=0.007$). Also predicting recurrence was the presence of high critical comments ($P=0.034$), longer duration of total illness ($P=0.045$), more number of episodes ($P=0.008$) and poor medication adherence ($P=0.049$). **Conclusion:** It would be worthwhile to attempt to prevent maternal complications in pregnancy, take measures to improve medication adherence, identify and take steps to reduce problem of high critical comments which may be crucial to reduce the number of recurrences and future morbidity and impairment in this population.

Key Words: *Factors, Psychosis, Recurrence, Adolescence.*

INTRODUCTION

Childhood and adolescent psychosis are held to have a significant burden to patients and family. The prevalence of major depression in adolescents in between 1 and 6 percent (APA, 2000). Lifetime prevalence of bipolar disorder in adolescents between 14 to 18 years of age was found to be 1 percent (Lewinsohn, 1995). It has been estimated that 0.1 to 1 percent of all schizophrenic disorders present before age of 10 years and 4 percent before 15 years (McClellan, 2005).

From the literature it appears that adolescent onset bipolar disorders have a course with multiple relapses and high rates of comorbidity which contribute to poor course and outcome in the long run, hampering academic, familial and social functioning of the child (Srinath et al, 1998). It is for this reason that recurrence of the illness is of such great concern.

In one study by Geller et al (2002) done on prepubertal and early adolescent population with bipolar disorder, it was found that mean time between recovery and recurrence was 28.6 weeks and subjects with low maternal child warmth were 4.1 times more likely to have recurrence after recovery than subjects with high maternal child warmth. Neither antidepressant drugs nor stimulant medication, with or without antimanic drugs, predicted recovery.

Another study by Birmaher et al (2002) noted that lower socio-economic status, non Caucasian patients, psychotic depression, past suicidal attempts, Borderline and Antisocial personality traits, comorbid dysthymic disorder, a negative attributional style, exposure to stress, high expressed emotions, conflicts with parents, biological factors (sleep EEG abnormalities, high cortisol levels) and recurrent major depressive disorders in first degree relatives were associated with recurrence.

An Indian study by Srinath et al (1998) on child and adolescent bipolar disorder found the following observations-an absolute recovery from index episode (100%), high relapse rate (67%) with most relapses occurring within 2 yrs of recovery from index episode, absence of predictors of recovery or relapse, very low rate of comorbid conditions, suicide/suicide attempts, absence of alcohol/substance abuse and low rate of rapid cycling.

Strober et al (1995) found that 96% subjects suffering from bipolar disorder had recovery from index episode, had a relapse rate of 44%, had more common comorbidity like ADHD-15%, conduct disorder-6%, substance use 9%, anxiety disorder-13%.

Another study by Winokur et al (1993) revealed that a family history of mania or schizoaffective mania predicted multiple episodes in bipolar patients. In unipolar patients, female sex, early age at onset and history of prior episodes predicted multiple episodes.

Several authors (Ramana et al, 1995; Honig et al, 1995; Miklowitz et al, 1988) have reported high level of expressed emotions predicting recurrence in adult onset bipolar disorder. Maternal warmth measure which is akin to that of expressed emotion predicted recurrence after recovery in school age children.

One study by Carlson et al (2002) found that behaviour disorder, significant anxiety, suicidal gestures and emotional response had a poorer course and outcome compared to those with no childhood psychopathology. Also they note that childhood psychopathology, especially behaviour disorders, prior to onset of mood disorder, related to poor functional outcome and early age at onset related to continued symptoms.

Keller et al (1993) in another study noted that index episode duration before entry, severity of endogenous features and history of previous episodes predicted a longer period till recovery.

The studies done have not investigated the possible role of certain factors like complication in pregnancy, perinatal

abnormalities, medication adherence in childhood and adolescent psychotic disorders, which need to be explored to find any relation with recurrence in adolescents. Hence, the need was felt to try and investigate the various socio-demographic, clinical, medication related and the expressed emotion related factors with recurrence in this population.

MATERIAL AND METHOD

The present study was conducted in Central Institute of Psychiatry, Kanke, Ranchi, Jharkhand. The study was done between December 2005 and August 2006. It was approved by the Institute Review Committee. It was a cross sectional, retrospective type of study and used purposive type of sampling. The patients for study were taken from those attending the Center for Child and Adolescent Psychiatry. It included patients aged 13 to 17 years, of either sex, suffering from recurrent psychotic disorder as per DSM-IV (APA, 1994) criteria. Exclusion criteria were patients having mental retardation, substance induced psychotic disorder, epilepsy or any significant medical or neurological illness. The sample size was of 51 patients.

Recurrence and recovery in the study were defined as per the study of Coryell et al (1995). Recovery of any syndrome was defined as at least 8 consecutive weeks during which symptoms were absent or limited to one or two of mild degree; the first week of recovery was the 1st of these weeks. The reappearance of the full syndrome of psychotic disorder after recovery constituted recurrence.

The patients and parents were assessed after taking informed consent. Tools used were Schedule for Affective Disorders and Schizophrenia-for School Age Children-Present and Lifetime Version (K-SADS-PL) for diagnosis (Kaufman et al, 1997), Child-Brief Psychiatric Rating Scale (C-BPRS) (Overall and Pfefferbaum, 1982) to rate current severity of psychopathology, Attitude Questionnaire (Sethi et al, 1985) to measure expressed emotion and Medication Adherence Rating Scale (Thompson et al, 2000) to measure medication adherence.

We had defined in our study the overall illness severity as 'high' or 'low'. High severity was when a patient had a score of

more than or equal to 34 on C-BPRS (the median value of our sample in C-BPRS ratings) as well as either greater than or equal to 2 hospitalizations or greater than or equal to 3 episodes of recurrent psychosis or both. Considering the limitation imposed by the cross sectional nature of our study, we devised the above criteria to differentiate highly recurring severe illness type from less severe variety among our patients.

The process of data collection was begun with an explanation about the aim and procedure of study. Each patient was interviewed along with guardian filling up necessary socio demographic and clinical data and applying the mania, depressive disorders and psychosis screening interviews of the K-SADS-PL; those who reached threshold levels were further interviewed with the appropriate supplements. Each patient was rated on the 21- item Child BPRS, the 10-item Medication Adherence Rating Scale and the 30 item Attitude Questionnaire.

STATISTICAL ANALYSIS

Statistical analysis was done using Statistical package for Social Sciences (SPSS, Inc, Chicago, Illinois) version 11.0. Descriptive statistics was used to describe the sample in terms of socio demographic and clinical characteristics. Chi-square test and logistic regression were used to compare between different variables. In this study a level of significance (a) less than <0.05 (2 sided) was taken as statistically significant.

RESULTS

Out of 51 patients (Table 1), 60.8% (N=31) belonged to male sex, 39.2% (N=20) were females. In the sample 72.5% (N=35) subjects were from rural population and 27.5% (N=14) were from urban population. 51.0% (N=26) had a monthly family income $<Rs$ 5000; 39.2% (N=20) had a monthly family income between Rs 5000 and Rs 10000; 9.8% (N=5) had a monthly family income more than Rs 10000. In the population, 49% (N=25) had studied till primary level, 49% (N=49) had studied till secondary level and 2% (N=1) was illiterate.

Pregnancy complications were present in 17.6% (N=9) subjects' mothers and absent in 82.4%(N=42) cases and

perinatal abnormalities were present in 3.9%(N=2) of cases and absent in 9.1% (N=49) cases.

Table 1: Sample characteristics

Variable		N	%
Sex	Male	31	60.8
	Female	20	39.2
Residence	Rural	37	72.5
	Urban	14	27.5
Monthly family income	$<Rs$ 5000	26	51.0
	Rs 5000-10000	20	39.2
	$>Rs$ 10000	5	9.8
Pregnancy complications	Absent	42	82.4
	Present	9	17.6
Perinatal abnormality	Absent	49	96.1
	Present	2	3.9
Education	Illiterate	1	2.0
	Primary	25	49.0
	Secondary	25	49.0
Mode of onset of index episode	Abrupt	22	43.1
	Acute	24	47.1
	Insidious	5	9.8
Most severe past episode	Last episode	43	84.3
	Any other episode	8	15.7
Family history	Present	29	56.9
	Absent	22	43.1
If family history present	Affective	11	37.9
	Non affective + Affective	4	13.8
	Non affective	1	3.4
	Others	13	44.8
If family history present	Psychosis	16	55.2
	Other	13	44.8
Type of diagnosis	Affective	46	90.2
	Non affective	5	9.8
Diagnosis of Patient	Bipolar mania	33	64.7
	Bipolar Dep.	5	9.8
	Bipolar mixed	5	9.8
	Schizophrenia	4	7.8
	Psychosis NOS	1	2.0
	Major depressive Disorder	3	5.9
Critical comments	High	12	23.5
	Moderate	29	56.9
Hostility	Low	10	19.6
	High	21	41.2
	Moderate	13	25.5
Dissatisfaction	Low	17	33.3
	High	44	86.3
	Moderate	3	5.9
Emotional over involvement	High	14	27.5
	Moderate	15	29.4
	Low	22	43.1
Warmth	High	7	13.7
	Moderate	11	21.6
Severity- No. of episodes	Low	33	64.7
	High	21	41.2
	Low	30	58.8
Severity- No. of hospitalizations	High	5	9.8
	Low	46	90.2
Severity-overall	High	15	29.4
	Low	36	70.6
Medication adherence	High	16	31.4
	Low	35	68.6

In 43.1%(N=22) cases, onset of illness was abrupt, in 47.1%(N=24) cases, onset was acute and in 9.8% (N=5) onset was insidious.

Table 2: Sample characteristics

Variable	Mean	S.D
Critical comments	7.73	1.10
Hostility	8.98	1.32
Dissatisfaction	10.25	1.06
Emotional over involvement	10.06	1.90
Warmth	7.90	1.45
Medication adherence	3.90	1.63

In 84.3%(N=43) cases, the last episode prior to the index episode was the most severe past episode and in 17.7%(N=8) any other episode other than the last one was the most severe past episode.

In 56.9% (N=29) cases a positive family history was noted and in 43.1%(N=22) cases there was no reported family history. Of those who had a positive family history, 37.9%(N=11) had a family history of affective illness, 13.8%(N=4) had a family history of non affective illness, 3.4%(N=1) had a family history of both affective and non affective illness, and 44.8%(N=13) had a family history of other conditions e.g. epilepsy, substance dependence, mental retardation, etc. Also among the 29 cases in whom positive family history was found, 55.2% (N=16) had family history of psychotic disorder and 44.8%(N=13) had a family history of other disorders.

Of our 51 cases, 90.2%(N=46) had a diagnosis of affective disorder and 9.8 % (N=5) had a diagnosis of non affective disorder. Individual diagnosis wise, 64.7% (N=33) had Bipolar Mania, 9.8% (N=5) had Bipolar Depression, 9.8% (N=5) had Bipolar Mixed, 7.8% (N=4) had Schizophrenia, 5.9% had Major Depressive Disorder and 2.0% (N=1) had Psychosis Not Otherwise Specified.

In assessing expressed emotions (Table 1 and Table 2), critical comments was high in 23.5% (N=12) cases, moderate in 56.9% (N=29) cases and low in 19.6% (N=10) cases (Mean=7.73, SD=1.10). Hostility was high in 41.2%(N=21) cases, moderate in 25.5%(N=13), low in 33.3%(N=17) cases (Mean=8.98, SD=1.32). Dissatisfaction was noted to be high in 86.3%(N=44) cases, moderate in 5.9%(N=3) cases and

low in 7.8%(N=4) cases (Mean=10.25, SD=1.06). Emotional over involvement was seen to be high in 27.5%(N=14) cases, moderate in 29.4%(N=15) cases and low in 43.1%(N=22) cases (Mean=10.06, SD=1.90). Warmth was found high in 13.7%(N=7) cases, moderate in 21.6%(N=11) cases and low in 64.7%(N=33) cases (Mean=7.90, SD=1.45).

Table 3: Comparison of socio-demographic and clinical variables between high and low severe and recurring illness types.

Variables	High	Low	χ^2	df	P	
Sex	Male	10	21	0.308	1	0.579
	Female	5	15			
Residence	Rural	10	27	0.369	1	0.369
	Urban	5	9			
Monthly income	< Rs 5000	7	19	2.518	2	0.284
	Rs 5000-10000	5	15			
	>Rs 10000	3	2			
Pregnancy complication	Absent	9	33	7.306	1	.007**
	Present	6	2			
Perinatal abnormality	Absent	14	35	0.425	1	0.514
	Present	1	1			
Education	Illiterate	0	1	1.292	2	0.524
	Primary	9	16			
	Secondary	6	19			
Family history	Present	11	18	2.350	1	0.125
	Absent	4	18			
Family history	Affective	4	7			
	Non Affective	0	4	4.466	3	0.215
	Affective+	0	1			
	Non Affective	7	6			
	Others	7	6			
Family history	Psychosis	4	12	2.535	1	0.111
	Others	7	6			
Diagnosis	Affective	14	32	0.237	1	0.627
	Non Affective	1	4			
Diagnosis	Bipolar Mania	10	23	4.183	5	0.523
	Bipolar Dep.	3	2			
	Bipolar Mixed	1	4			
	Schizophrenia	1	3			
	Psychosis NOS	0	1			
	Major Depressive Disorder	0	3			
Critical comments	High	3	9	0.699	2	0.705
	Moderate	8	21			
	Low	4	6			
Hostility	High	8	13			
	Moderate	4	9	1.908	2	0.385
	Low	3	14			
Dissatisfaction	High	15	29			
	Moderate	0	3	3.381	2	0.184
	Low	0	4			
Emotional over involvement	High	3	11			
	Moderate	3	12	2.471	2	0.291
	Low	9	13			
Warmth	High	2	5			
	Moderate	3	8	0.039	2	0.981
	Low	10	23			

* P< 0.05 is significant (2- tailed)

** P< 0.01 is significant (2- tailed)

Severity of illness as per number of episodes was found to

be high in 41.2% (N=21) and low in 51.8% (N=30). Severity of illness as per number of hospitalizations was found to be high in 9.8% (N=5) and found low in 90.2% (N=46). The overall illness severity (taking a high BPRS score and either high number of hospitalization or high number of episodes or both) was found high in 29.4% (N=15) and low in 70.6% (N=36).

Medication adherence was seen to be high in 31.4% (N=16) and low in 68.6% (N=35) of patients (Mean=3.90, SD=1.63).

When comparison was made between various clinical and socio-demographic variables with severity of illness (Table 3) it was seen that pregnancy complications had significant association with higher illness severity ($P=0.007$) but no other variables had such an association. When logistic regression was applied between various variables and overall illness severity (Table 4), significant association was seen between total illness duration ($P=0.045^*$), number of episodes ($P=0.008^{**}$), critical comments ($P=0.034^*$), medication adherence ($P=0.049^*$) and severity. Association between other variables and illness severity was not seen to be significant.

Table 4: Table showing association between clinical variables

Variable	B	S.E.	Wald	Sig (P)
Age	.406	.701	.335	.563
Total illness Duration	-.367	.183	4.035	.045*
No of Episodes	-2.827	1.072	6.954	.008**
No. of Hospitalizations	1.085	1.143	.900	.343
Index Episode Duration	1.110	.862	1.659	.198
Age of illness Onset	-.650	.518	1.574	.210
Critical Comments	1.908	.902	4.476	.034*
Hostility	-.344	.769	.199	.655
Dissatisfaction	-.460	1.072	.184	.668
Emotional Over				
Involvement	.513	.530	.939	.333
Warmth	.814	.630	1.670	.196
Medication Adherence	-.907	.460	3.885	.049*
Constant	-.617	18.200	.001	.973

* $P < 0.05$ is significant (2-tailed)

** $P < 0.01$ is significant (2-tailed)

DISCUSSION

This was a cross sectional retrospective study involving an

adolescent psychotic population from a large psychiatric hospital. Some of the salient features of the study included the use of operationalised criteria for recurrence and recovery (Coryell et al, 1995), use of semi structured K-SADS instrument (Kaufman et al, 1997) for generating DSM-IV (APA, 1994) diagnoses for the subjects, assessment of current severity of psychopathology using C-BPRS instrument (Overall & Pfefferbaum, 1982) and use of specific instrument for Medication Adherence Rating (Thompson et al, 2000).

To overcome the constraint of a cross sectional approach, the severity of overall illness was taken as incorporating both current severity by using C-BPRS score and longitudinal severity by taking the number of hospitalizations and number of episodes till date of assessment.

In our study it was seen that pregnancy complications were more common in the high severity group rather than the low severity group ($P=0.007$). Various types of complications were encountered like maternal jaundice, edema, exanthematous fever, hypertension, hyperemesis gravidarum. It has been seen that disruption of fetal neural development, which may result from maternal complication in pregnancy especially in 2nd trimester, has been correlated with schizophrenia and that these adverse conditions may interact with genetic risk factors which may produce psychotic illness in at risk individuals (McClellan, 2005). Another finding in our study was that 3.9% cases had a perinatal abnormality after birth. There was no statistically significant difference between the high severity and low severity groups in our study with regard to this factor ($P=0.514$).

In our study, 43.1% patients had an abrupt onset of index episode, 47.1% patients had on acute onset of index episode and 9.8% cases reported an insidious onset for their index episode. Also, it was seen that in a majority of cases (84.3%), the episode preceding the index episode was the most severe past episode and only 15.7% cases reported any episode preceding the last episode to be the most severe past episode; this finding could suggest that as the illness

advances the severity of the recurrent episodes increases. This is in agreement with the findings of Keller et al (1993) who noted that a history of previous episodes predicted a longer time to recovery from the current episode in bipolar illness.

In our study, family history of mental, neurological, substance use disorder or mental retardation was found in 56.9% cases and of these cases, when examined, a family history of psychotic disorder was noted in 55.2% cases. Various studies (Goodyer et al, 1997; Harrington et al, 1990) have also observed similar findings where a family history of mood disorder, especially recurrent type are risk factors for recurrence of major depressive disorder.

Logistic regression analysis done on the findings revealed four predictor variables which were significantly associated with higher overall severity and recurring psychotic illness. One of these was the total duration of illness as a predictor of the severity of recurrence; this is similar to the finding by some workers (Kovacs et al, 1984; Eggers & Bunk, 1997) who concluded that an earlier age of onset is associated with a greater recurrence risk.

Yet another predictor the study revealed was seen to be high critical comments ($P=0.034$). Studies done before (Birmaher et al, 2002; Ramana & Bebbington, 1995; Honig et al, 1995; Weisman et al, 1998 & Wendel et al, 2000) have observed increased possibility of recurrence in subjects living in high expressed emotion environment as compared to those in low expressed emotion environments. Relatives with higher expressed emotion are critical and hostile and do not know any other way to support the ill member. The only way they feel that the person will change his behavior is through criticism which actually causes the relapse (Wendel et al, 2000).

In our study, another predictor for severity of recurrence was medication adherence ($P=0.049$). A lower score on medication adherence increased the possibility of a higher severity of the recurring disorder. Workers like Faedda et al (1993) have noted abrupt stoppage of medicine can lead to rapid

recurrence of psychotic bipolar disorder. Also other authors have noted that neuroleptics drug withdrawal may increase the risk of relapse in schizophrenia over and above the risk associated with the underlying illness (Moncrieff, 2006).

Yet another variable predicting severity of recurrence was the total number of episodes ($P=0.008$) experienced, which is in agreement with some studies (Birmaher et al, 2002; Keller et al, 1993) who found that the a prior history of mood disorder was risk factor for recurrence of psychotic disorder. Such a pattern could point towards a kindling phenomenon whereby the transition takes place from precipitated to spontaneous episodes and with time the severity of the episodes increases as was seen in our study (Weiss & Post, 1994).

To summarize, our study found a larger number of pregnancy complications in the mother of children who in future developed highly recurrent illness. Also, other predictive variables for severity of recurrent psychosis were increased number of episodes, increased expressed emotion (critical comments), and poor medication adherence.

Henceforth, it may be worthwhile to take active measures towards preventing complications in pregnancy, ensuring better compliance towards medication and addressing the problem of high expressed emotions with an aim to reduce recurrence in this population. Since frequent recurrences in adolescent years could have serious consequences like academic impairment, school drop-out, unemployment and possible problems in personality development, the need is urgently felt to study more intensively the adolescent population with regard to psychotic recurrences.

Certain limitations of the study are a small sample size ($N=51$) and cross sectional, retrospective type of study. Information on past episodes was dependent on guardian's recall, which raised the possibility of recall bias.

Future studies could use a larger sample size, a prospective design, comparison groups with age and sex matched controls and improve upon the current findings.

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1. **Dr. Arnab Bhattacharya**, MBBS, Junior Resident, Central Institute of Psychiatry, Kanke, Ranchi-834006, Jharkhand.
 2. **Dr. Vinod K. Sinha**, M.D., D.P.M., (Corresponding Author), Professor of Psychiatry Department Of Child and Adolescent Psychiatry, Central Institute of Psychiatry, Kanke, Ranchi-834006, Jharkhand, Email: vinod_sinhacip@yahoo.co.in
 3. **Dr. Pushpal Desarkar**, M.D., D.P.M., Senior Resident, Central Institute of Psychiatry, Kanke, Ranchi-834006, Jharkhand.
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FAMILY ENVIRONMENT AND ALCOHOL DEPENDENCE: A COMPARATIVE STUDY

Narendra Kumar Singh¹, Devvarta Kumar²

ABSTRACT

Background- Alcohol consumption can have negative impacts in all domains of a person's life i.e., in physical, social, financial and familial. In some families alcohol becomes prime center around which all family interactions and dynamics revolve. This kind of family seeks only temporary stability by grossly affecting permanent stability. Thus the development and organization of family gets impaired as consequences of alcohol dependence. **Aims-** The purpose of this study was to assess the family environment in alcohol dependent families. **Method-** The sample consisted of 50 participants from the family members (one person from each family) of patients diagnosed with alcohol dependence and 50 participants from family members (one person from each family) of family of normal controls (i.e., a family without any alcohol dependent member). **Result-** The families with alcohol dependence scored significantly low in domain of family cohesion, expressiveness, independence, achievement orientation, intellectual cultural orientation, active recreation orientation, moral religious emphasis and organization in comparison to families without alcohol dependence. However, no significant difference was found between families with alcohol dependent and families without alcohol dependent on "control" domain in family environment. **Conclusion-** Findings indicated significant difference in family environment between the families with alcohol dependence and families without alcohol dependence.

Key words: *Family, Alcoholism, family climate*

INTRODUCTION

It is an accepted practice to view the family as a system organized around the support, regulation, nurturance, and socialization of its members (Minuchin, 1974). Drug addiction and alcoholism can be viewed as a symptom of a dysfunctional family system in which the addicted person emerges as the identified patient of the system. The addiction and associated behaviours evolve within the family and become an integral part of that system, helping to define roles, boundaries, and subsystems. Alcohol consumption can have negative impacts in all domains of a person's life that is physical, social, financial and familial. The impact of alcohol on familial aspects has been widely studied. According to Glucksman (1994), majority of divorce cases are attributed to alcoholism and many cases of alcoholism among females are caused by their husbands' habit of consuming alcohol. In the United States, alcohol is a feature in upto 80% of violent

family incidents and in Britain the figure is approximately 75% (Glucksman, 1994). It has been reported that child abuse and negligence of children are related to alcoholism among parents (Glucksman, 1994). Problematic alcohol consumption has also been linked to family culture (Bennett & Wolin, 1990; Sher, 1991). Family rules and family rituals have been identified as primary mechanisms through which the transmission of alcoholism occurs across generations. Families who maintain their family rituals, despite the presence of alcohol abuse in the family, have been found to be less likely to transmit alcoholism from one generation to the next (Bennett et al, 1987). The family, regardless of its structure or formations, is an important microsystem shaping individual development; therefore, guided by an ecological model, it has been correctly hypothesized that positive family processes, such as emotional closeness, and family members' sense of family obligation would be associated with less alcohol abuse (Beavers & Hampson, 1993; Bowen,

1978; Broderick, 1993; Broderick & Smith, 1979; Epstein et al, 1993). Little work has been done to study the relationship between family environment and alcohol dependence even in Western culture. But few related empirical studies have categorically mentioned that family plays a very key role in either maintaining or ending the substance intake behaviour (Epstein et al, 1993; Beavers & Hampson, 1993). So this study was aimed to assess the family environment in alcohol dependent families.

METHOD

The sample consisted of 50 participants (spouse and first degree relatives) from the family members (one person from each family) of patients diagnosed with alcohol dependence as per ICD-10 (WHO, 1992) criteria and having no other comorbidity and other 50 participants (spouse and first degree relatives) from family members (one person from each family) of family of normal controls having no history of alcohol dependence and who scored less than three on GHQ-12 (Goldberg & William, 1978). Both groups were matched on various socio-demographic correlates (age, education, occupation, sex, income and marital status).

Informed consent was taken from family members by considering the inclusion and exclusion criteria. After filling up of the socio-demographic data sheet, family environment scale was administered.

The measure used in the present study includes socio-demographic data sheet, Family Environment Scale (Joshi & Vyas, 1987) and General Health Questionnaire -12 (Goldberg & William, 1978).

The family environment scale was originally developed by Moos and Moos (1974). For the present study, the Hindi version of the scale developed by Joshi and Vyas (1987) was used. The Hindi version has 79 items, which are answered in a 5 point Likert scale (Joshi & Vyas, 1987). There are total of ten subscales, that are broadly grouped into three dimensions (i) relationship (it is further divided into three sub scales:

cohesion, expressiveness and conflict), (ii) personal growth (it is further divided into five sub scales: independence, achievement orientation, intellectual cultural orientation, active recreational orientation and moral religious emphasis) (iii) systems maintenance dimensions (it is further divided into two sub scales: organization and control). The scale has moderate to high test retest reliability and internal consistency (Joshi & Vyas, 1987).

The GHQ-12 was developed by Goldberg and William in 1978. It is a 12-item questionnaire and is widely used to screen for the presence of psychiatric distress.

Data analyses

For analysis of the obtained data 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. The 't' test was used for group comparison on continuation data and Pearson 'r' (two-tailed correlation coefficient) was used for correlation analysis.

RESULT

Results indicate that the informants of two groups were matched on the socio-demographic variables of age, education, informant's income, sex, marital status, domicile, occupation and family income. Mean age of informants of families with alcohol dependents was 36.38 + 11.90 years and that of families without alcohol dependents was 34.98 + 10.48 years.

Table-1 shows comparison of various domains of family environment scale in study group and control group using independent sample t-test. Findings indicated that study group was significantly lower on scores of cohesion, expressiveness, independence, achievement orientation, intellectual cultural orientation, active recreational orientation, moral religious emphasis and organization than control group. In addition, results also revealed that study group was significantly higher on domain of conflict in comparison to control group.

TABLE 1: Comparison of families with alcohol dependence (study group) and families without alcohol dependence (control group) on domains of Family Environment Scale

Domains of Family Environment Scale	Groups		t (df =98)
	Study group (N=50) Mean±SD	Control group (N=50) Mean±SD	
Cohesion	15.56±7.37	25.04±4.30	7.847***
Expressiveness	12.82±3.32	17.28±3.58	6.450***
Conflict	14.76±4.17	12.48±2.62	3.267**
Independence	18.80±6.52	24.56±4.15	5.267***
Achievement Orientation	15.78±5.35	20.82±3.50	5.570***
Intellectual Cultural Orientation	13.68±3.97	17.84±3.19	5.774***
Active Recreational Orientation	11.04±3.16	15.34±3.56	6.379***
Moral Religious Emphasis	16.30±4.32	22.34±3.66	7.531***
Organization	17.02±5.16	21.96±3.65	5.519***
Control	18.58±4.74	20.08±3.12	1.868

** significant at P <0.01, ***significant at P <0.001

Table-2 reveals Pearson correlation coefficient between socio-demographic variables of families with alcohol dependence patients and family environment scale domains. There was a significant positive correlation between cohesion and patients income ($p < 0.05$). There was also positive correlation among intellectual cultural orientation and various socio-demographic variables of education ($p < 0.05$), patient's income ($p < 0.01$), age of onset ($p < 0.01$) and average amount of expense ($p < 0.05$). Moral religious emphasis shows positive correlation with variables of education ($p < 0.05$), patient's income ($p < 0.01$) and average amount of expenditure ($p < 0.01$). Further results indicated that organization was also positively correlated with age ($p < 0.05$), patient's income ($p < 0.01$) and family income ($p < 0.05$). Finally, negative

correlation was found between conflict with variables of patients' income ($p < 0.01$) and age of onset ($p < 0.05$).

DISCUSSION

The study was carried out on total 100 subjects (50 participants of spouse and first degree relatives of family member of patient diagnosed of alcohol dependence and other 50 participants of spouse and first degree relatives of family members without alcohol dependents). Both the groups were matched on various socio- demographic factors. The purpose of the study was to assess family environment in the families of patients with alcohol dependence as compared to families without any alcohol dependent patients.

The present study highlights the fact that the environment of families with members having alcohol dependence is characterized by negative factors such as lower cohesion, poor expressiveness, impoverished intellectual cultural orientation, lack of independence, limited achievement orientation, lack of active recreational orientation, poor moral religious emphasis, disorganization and higher level of family conflict. Present findings were supported by a study done by Sher (1991), who obtained similar findings of lower levels of family cohesion, expressiveness, intellectual cultural orientation and higher level of family conflict in alcoholic families using the family environment scale (FES). Further, a study done by Jesse (1992) using the same tool (FES), similar findings in the areas of cohesion, conflict, and achievement,

TABLE 2: Correlation of socio-demographic variable of families with Alcohol Dependence Patients with family environment Scale domains

Domains of Family Environment Scale	Age	Education	Patients Income	Age of onset	Avg.Amount expense	Avg.Amount consume	Family income
Cohesion	.233	.255	.416*	.241	.110	-.234	.239
Expressiveness	-.019	.145	.253	.053	-.104	-.189	.250
Conflict	-.270	-.158	-.427**	-.286*	.039	.067	-.104
Independence	.099	.118	.204	.072	.033	-.106	.094
Achievement Orientation	.001	.126	.208	.223	.072	-.033	.051
Intellectual Cultural Orientation	.174	.329*	.438**	.370**	.336*	.116	.251
Active Recreational Orientation	.036	.117	.237	.014	.093	.022	.255
Moral Religious Emphasis	.123	.282*	.443**	.079	.413**	.137	.135
Organization	.303*	.145	.460**	.261	.031	-.204	.283*
Control	-.098	.014	-.088	-.097	.200	.066	.063

* Significant at < 0.05, ** Significant at < 0.01

intellectual, and moral religious emphasis were found. Yet another study by Bijttebier and Goethals (2006) added their support in terms of family organization. Further the finding regarding less cohesion in alcoholic families than non alcoholic families corroborate with various other studies, (Beavers & Hampson, 1993; Bowen, 1978; Broderick, 1993; Broderick & Smith, 1979; Epstein et al, 1993).

The present study has a few relevant findings in the domain of family environment. A positive association between organization, age, patient income and family income emerges. Organizational ability is one of the components of leadership and the relationship of leadership with age has already been shown in the study done by Oshagbemi (2003). Besides, financial component is very crucial in endowment of maintaining structure and regulating family functioning. Moral religious emphasis shows positive association with education, income and average amount of expense on alcohol. Morality and religious aspect in any family is enriched by the quality of education and regarding the question concerning the role of patient income, it has already been discussed above. Intellectual cultural orientation of family also shows positive association with education, patient income, the age of onset and the amount of expense on alcohol. Family Conflict has negative association with income of the patient and age of onset of drinking i.e., more the duration of conflict, earlier the age of onset. Patients spend more and more money on drinking and the conflict in family is likely to increase. Interestingly, patient's income also shows positive association with cohesion. It is evident from the previous discussion on the relation of finance with family functioning.

CONCLUSION

Results indicated significant difference in family environment between the families with alcohol dependent members and families without alcohol dependent members. The former group scored significantly low in various domains namely, family cohesion, expressiveness, independence, achievement orientation, intellectual cultural orientation, active recreation orientation, moral religious emphasis and

organization in comparison to the latter group. Families with alcohol dependent and the families without it do not seem to differ on "control" domain of family environment. Further, high level of "conflict" was noticed in families with alcohol dependent members in comparison to families without alcohol dependent members.

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1. **Narendra Kumar Singh**, MSW, M. Phil (Psychiatric Social Work) Student, Central Institute of Psychiatry, Kanke, Ranchi-834006.
 2. **Dr. Devvarta Kumar**, Ph.D, M.Phil in Clinical Psychology, (Corresponding Author), Associate Professor, Department of Clinical Psychology, Central Institute of Psychiatry, Kanke, Ranchi-834006, Email: devavratak@yahoo.co.in
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APATHY IN SCHIZOPHRENIA: CLINICAL CORRELATES AND ITS ASSOCIATION WITH CURRENT SOCIAL FUNCTIONING

Amlan Kusum Jana¹, C.R.J. Khess², Sarita E. Paul³, Pushpal Desarkar⁴

ABSTRACT

Background: Apathy is a known negative symptom but there has been only one study quantitatively assessing it in patients with schizophrenia. The present study shows its effects on current social functioning in young patients with schizophrenia. **Method:** A total of 30 patients aged 18-45 years and age, sex and socio-economic status matched 30 healthy controls were taken for this study. Apathy was evaluated in them applying Apathy Evaluation Scale. Psychopathology of schizophrenia was assessed with Positive and Negative Syndrome Scale (PANSS), negative symptoms separately with Scale for Assessment of Negative Symptoms (SANS) and current social functioning was assessed using Schizophrenia Research Foundation - India, social functioning index. **Results:** The mean level of apathy in patients was significantly higher than that in controls ($p=0.000$). Apathy had a high inverse correlation with current social functioning ($r=-0.833$; $p<0.01$); high positive correlation with avolition- apathy sub-scale of SANS($r=0.803$; $p<0.01$). However partial correlation between current social functioning and avolition apathy sub-scale score, after controlling affective flattening, alogia, anhedonia-asociality and inattention was not significant. **Conclusion:** Apathy is high in patients with schizophrenia; but apathy alone does not significantly determine the impairment of current social functioning.

Key words: *Apathy, positive symptoms, negative symptoms*

INTRODUCTION

The term apathy describes the lack of motivation seen in a broad array of psychiatric, neurological and medical disorders (Marin, 1991). Moreover it is not an uncommon experience for a normal person in relation to job changes, retirement, loss of relationship or the "empty nest syndrome" (Marin, 1996b). But, in clinical practice, apathy lacked the essential ingredients of validity, conceptual and operational definitions, means for reliable measurement, and evidence of construct validity. Based on recent work, it is now possible to offer an empirically grounded approach to define apathy, provide criteria for diagnosing apathy as a distinct syndrome (Marin, 1991) and to show the utility of the concept, both for clinical work (Marin et al, 1995; Marin, 1996a) and as a stimulus for understanding the neural basis of goal-directed behavior (Marin, 1996a; Kalivas et al, 1993).

From the accounts of Bleuler (1911) or Kraepelin (1919) it is obvious that signs and symptoms of apathy have long been

recognized as common in schizophrenia. Recent studies by Kibel et al (1993) and Malla et al (1993) have shown apathy to be an important symptom of schizophrenia, among the various other negative symptoms in the widely used Scale for Assessment of Negative Symptoms (SANS) (Andreasen, 1981). Surprisingly there has been little quantitative study of the level of apathy in schizophrenia and on its relation to other clinical correlates. One previous study (Kiang et al, 2003) did quantify apathy and show its relation to functional outcome in a group of patients with schizophrenia or schizoaffective disorder but the inclusion of many chronic patients confounded the findings as apathy is known to occur in any chronic illness.

Social functioning in schizophrenia has been the focus of clinicians and researchers for long. Enduring negative symptoms are seen to have the strongest negative effect on social functioning (Mueser et al, 1990; Bailer et al, 1996; Breier et al, 1991). The study findings remain reliable because of the facts that negative symptoms are fairly specific to

schizophrenia (Cuesta & Peralta, 1995), occur only infrequently in other psychiatric disorders (Pogue-Geile & Harrow, 1984) and even if they occur in other illnesses, they do not appear to endure except in schizophrenia (Husted et al, 1995).

Among the individual negative symptoms, avoidance and withdrawal (Hoffman & Kupper, 1997), psychomotor retardation (Harvey et al, 1996), anergia (Mueser et al, 1996) and anhedonia (Freedman et al, 1995) are associated with poor social and occupational outcome.

Kiang et al (2003) found that functional outcome was more highly correlated with apathy as measured by clinician rated version of Apathy Evaluation Scale (AES-C) (Marin et al, 1991) than with the negative or positive symptom of the Positive and Negative Syndrome Scale for schizophrenia (PANSS) (Kay et al, 1987)

Keeping these in mind along with the possibility that apathy may be a distinct clinical syndrome, it was felt that it might have a specific impact on the final outcome of illness. Moreover if apathy is found to be one of the principal components in schizophrenia which causes impairment in social functioning, targeting it as a focus of treatment will hasten recovery.

In the present study, apathy was measured in a group of acute schizophrenic patients and matched healthy controls and their mean apathy levels were compared. The relation of apathy with various socio-demographic variables and clinical features were looked for and finally an attempt was made to find out whether apathy affects current social functioning and if so, how.

METHODOLOGY

Subjects

A total of thirty male and female patients from 18 to 45 years of age, diagnosed with schizophrenia, fulfilling DSM-IV-TR criteria with duration of illness from 6 months to 2 years and accompanied by guardian (s) and giving consent for the study were recruited.

Along with them thirty (30) healthy controls matched to the patients in respect to age, sex and total family income were recruited in the same period. This group consisted of people who reside nearby the institute in which the study was conducted and who volunteered for the study. All the subjects as well as their guardians gave written informed consent following description of the procedure. The patients met the following exclusionary criteria: presence of any comorbid major physical illnesses, current depressive episode, substance dependence in the past one year, presence of any axis II (DSM-IV-TR) disorder, history of ECT in the past 6 months, presence of extra pyramidal symptoms. For the control group, presence of any axis I (DSM-IV-TR) disorder was also considered an exclusion criteria along with all the exclusion criteria of the patients.

Measures Used

1. *Socio-demographic data sheet*: The data sheet included patient particulars, along with illness duration, age of onset, relevant past and family history, history of substance abuse, premorbid personality, significant findings on physical examination and diagnosis.
2. *Structured Interview Guide for the Hamilton Depression Rating Scale (SIGH-D)*: This scale is based on the Hamilton Rating Scale for Depression (HDRS) (Hamilton, 1960) with drafted interview questions that were appropriate for gathering the information necessary to make the various item distinctions in a relatively standard way. The structured interview guide for HDRS, developed by Williams (1988), uses the standard version of HDRS with few minor changes in anchor-point cues.
The test-retest reliability was seen to be 0.82.
3. *Simpson-Angus Scale*: This is a 10 item instrument developed by G.M. Simpson and J.W. Angus (1970) and is used to measure the symptoms of parkinsonism or parkinsonian side effects (rigidity, tremor, akinesia and salivation) related to the use of

antipsychotic medications. A total of 10 items are rated on a five-point scale (0 = complete absence of the condition; 4 = presence of the condition on extreme form). The global score is the sum of all scores divided by the total number of item. Final scores of up to 0.3 are considered within the normal range.

4. *Positive and Negative Syndrome Scale for Schizophrenia (PANSS)*: The PANSS developed by S.R. Kay et al (1987) is a 30 item rating scale that is specifically developed to assess individuals with schizophrenia. It consists of a semi-structured clinical interview and any available supportive clinical information. The 30 items rate along a 7-point continuum (1 = absent, 7 = extreme). The assessment provides separate scores in several clinical domains including a positive syndrome, a negative syndrome and general psychopathology among others. Ratings are generally based upon information relating to the past week.
5. *Scale for Assessment of Negative Symptoms (SANS)*: This scale was developed by N.C. Andreasen (1981) and it consists of 25 items, which are designed to assess negative symptoms in individuals with schizophrenia. The SANS items are rated on the basis of a clinical interview, direct observation, and any additional sources of information, including clinical staff or family member reports. The SANS evaluates five domains of the negative symptoms complex, including alogia, affective flattening, avolition-apathy and attention. The scale is rated on a 0 to 5 spectrum (0 = not present, 5 = severe). Although SANS was developed to assess negative symptoms in schizophrenia, individual items on the SANS may be scored high for individuals with other types of serious mental illness, such as depression or drug induced psychotic disorders.
6. *Apathy Evaluation Scale (AES)*: Developed by Marin et al (1991), it requires 10-20 minutes to administer depending on the subjects' abilities and the version

used. There are 3 versions of the scale: self (AES-S), informant (AES-I; significant other, e.g. personal or professional caregiver), and clinician (AES-C) rated versions. The clinician version has somewhat better validity than the informant version. The overall validity of the AES-S is less than the AES-C and AES-I. The AES assessment of apathy is based on subjects' current functioning. For outpatients or patients rated within 3-4 days of hospitalization the period rated is defined as the previous 4 weeks.

Each version consists of the same 18 items, which are basically of 3 types i.e. behavioral items, cognitive items and emotional items. Each item is primarily an index of overt goal-directed behavior, goal-related cognitions, or goal-related emotional responses. The three version of the AES use a similar 4 point, Likert-type scale, with anchor points labeled as: Not at all (with a score of 1), Slightly (score 2), Somewhat (score 3) and A Lot (score 4). In our study, however only the informant and clinician rated versions were used.

The AES-C is administered as a semi-structured interview. Items are rated based on current functioning as evident from the subject's "thoughts, feelings, and actions" during the past 4 weeks (Marin et al, 1995). Ratings given for the AES-C are based on the clinician's best judgment of the subject's motivational state.

The scoring is made such way that higher the score, more the apathy. Scores for AES range from 18 to 72.

7. *Schizophrenia Research Foundation (SCARF) India-Social Functioning Index (SCARF-SFI)*: This scale was developed by Padmavati, Thara, Srinivasan and Shubha Kumar in 1995. No formal training is required for its administration. The scale is intended for administration on persons suffering from psychiatric illnesses and the items are rated on a five point scale; higher the score, the better is the social functioning. Social functioning is measured over 4 domains, i.e., self-concern, occupational role, role in the family and other social roles. Each domain has 4/5 sub-

components.

Information is obtained from subject and / or informant and a global assessment of social functioning is made on a 3 point scale.

Mild impairment	:	> 60
Moderate impairment	:	30-60
Severe impairment	:	< 30

8. *General Health Questionnaire-5 item version (GHQ-5)*: To screen for any psychiatric morbidity in normal controls, GHQ-5 was administered. GHQ-5 is a short version of the General Health Questionnaire. The original GHQ contains 60 items for the detection of the non psychotic psychiatric illness. However the short 5-item version is short and less time concerning, so better as screening improvement. The 5-item version contains the items numbered 14, 39, 42, 49 and 54 in the original GHQ and has been evaluated for its validity. It was found to have a sensitivity of 86%, specificity of 89% and an overall misclassification of 13% with a cutting point of $\frac{1}{2}$ (Shamsunder et al, 1986).

Procedure

Assessment of patients: All the assessments were performed by the same physician rater in the above mentioned institute. For each subject the assessments were done in single sessions only. Depressive symptoms were assessed by applying the structured interview guide for the Hamilton Depression Rating Scale (SIGH-D) (Williams, 1988). A cut off score of 6 was taken and patients with a score of 6 or above were excluded from the study. To assess extra pyramidal symptoms, the Simpson-Angus Scale was used and patients with global score more than 0.3 were excluded from the study as per exclusion criteria. Positive, negative and other symptoms of schizophrenia were assessed with Positive and Negative Syndrome Scale (PANSS) (Kay et al, 1987). Negative symptoms were separately assessed by scale for assessment of negative symptoms (SANS) (Andreasen, 1981). Apathy was assessed administering the clinician (AES-

C) and informant rated (AES-I) versions of Apathy Evaluation Scale (Marin et al, 1991). The questions in the scale are in English and the subjects in the present study are all Hindi speaking. For that reason the informant version of the scale was translated into Hindi through an appropriate method. Then, to standardize both the informant and the clinician version of the scale (AES-I and AES-C) in the study population, a pilot study was conducted and the inter rater reliability (intra class correlation coefficient was found to be 0.9345. Current social functioning was assessed by applying Schizophrenia Research Foundation (SCARF) India - Social Functioning Index (Padmavati et al, 1995) which assesses social functioning over the previous one month.

Assessment of Controls: After obtaining information about their socio-demographic profile, general health questionnaire-5 item version (GHQ-5) (Shamsunder et al, 1986) was applied to document their general health status as persons with physical illness were excluded from the study. Apathy was evaluated, applying clinician and informant rated version of the apathy evaluation scale (AES-C and AES-I) (Marin et al, 1991). Social functioning was assessed using the SCARF-India, Social functioning index (Padmavati et al, 1995).

Statistical Analysis

The data collected was statistically analyzed using Statistical Package for Social Sciences (SPSS) 10.0 for Windows 98. For summarizing the continuous and discrete data percentages, mean and standard deviations of two groups were performed. Means were compared between the two groups (patients and controls) using independent t test for continuous variables (AES scores, social functioning score, age).

Chi square test was used to analyze categorical variables to know the group difference. To see the correlation between different variables Pearson's rho value was calculated. Partial correlation between total social functioning score and total score of avolition-apathy sub-scale of SANS was calculated

after controlling for affective flattening, alogia, asociality and attention.

RESULTS

The socio-demographic profile comparison showed that both the patient and healthy control populations consisted of mostly married persons, engaged in semiskilled occupation. Most of them were educated till secondary classes, belonged to extended families with total monthly family income up to Rs. 5000 and came from rural backgrounds.

As shown in Table 1, patient group had a higher mean apathy score (50.50 + 13.81 in AES-C) compared to the control group (19.60 + 2.33). The social functioning score was higher in the control group (82.77+ 1.76) compared to the patient group (49.37 + 15.39).

Table 1: Group difference of Apathy scores [informant (AES-I) and clinician (AES-C) rated] and social functioning scores between patients and controls

Variables	Patient (Mean ± SD)	Control (Mean ± SD)	t (df = 58)	p
AES-I total	51.50 ± 12.83	19.60 ± 2.19	13.427	0.000**
AES-C total	50.50 ± 13.81	19.60 ± 2.33	12.088	0.000**
SF total	49.37 ± 15.39	82.77 ± 1.76	-11.810	0.000**

** Significant at p < 0.01 level (2 tailed)

Abbreviations:

AES-I : Apathy Evaluation Scale, informant rated version
 AES-C : Apathy Evaluation Scale, clinician rated version
 SF total : SCARF social functioning index total score

When Pearson's r value was checked between apathy and various clinical and socio-demographic factors, it was seen (as shown in Table 2) that there was no significant correlation between apathy scores (either clinician or informant rated) and age or duration of illness. No significant correlation could be seen between PANSS positive sub-scale total score and apathy but apathy scores showed strong positive correlation with PANSS-negative sub-scale total score, SANS total score and total score of avolition apathy sub-scale of SANS (p < 0.01). Correlation between PANSS-general symptom sub-scale and apathy scores, though significant (p < 0.01) was not that high. There was a strong negative correlation (p <

0.01) between SCARF-social functioning index total score (SF total) and apathy scores.

Table 2: Correlation (Pearson's r) of apathy scores [informant (AES-I) and clinician (AES-C) rated] with various socio-demographic and clinical characters

Variables	AES-C	AES-I
Age	.161	.227
Duration of illness	.072	.119
PANSS - P score	.229	.261
PANSS - N score	.819**	.778**
PANSS - G score	.675**	.658**
SANS : Avolition-apathy sub-scale total score	.803**	.839**
SANS Total	.836**	.844**
SF total	-.833**	-.856**

** Correlation is significant at p< 0.01 level (2 tailed)

Abbreviations:

PANSS-P : Positive symptom sub-scale total score of Positive and Negative syndrome scale of schizophrenia
 PANSS-N : Negative symptom sub-scale total score of Positive and Negative syndrome scale of schizophrenia
 PANSS-G : General symptom sub-scale total score of Positive and Negative syndrome scale of schizophrenia
 SANS : Scale for assessment of negative symptoms
 SF total : Social functioning index (SCARF-SFI) total score

Next, the relation of apathy and various sub-scales of SANS was seen. From Table 3 we can see that though all the SANS sub-scale scores were positively and significantly correlated (P < 0.01) to apathy scores (both informant and clinician rated), maximum correlations with both the apathy scale scores were with asociality followed by avolition-apathy.

Table 3: Correlation (Pearson's r) of apathy scores [informant rated (AES-I) and clinician rated (AES-C)] with sub-scales of SANS

Sub-scales of SANS	AES-I	AES-C
Affective flattening	.684**	.678**
Alogia	.633**	.624**
Anhedonia-asociality	.851**	.873**
Avolition-apathy	.839**	.803**
Inattention	.780**	.767**

** Correlation is significant at p< 0.01 level (2 tailed)

Finally the relation (partial correlation) between avolition-apathy sub-scale (which again is significantly correlated with apathy measured by Apathy Evaluation Scale) and social functioning was checked after controlling the other sub-scales

of SANS. As shown in Table 4, it was seen that the correlation between SANS avolition apathy sub-scale total score and SCARF-social functioning index total score was not significant, when affective flattening, alogia, anhedonia-asociality and inattention were partialled out.

Table 4: Partial correlation between total score of SCARF-social functioning index and Avolition-apaty sub-scale of SANS after controlling for affective flattening, alogia, anhedonia-asociality and inattention

	SF TOTAL	p
SANS avolition- apathy sub-scale total score	-0.3612	.070

DISCUSSION

Comparing the mean level of apathy between patients and normal controls by independent samples t-test, patients were seen to have significantly higher level of apathy. Kiang et al (2003) described similar finding in a group of patients with schizophrenia and schizoaffective disorders.

The low level of apathy in normal controls might be due to what Marin (1991) said "volunteerism": individuals who volunteer for a study on apathy probably have higher than average motivation compared to the general population.

To see the relationship of apathy with various socio demographic and clinical variables as well as current social functioning first the Pearson's r value between various variables and apathy was calculated. No significant correlation of apathy could be seen with age or duration of illness. There was also no significant correlation between apathy and positive symptoms of PANSS. The previous study by Kiang et al (2003) showed a similar picture with no significant correlation between PANSS positive symptoms and apathy scores with $r=0.02$ and p value not being significant.

When correlation of apathy was checked with negative symptoms sub-scale of PANSS, it was seen that they were significantly correlated. Significant correlations were also seen between apathy scores (by AES) and scores of PANSS general symptoms sub-scale. Strongest correlation was between AES

scores and total score of SANS. Interestingly, this was even stronger than the correlation between AES scores and avolition-apaty sub-scale (of SANS) score. But when correlation between apathy and sub-scales of SANS were tested, strongest correlation of apathy was seen with anhedonia-asociality sub-scale and not avolition-apaty sub-scale. This is an important finding and to the best of the authors' knowledge it has not been reported in any of the previous studies.

To find out the other clinical correlates of social functioning, the correlations between SCARF-SFI total score (and also sub-scale scores) and scores of other scales and sub-scales were checked.

Previous studies have shown that negative symptoms are associated with poor social functioning (Mueser et al, 1990; Bailer et al, 1996; Breier et al, 1991; Keefe et al, 1987; Maurer et al, 1996). Also individual negative symptoms like poverty of speech (Pogue-Geile & Harrow, 1984) have similar bearing on social functioning. So it was felt that if the specific and differential effect of apathy on social functioning was to be tested, it had to be filtered out from the effects of other negative symptoms on social functioning. The AES does not measure any other negative symptoms but it is strongly correlated to SANS as well as its avolition-apaty sub-scale. So a partial correlation between avolition-apaty sub-scale score and SCARF-SFI score was tested after controlling for the other sub-scales of SANS i.e. affective flattening, alogia, anhedonia-asociality and inattention. The test intended to show the effect of apathy on social functioning without any effect from other negative symptoms.

The present study however failed to find a significant correlation between avolition-apaty sub-scale score and social functioning (measured by SCARF-SFI) when other sub-scales of SANS were controlled, though a trend was seen ($r = -.36$ with $p = .07$).

Despite best of efforts from the authors the study was not without limitations. Firstly, a cross sectional study design failed

to point out any changes on the level of apathy over the course of time. The changes could have been due to ongoing treatment, effect of hospitalization (for those who got admitted) and several other factors. No association between antipsychotic dosage and apathy was looked for. So effects of different types of medicines (e.g. typical and atypical antipsychotics) on apathy could not be tested. Another limitation of this study was that it examined a specific segment of population drawn out of a purposive method of sampling. Females were grossly under represented in the study population and the sample size was also small. So the conclusions derived from the study might not hold good for all patients with schizophrenia. A single rater assessed all the patients for apathy as well as social functioning. This might have led to what is called "halo effect" (Nisbet & Wilson, 1977) leading to overestimation of the correlation between the parameters. Finally, biological correlates of apathy were not looked for. Any significant finding in this aspect would have been enlightening. Future studies comparing the mean apathy levels in various other psychiatric disorders and schizophrenia may come out with a better picture about apathy in schizophrenia and whether it is qualitatively and/or quantitatively different from apathy in other psychiatric illnesses.

Besides, studies looking for biological correlates of apathy would give a new light in the neurobiology of apathy. These studies may include advanced neuroimaging techniques [e.g. Computed Tomography (CT scanning), functional Magnetic Resonance Imaging (fMRI) etc.], neurophysiological investigations [e.g. Electroencephalogram (EEG), Event Related Potentials (ERPs) etc.] or evaluate biochemical parameters in blood or cerebrospinal fluid in individuals with apathy.

CONCLUSIONS

To conclude, mean apathy level in acute schizophrenic patients was higher than that in healthy controls and it had no relationship with age or duration of illness. Apathy was not significantly correlated with positive symptoms of PANSS,

moderately positively correlated with general symptoms of PANSS but strongly positively correlated with SANS total score and its sub-scales like anhedonia-asociality and avolition-apathy. Current social functioning was strongly negatively correlated with apathy, negative symptoms of PANSS, SANS total score and its sub-scales like avolition-apathy and anhedonia-asociality. However correlation between avolition-apathy and current social functioning was not significant when other sub-scales of SANS were controlled.

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1. **Dr. Amlan Kusum Jana**, D.P.M., Junior Resident, Central Institute of Psychiatry Ranchi-834006.
 2. **Dr. C.R.J. Khess**, M.D., (Corresponding Author), Professor of Psychiatry and In-charge of Deaddiction Centre, Central Institute of Psychiatry, Ranchi-834006, Email : cipranchi@hotmail.com.
 3. **Dr. Sarita E. Paul**, M.D., Ex Associate Professor of Psychiatry, Central Institute of Psychiatry, Kanke, Ranchi-834006.
 4. **Dr. Pushpal De Sarkar**, M.D., D.P.M., Senior Resident, Central Institute of Psychiatry, Kanke, Ranchi-834006.
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PSYCHOSOCIAL ISSUES AMONG PRISONERS: AN EXPLORATORY INVESTIGATION

L.N.Suman¹, M.Manjula²

ABSTRACT

Background: Research has indicated that prisoners constitute a vulnerable population in terms of risk for mental health problems. Very few studies in India have been carried out to examine mental health needs of prisoners. **Aim:** The study aimed at examining the socio-demographic characteristics, antecedent factors to criminal behavior, current psychological functioning, self-descriptions of personality and adjustment to the prison in a sample of prisoners jailed in the Bangalore Central Prison. **Methodology:** Information was obtained using a socio-demographic data sheet and a semi-structured interview schedule. The sample consisted of 20 female and 20 male prisoners who were interviewed individually. Data obtained were analyzed using descriptive statistics. **Results:** Results revealed that 54% of the prisoners were from an urban background and 34% were illiterate. None had a past criminal record or history of crime in the family. They were mostly from peaceful neighborhoods and intact families. 74% were convicted for either homicide or abetting homicide, out of which, 30% of the homicides occurred during group violence. 30% of male prisoners and 55% of female prisoners had depressive symptoms and 20% each had somatic problems. **Conclusion:** Most of them were satisfied with prison conditions and treatment by prison officials. Men reported having better social support than women prisoners. The implications for psychological intervention in the prison setting are discussed.

Key words: Prisoners, Psychological distress, Adjustment, Social Support.

INTRODUCTION

Research has consistently shown a higher level of mental health problems in prisoners compared to the general population. The rate of mental illness is said to be at least three times the national average and between 15-20 percent of prisoners are said to be mentally ill (Benson, 2003). Kane and DiBartolo (2002) screened 30 women prisoners using the Brief Symptom Inventory (BSI) and found that 70% of them were in the clinical range for mental health problems. They also found that scores on the Multidimensional Scale for Perceived Social Support were negatively correlated with the Global Severity Index on the BSI, which indicated that social support had a protective effect with regard to psychological distress. The sample demonstrated tremendous needs in terms of psychiatric illness, addictions and difficulty with maintaining family and maternal roles. These needs require appropriate interventions from mental health professionals. Similarly, Jiang and Winfree (2006) found that extra and intrainstitutional social support mechanisms reduced inmate

perceived stress associated with imprisonment and yield fewer official rule infractions. They also found that female inmates experienced more social support than did their male counterparts.

In a larger survey, Warren (2003) assessed psychopathology of 802 women prisoners using the Brief Symptom Inventory. Results revealed that women inmates reported high degrees of psychological distress and were significantly above a comparison group of non clinical women. Over 50% of them also met DSM IV criteria for personality disorders. The most prevalent disorders were paranoid, borderline, narcissistic and obsessive compulsive personality disorders. He also found that narcissistic personality disorder significantly predicted current incarceration for any violent crime including murder and any violent crime excluding murder. Cluster 'A' personality disorders were also significantly related to violence. Antisocial and psychopathic traits were found to be predictive of recidivism.

With respect to India, information about prisons reveal that they are plagued by problems such as overcrowding, unhygienic conditions and several undertrials not being produced in court for many months (National Crime Records Bureau, 2002). However, few studies have examined the psychological needs of prisoners, their background, and vulnerabilities in their environment/home or in their own personalities.

MATERIALS AND METHOD

The aim of the study was to examine specific psychosocial issues among a sample of male and female prisoners. The objectives of the study were to examine socio-demographic characteristics, the nature of crimes committed, current psychological functioning, self-descriptions of personality, adjustment and antecedent factors related to crime.

The sample consisted of 40 prisoners, comprising of 20 female and 20 male prisoners which was selected using purposive sampling. The sample was selected from the Bangalore Central Jail, situated on the outskirts of Bangalore City. The total population of the jail is approximately 4500-4700, with an open prison system. There is a separate complex for women prisoners accommodating 100 of them. The prison provides various facilities to prisoners such as a library, hospital, indoor and outdoor games and training in certain skills such as tailoring, baking, printing, gardening and carpentry. These skills are imparted not only to keep the prisoners meaningfully occupied, but also to equip them with skills that can be used by them after release. Data was collected using the following tools:

- 1) *Socio-demographic Data Sheet*: This was used to obtain demographic details such as age, education, occupation, income, religion, whether from rural/urban background, type of family and regional background.
- 2) *Semi-structured Interview Schedule for Prisoners*: This was developed by the investigators for the purpose of the present study. The schedule covers five broad domains:

- i) *Details related to the offence committed*: This includes the type of crime committed, circumstances surrounding the offence, prisoner status and duration of imprisonment.
- ii) *Antecedent factors for criminal behavior*: This examines childhood upbringing, nature of adolescent peer groups, family history of criminal involvement or encounters with law enforcing agencies, past history of crime by the prisoner, adult peer influences for deviant behavior and exposure to violence and aggression in their families or neighborhood.
- iii) *Current psychological functioning*: This covers past and present history of any mental illness. The interview covers psychotic symptoms, mood disorders, substance use/abuse, anxiety spectrum disorders and organicity. The interview also elicits narratives from prisoners about their current emotional well being, and concerns, if any. The physical health of the prisoner was also enquired into.
- iv) *Self description of personality*: The interview attempts to get a developmental perspective, with examples, to obtain a global picture of the prisoner's personality. It includes traits such as empathy, responsibility, frustration tolerance, coping patterns, emotional stability, sociability, motivation to work, attitude towards responsibilities, leisure time interests and religiosity.
- v) *Adjustment*: This examines attitude towards the judicial system, acceptance of the judgment given and adjustment to the prison setting. The interview also examines the social support networks available, attitude toward the future and concerns about stigma that may lead to lack of acceptance in society after release.

The prison authorities were contacted and permission was obtained from them to interview the prisoners. Their approval regarding the content of the interview and the informed consent form was also obtained. The prisoners were contacted individually and the aim of the study was explained to them.

Those who agreed to be interviewed were requested to sign an informed consent form. However, all of them declined to do so out of fear that their signatures could be misused. Hence, oral consent was obtained from all the participants and the same was brought to the notice of the prison authorities. All the male prisoners were interviewed individually in a separate room provided by the prison hospital authorities inside the hospital building. The female prisoners were interviewed in the female barrack in a separate room provided for that purpose. The time taken for the interviews ranged from 90 minutes to 120 minutes. The data obtained was analyzed using descriptive statistics such as means, standard deviations and percentages.

RESULTS

Table 1: Demographic details of the prisoners (N=40)

		Females		Males	
		n=20	(%)	n=20	(%)
Marital status	Married	17	85	12	60
	Unmarried	3	15	8	40
Education	Illiterate	10	50	4	20
	Primary/secondary	6	30	10	50
	PUC/Degree	4	20	6	30
Occupation	Coolie/daily wager	10	50	12	60
	Govt. employee	2	10	3	15
	Agriculture	-	-	5	25
	Home maker	8	40	-	-
Family type	Nuclear	17	85	18	90
	Joint	3	15	2	10
Background	Rural	8	40	12	60
	Urban	12	60	8	40
Religion	Hindu	16	80	18	90
	Christian/Muslim	4	20	2	10

The mean age of the female prisoners was 34.55 years (range: 21-60 years) and that of males was 38.80 years (range: 21-65 years). Table 1 gives the other details of the demographic characteristics of the sample. It can be seen from the table that 85% of the females and 60% of the males were married. 50% of the females and 20% of the males were illiterate and educational levels were higher among males compared to females. More than half of them, among both the groups, were daily wage earners, out of which 40% were involved in agriculture among men. 40% women were home makers.

There was equal representation from rural and urban backgrounds. Majority of them were from nuclear families and were Hindu.

Table 2: Details of the crime and criminal history (N=40)

		Females		Males	
		n=20	(%)	n=20	(%)
Prisoner status	Convict	11	55	16	80
	Under-trial	9	45	4	20
Duration of imprisonment (yrs)	Convict	1.35		4.41	
	Under-trial	0.94		2.37	
Type of crime	Accomplice in murder	17	85	2	10
	Attempt to murder	1	5	2	10
	Abetting rape/cheating	2	10	-	-
	Group fight & murder	-	-	6	30
	Murder for money /property	-	-	5	25
	Naxalite activities, rowdyism, kidnapping, trade union activities	-	-	5	25
		-	-	-	-

The details of the crime committed by the prisoners are given in Table 2. It shows that about 55% of the females and 80% of the males were convicted by the court for their crime. Most of the women prisoners (85%) were involved in homicide (mainly dowry related deaths of their daughters in law) while other crimes included cheating (10%) and attempt to murder (5%). Among men, 25% were charged with murder for gain. Another 25% were involved in antisocial activities while 30% were involved in group fights leading to murder (mainly in rural areas, over land disputes). The remaining 10% were accomplices in murder and attempt to murder. Duration of imprisonment ranged from 7 months to 8½ years for males and 14 days to 1½ years for females.

With respect to childhood, 70% of the males and 50% of the females reported normal affectionate relationships with parents and significant others. 10% of the females reported that they grew up in hostels with strict unaffectionate guardians while no detailed information was provided by 20% of the females. Conduct problems in childhood were reported by 10% of the males while 20% in both the groups reported being stubborn, irritable and wanting their own way. None had past or family history of crime but one female prisoner reported a personal

history of involvement in a court case over a land dispute. Almost half the sample reported being raised in neighborhoods characterized by small fights over petty issues. These prisoners were either from rural backgrounds or from low socio-economic status families of urban backgrounds. Equal number of prisoners reported having been brought up in peaceful neighborhoods and having had good relations with others in their social networks. 20% of male prisoners reported having committed crimes due to the influence of their peers.

Table 3: Antecedent factors to crime (N=40)

		Males		Females	
		n=20	(%)	n=20	(%)
Childhood	Normal childhood, affectionate relationship with parents	14	70	10	50
	Grown up in hostels, strict guardians without affection	-	-	2	10
	No information	-	-	4	20
	Truancy, stealing	2	10	-	-
	Stubborn, adamant, pampered, irritable, wanted their own way	4	20	4	20
Neighborhood	Fights over petty issues	10	50	8	40
	Peaceful	10	50	12	60
	Personal/Family history of crime	0	0	1	5
	Peer influence	4	20	0	0

Table 4: Self descriptions of personality (N=40)

Personality	Males		Females	
	n=20	(%)	n=20	(%)
Short tempered, dominating, impulsive, irritable, stubborn, rigid, intolerant to injustice	8	40	8	40
Introverted, anxious, reserved, attached to family members	4	20	4	20
Stable, responsible, mature,				
Hard working	7	35	7	35
No information	-	-	1	05
Antisocial traits	1	5	-	-

The personality characteristics as described by the prisoners are given in Table 4. About 40% of both males and females described themselves as having maladaptive personality traits such as being short-tempered, dominating, impulsive and stubborn. 20% of them, in both the groups, described

themselves as being introvert, anxious and reserved. 35% of the prisoners, in both the groups, reported having stable, mature and responsible personality characteristics. 3 women did not provide detailed information about their personalities while one male prisoner reported traits characteristic of an antisocial personality.

10% of female prisoners and 35% of male prisoners reported having a physical problem. Among the females, one had headache and one had menopause related problems. Among men, one each had HIV/AIDS, throat cancer and asthma while others reported problems such as headache following head injury, epileptic attacks, back pain and loss of vision in one eye. More than half of female prisoners and nearly one third of male prisoners had depression. They reported disturbed sleep, poor appetite, feelings of sadness, crying spells and ideas of hopelessness as well as death wishes. They broke down while narrating their experiences and expressed feeling better after ventilating their distress. Only one female prisoner, who was severely depressed, was on treatment for the same. Among the males, one had attempted suicide and was under psychiatric treatment. 20% of both males and females reported somatic complaints such as headache, bodyache and easy fatigability, which probably masked depression. Only one prisoner had psychosis and about one third of male prisoners were dependent on nicotine. There was no use or abuse of any other psychoactive substance in the prison.

Table 5: Health status of the prisoners(N=40)

	Females		Males*	
	n=20	(%)	n=20	(%)
Medical illness	2	10	7	35
Depression	11	55	6	30
Psychosis	0	0	1	5
Somatic symptoms	4	20	4	20
Substance abuse	-	-	6	30

* Some prisoners reported more than one problem.

75% prisoners in both the groups were unhappy with the judicial system. They claimed to be innocent and felt that various circumstances surrounding the offence were not

considered while sentencing them. 25% of the sample in both the groups accepted the judgment against them and felt that they had to be punished as it was their fate. 65% of the females and 85% of the males were well adjusted to the prison setting; they had a favorable opinion about the prison officials and were satisfied with the facilities provided. However, 25% of the females and 15% of the males were not happy with the facilities and 10% of the females had difficulty in adjusting to the prison conditions. They reported significant interpersonal problems with other inmates, harsh treatment by prison guards and poor quality of food.

Table 6: Attitude toward the judicial system /future and adjustment to the prison (N=40)

		Females		Males	
		n=20	(%)	n=20	(%)
Attitude to judicial system	Accept crime, feel that it is their karma	5	25	5	25
	Injustice, claimed innocence, angry towards the system, law & police, felt that circumstances should be considered	15	75	15	75
Adjustment to jail	Happy with the jail, prison officials & staff	13	65	17	85
	Poor adjustment	2	10	-	-
	Not happy with facilities and health care	5	25	3	15
Attitude toward future	Fear of stigma, worry about future	9	45	13	65
	Optimistic about future	11	55	7	35
Support system	Adequate support from family members & others	11	55	15	75
	No social support	9	45	5	25

In terms of attitude toward the future, most of them had worries and fears about the future. Female prisoners were worried that their husbands and in-laws would not accept them back due to the stigma attached to an ex-offender. With respect to males, 65% of them expressed worry about getting a job, once they were released, because of the stigma of having a criminal record. However, more than half of the females (55%) expressed optimism about leading a life on their own. They had specific plans for the future and expressed confidence in

their own abilities to overcome hurdles. On the other hand, only 35% of the males expressed an optimistic attitude. 55% of the females and 75% of the males reported adequate support from their family members and significant others. 45% of the females reported that they had no social support as their families had abandoned them and that it was a matter of great distress and anxiety. While most of the male prisoners were visited by their family members, there were few visitors from the families of female prisoners. 25% of male prisoners, who reported lack of social support, gave reasons such as poverty and physical distance as leading to lack of support from their families for a transient period and did not perceive it as a long lasting problem.

DISCUSSION

The demographic characteristics of the group show that most of them were middle aged, married and had their own families. The educational background of these individuals shows that literacy rate was less in the group as a whole and more so among women, thus indicating a notable gender disparity in education. The findings are similar to the other studies in terms of age, education and marital status (Freudenberg et al, 2005). In terms of occupation, majority were daily wagers or agricultural workers among men and homemakers among women. They were from low income strata and were mostly from nuclear family backgrounds. Most of the studies conducted in the western context also report similar findings (Gatherer et al, 2005; Seigel, 2004).

None of the prisoners had past or family history of crime, unlike reports about western prisoners, where most of them, including women, had past criminal records (Freudenberg et al, 2005). In the present study, most of the women were accomplices in murder and very few were involved in fraud. Among men, most of them had been involved in group clashes leading to murder. This is referred to as reactive aggression, defined as absence of planning or goals and instead being involved in a dispute or interpersonal conflict with the victim (Cornell et al, 1996). About 25% were involved in murder for material gain and such crimes are referred to as instrumental

or proactive violence (Amir, 1995). Instrumental or proactive aggression is reported to be associated with psychopathic personality, which was not examined in the present study.

The absence of significant antecedent factors for the criminal behavior of the prisoners is noteworthy. Unlike western studies, the present study failed to find family pathology, disturbed childhood or environments characterized by violence among the prisoners studied. However, the sample was very small and this finding must be interpreted with caution. Similarly, the finding that nearly half the sample was characterized by adaptive personalities needs to be corroborated by interviews with their family members. Lack of affection was reported by some of the women in childhood, and this was also cited as a reason for crime, indicating the importance of early nurturing experiences. 25% of the female prisoners reported having difficult marriages, i.e., their marriages were characterized by infidelity on the part of the husband, sexual abuse by the husband and separation from the husband due to marital discord. The percentage of sexual and physical abuse reported by women prisoners was also higher (63%) in a study conducted in the US (Freudenberg et al, 2005).

According to the self-descriptions of personality given by the prisoners, 40% of both men and women described themselves as short tempered, rigid and aggressive. This indicates that personality traits of a maladaptive nature may have a role to play in deviant behaviors. This requires systematic investigation through comprehensive assessment of their personalities using objective personality tests. Fewer prisoners reported being introvert and only one had antisocial traits. This is similar to the findings reported in Office for National Statistics (ONS, 1997) survey but the number of prisoners with antisocial traits in the present study is very low compared to the study by Warren (2003). Another surprising finding in the present study was that there was no significant substance abuse with only nicotine dependence among 30% of the men. In terms of the health status of the prisoners, most of them suffered from psychological problems rather than medical problems. Psychological distress was more

among women in the present study probably because of multiple reasons such as being separated from the family for the first time in life and dependent on family and relatives for the care and well being of their children, which led to significant worries and distress.

As far as attitude towards the court verdict was concerned, these people perceived the legal system as inefficient, corrupt, undependable, and significantly influenced by the rich and powerful. In spite of this, a large percentage reported that they were well adjusted to the prison. They perceived the prison environment as satisfactory, prison officials as humane and facilities as good. A small percentage had adjustment problems and reported dissatisfaction. These findings indicate that the open prison system along with a caring approach probably led to adequate adjustment among the prisoners. However, these findings cannot be generalized to other prisons in India. Among several prisoners, worries about the future were mainly related to the fear of stigma which was more among male than female prisoners. The reason may be that in a male dominated society where men are expected to earn a living for their families, not getting a job is seen as a major threat to their ability to earn an income and thus survival itself. In contrast, the fears of being deserted by family members were expressed more by women when compared to men. Some of the concerns expressed by women were fears that their husbands would remarry; their children would not accept them back; and not knowing where to go in case they were not allowed back into their homes. Freudenberg, et al (2005) also reported similar findings but found that the concern about their families taking them back was much less compared to concern over income, housing and substance use. This difference may be explained in terms of the importance given to family ties and social acceptance as well as lack of tertiary community support systems in India. Another concern expressed by the inmates was that of getting a job to support them. A similar concern was reported by prisoners in a study in Canada by Selber, et al (1993). He also noted that inability to find a job and reintegrate in society contributed to recidivism. Hence, there is a need to plan release and rehabilitation of the prisoners and strengthen

family as well as social support systems. Although males reported better support from the family than females, females reported more optimism about the future. Contrary findings of females having better social support and in turn having better adjustment to prison conditions was reported by Jiang and Winfree (2006).

The present study has limitations such as a small sample size and lack of objective assessment of psychological problems, personality and adjustment. However, as a preliminary study, the findings have indicated areas requiring further investigation. There is a need to assess psychological well being, personality, coping skills, family pathology, social support and adjustment using standardized measures. In addition, family members of prisoners need to be interviewed to get more details about the personality of the prisoners and their behavior patterns. Based on the information obtained, interventions such as supportive therapy, group therapy, enhancing family support systems, social skills training and problem solving skills can be applied, and planning appropriate rehabilitation can be examined. Currently, there is a need for recognition and remediation of psychological problems among prisoners and the services of clinical psychologists in the prison setting are indicated. Future studies can focus on examining the needs of released prisoners and society's attitude towards

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1. **Dr. L.N. Suman**, Department of MH&SP,(Corresponding author) NIMHANS, Hosur Road, Bangalore: 560 029. E mail: elenes@nimhans.kar.nic.in
 2. **Dr. M.Manjula**, Ph.D. Junior Scientific Officer, Department of Mental Health and Social Psychology, NIMHANS, Hosur Road, Bangalore 560 029
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GENERALIZED ANXIETY, PANIC AND PHOBIC SYMPTOMS IN SCHIZOPHRENIA

Arijit Dutta Chowdhury¹, Daya Ram², Pushpal Desarkar³

ABSTRACT

Background: Research has been scant about anxiety symptoms in schizophrenia, though its prevalence and risk factors in schizophrenia patients is an important issue for investigators. **Aim:** To investigate the distribution and prevalence of generalized anxiety, panic and phobic symptoms and disorders in patients with schizophrenia. **Methods:** Schedule for Affective Disorder and Schizophrenia - Lifetime Version (SADS-L) was used on 60 drug free or drug naïve schizophrenia patients to determine comorbid anxiety symptoms/disorders. **Results:** Results revealed comorbid panic disorder in 10%, generalized anxiety disorder in 10%, social phobia in 1.7% and agoraphobia in 3.3%. Moreover, anxiety symptoms/disorders were commoner in patients with family history of psychosis compared to those without family history of any psychosis. **Conclusion:** Anxiety symptoms were commoner in those patients who also had a family history of psychosis. This may indicate a common genetic underpinning between anxiety disorders and psychosis.

Key words: Prevalence, Generalized anxiety, Panic, Phobic Symptoms, Schizophrenia

INTRODUCTION

Although anxiety symptoms in schizophrenia were well documented in early writings, research has been scant in this area. Interest in this field started growing in the 1980s with the successful use of benzodiazepines in treating anxiety symptoms in schizophrenia. Considering high disability and chronicity of anxiety disorders, its prevalence and risk factors in schizophrenia patients would be an important issue for investigators.

Argyle (1990) studied 20 schizophrenia patients of which 35% had panic attacks. Cosoff & Hafner (1998) found, among 60 schizophrenia patients, panic disorder in 5%, specific phobia in 17%, generalized anxiety disorder (GAD) in 12%, agoraphobia in 5% and specific phobia in 5%. Cassano et al (1998) studied anxiety disorder comorbidity in 31 schizophrenia patients. In their study, the prevalence of panic disorder was 19.4% (n = 6), social phobia 16.1% (n = 51) and specific phobia 3.2% (n = 1). In a study on 49 schizophrenia patients, Labbate et al (1999) found that 43% had experienced

lifetime panic attacks and 16 (33%) had current or past panic disorder. Goodwin et al (2003) found that, out of 194 schizophrenia patients, 58 (31.5%) had at least one anxiety disorder. They found agoraphobia in 8.2% (n = 15), social phobia in 8.2% (n = 15), specific phobia in 13.6% (n = 25) and panic attacks in 7.1% (n = 13) of their patients. Pallanti et al (2004), found, among 80 patients of schizophrenia, panic disorder in 13.8%, social phobia in 36.3%, GAD in 2.5%, agoraphobia in 3.8%, and specific phobia in 2.5%.

However, all the studies included patients who were receiving antipsychotic medications, thus limiting the generalizability. Moreover, work has been grossly insufficient for generalized anxiety disorder in the same population. The aim of the study was to investigate the distribution and prevalence of generalized anxiety, panic and phobic symptoms and disorders in drug naive/drug free patients with schizophrenia and to compare the sociodemographic and clinical variables between schizophrenia patients with and without anxiety symptoms in order to identify any risk factors.

MATERIALS AND METHODS

The study was conducted at the Central Institute of Psychiatry, Ranchi, India. The protocol was approved by the institute's ethical committee. Sampling was purposive and first three patients with schizophrenia were taken up according to inclusion and exclusion criteria on every alternate day. A total of 60 consenting patients (52 males, 8 females) aged 18 to 50 years with a diagnosis of schizophrenia according to DSM-IV (American Psychiatric Association, 1994) criteria and who were either psychotropic drug naive or drug free for 4 weeks (12 weeks for depot antipsychotics) were included in the study. Exclusion criteria were comorbid significant medical illness, mental retardation, depression and substance dependence. All patients were assessed on a semi-structured socio-demographic and clinical data sheet, Schedule for Affective Disorder and Schizophrenia - Lifetime Version (SADS-L) (Endicott & Spitzer, 1979), and 18-item Brief Psychiatry Rating Scale (BPRS) (Overall & Gorham, 1962).

STATISTICAL ANALYSIS

Data were analyzed using Statistical Package for Social Sciences (SPSS for Windows, ver. 10.0.1) Percentage of various anxiety symptoms/disorder were determined as well as the distribution of these symptoms. Independent t test for continuous variables and χ^2 test for categorical variables were used to determine if there were any group difference in sociodemographic and clinical profile of schizophrenia patients with or without anxiety symptoms/disorder. In this study, a level of significance of < 0.05 (two tailed) was taken to consider a result statistically significant.

RESULTS

Sample population consisted of young patients (31.45 \pm 7.77 yrs.), mostly married (73.3%) males (n=52) and females (n=8). About half of the patients were educated up to secondary (55%). Majority of patients were either unemployed (35%) or semiskilled workers (41.7%) from rural background (80%). They had average duration of illness of 55.3 \pm 48.77 months. Majority of them had insidious onset (68.3%) of illness with

continuous course (73.3%) without any precipitating factor (86.7%) or past history of schizophrenia (78.3%). Majority of them also had no family history of psychiatric illness (66.7%) or premorbid personality disorders (86.7%). Thirty nine (65%) patients had a diagnosis of paranoid Schizophrenia and 21 (35%) patients had a diagnosis of undifferentiated Schizophrenia.

Out of 60 patients, 11 (18.33%) had panic symptoms of which 6 (10%) fulfilled criteria for panic disorder. 10 (16.66%) patients had generalized anxiety symptom of which 6 (10%) fulfilled criteria for generalized anxiety disorder. Only 1 (1.7%) patient had social phobia and 2 (3.3%) patients had agoraphobia (Table 1).

Table 1: Prevalence of Generalized Anxiety, Panic and Phobic symptoms / disorder in Schizophrenia patients (N= 60)

Comorbid Anxiety symptom / Disorder	n	%
Panic attacks	11	18.33
Panic Disorder	6	10
Generalized anxiety symptoms	10	16.66
Generalized Anxiety Disorder	6	10
Social phobia	1	1.7
Agoraphobia	2	3.3

Among panic symptoms, dyspnoea was commonest (81.8%) followed by palpitations (72.7%), sweating (72.7%), dizziness (63.6%), trembling (63.6%), chest pain (36.4%), tingling (36.4%), fear of dying (36.4%) and faintness (9.1%). Among generalized anxiety symptoms, sweating (80%) was commonest, followed by insomnia (60%), muscular tension (60%), fidgeting (30%) and worrying (10%).

Comparison of clinical variables of schizophrenia patients without anxiety symptoms (n=39) and with anxiety symptoms (n=21) didn't reveal any significant group difference regarding duration of illness ($p = 0.412$), age of onset ($p = 0.818$), mode of onset ($p = 0.432$), presence or absence of precipitating factor ($p = 0.08$), past history ($p = 0.309$), premorbid personality ($p = 0.807$), course of illness ($p = 0.087$), diagnosis ($p = 0.843$) and total BPRS score (95% CI, -5.47 - 0.90; $p = 0.156$).

Significant group difference was found regarding presence or absence of family history of psychosis (Table 2). Anxiety symptoms were significantly commoner ($p = 0.016$) in patients who had family history of psychosis.

Table 2: Comparison of clinical variables of Schizophrenia patients without anxiety symptoms (N=39) and with anxiety symptoms (N=21)

Variables	Schizophrenia	Schizophrenia	t/x ²	p
	without anxiety symptoms (N=39)	with anxiety symptoms (N=21)		
	Mean±SD/n(%)	Mean±SD/n(%)		
Duration of illness(mths)	54.51 ±48.49	56.76 ±50.47	0.169	0.412
Age of onset (yrs)	26.58 ±7.37	26.09 ± 8.79	0.231	0.818
Mode of onset				
Acute	11(28.2)	28 (71.8)		
Insidious	8(38.1)	13(61.9)	0.617	0.432
Precipitating factor				
Present	3 (7.7)	36 (92.3)		
Absent	5 (23.8)	16 (76.2)	3.068	0.08
Past History				
Present	10 (25.6)	29 (74.4)		
Absent	3 (14.3)	18 (85.7)	1.037	0.309
Family History of Psychosis				
Absent	31 (79.5)	8 (20.5)		
Present	9 (42.9)	12 (57.1)	8.242	0.016*
Premorbid personality				
Premorbid disorder absent	36 (92.3)	3(7.7)		
Premorbid disorder present	19 (90.5)	2(9.5)	0.06	0.807
Course				
Continuous	27(69.2)	10 (25.6)		
Episodic Remittent	2(5.1)	17(81)	4.875	0.087
Episodic with stable deficit	1 (4.8)	3(14.3)		
Diagnosis				
Paranoid Schizophrenia	25 (64.1)	14 (35.9)		
Undifferentiated Schizophrenia	14 (66.7)	7 (33.3)	0.039	0.843
BPRS* Total	22.67 ±5.89	24.95 ±5.85	1.436	0.156

* $p < 0.05$, **BPRS-Brief Psychiatric Rating Scale

DISCUSSION

Prevalence of panic disorder has varied widely in other studies, being as low as 5%(Cosoff & Hafner, 1998) to as high as 43% (Labbate et al, 1999). In our study, it was 10%, which fell somewhere in between; though the rate of panic attacks were higher i.e.,18.33%.

Only two other studies looked for the generalized anxiety disorder comorbidity in schizophrenia. Pallanti et al (2004) got a rate of 2.5 %, while Cosoff & Hafner (1998) got a rate of 12 %. Our result was more similar to the later one, being 10%. However, we obtained a high rate of generalized anxiety symptoms which was 16.67%.

In other studies, comorbidity of social phobia was mostly found to be high. It varied from 17 % (Cosoff & Hafner, 1998) to 36.3 % (Pallanti et al, 2004). However, we got a rate of only 1.7%. It may be due to the fact that our study was conducted during the acute psychotic phase which could have reduced the chance of diagnosing social phobia. Our rate of agoraphobia (3.3%) was similar to that of Pallanti et al (2004) who found a prevalence rate of 3.8 %.

An important observation of the current study was that anxiety symptoms as a group were commoner in those patients who had a family history of psychosis. At least two studies (Goodwin et al, 2001; Goodwin et al, 2002) in the past have shown that schizophrenia patients with panic attacks have higher family psychopathology. Though the similar finding is not there regarding other anxiety disorders, our result suggests the same may be true when all anxiety symptoms are considered as a whole. Moreover, this could reflect shared genetic underpinning between schizophrenia and anxiety disorders and points towards unitary genetic pathogenesis between psychoses and anxiety disorders. However, this observation is preliminary and future genetic studies are needed to test the hypothesis

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1. **Dr. Arijit Dutta Chowdhury**, D.P.M., Junior Resident, Central Institute of Psychiatry, Kanke, Ranchi-834006, Jharkhand.
 2. **Dr. Daya Ram**, M.D., (Corresponding author), Professor of Psychiatry, Department of Psychiatry, Central Institute of Psychiatry, Ranchi-834006, Jharkhand, Email : rch_cipra@sancharnet.in.
 3. **Dr. Pushpal Desarkar**, DPM, M.D., Senior Resident, Central Institute of Psychiatry, Kanke (PO), Ranchi-834006, Jharkhand.
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PROZAC NATION - YOUNG AND DEPRESSED IN AMERICA : A MEMOIR

Elizabeth Wurtzel

(Riverhead Books, New York, 1995)

This is the memoir of a young girl with depression. The author's detailed description of the depression she faced from childhood on to young adulthood take us to the depths of despair. Elizabeth Wurtzel describes depression as a black wave overwhelming her. "I will be alone in this world and in my life. I will eventually be so crazy from this black wave, it seems to be taking over my head with increasing frequency, that one day I will just kill myself. Not for any great thoughtful existential reasons, but because I need immediate relief".

This is a beautifully written book and the author is very perceptive about the nature of depression and the feelings of a young girl in the America of the 1980's and 90's. She is often brutally honest about herself, describing herself as selfish and completely self absorbed during depressive periods. Her family broke up in her childhood. She was caught in the crossfire of her battling parents, used by both of them as ammunition, in a futile war. She was extremely talented and full of promise as a child. She attended private school because of various scholarships she won. At the onset of her depression in her pre-pubertal years, she was poised to fulfill all her potential. Her parents were middle class Jewish. She had a very poor relationship with her mother, who exhibited very high expressed emotions. Her relationship with her father became non-existent after the divorce. The "black wave" which engulfed her at a summer camp lead to her first suicide attempt - an overdose of antihistaminic pills. She began to cut herself with razor blades in the school locker room "hiding the scars from my mother became a sport of its own. I collected razor blades. I bought a Swiss Army knife."

At this point in her life she is first seen by a psychiatrist. She is still at school. Her self esteem has been badly damaged by her father. After her mother gets custody of her, he does the disappearing act. She lost any relationship she ever had with her father and her relationship with her mother was far from good. Her mother wondered where the girl full of promise had disappeared and in her place was a person her mother could not understand at all. Her depression was not recognized for quite a long time. When she was ten years old, her father told her that her mother became pregnant with her and wanted to have an abortion and it was he who prevented it. Her mother completely denied this and said that the opposite was true. This was characteristic of her parents and her childhood was spent between two battling parents. There was always a shortage of money to pay for her expensive therapy.

Despite severe depression, she became an undergraduate at Harvard. She drifted through her courses - the black wave followed her through her years in Harvard. She became addicted to drugs and alcohol. It was the rejection by her boyfriend, who was finally fed up with her depression that pushed her to one of her lowest ebbs. "To ask anyone how he happened to fall into a state of despair always involves new variations on the same myriad mix of family history. There is always divorce, death, drunkenness, drug abuse and whatnot in any of several permutations".

Elizabeth Wurtzel was very much a child of the 80's and 90's in America. She found solace in the music of Bruce Springsteen, Joni Mitchell and Bob Dylan. She read and

identified with the poetry of Sylvia Plath, especially 'The Belljar'. During her years in Harvard she went through a spontaneous miscarriage of an unwanted pregnancy. She did not even know that she was pregnant at that time. Lying in her bed after the miscarriage, she felt extremely depressed. "A human being can survive almost anything, as long as she sees the end in sight. But depression is so insidious, and it compounds daily, that it is impossible to see the end. The fog is like a cage without a key". Her psychiatrist Dr. Sterling, after years of therapy decided to prescribe Mellaril (thioridazine) for her agitation. She felt marginally better but it did not make any significant difference. She was as depressed and suicidal as before. Finally Prozac (fluoxetine) was approved by the FDA and she was one of the first patients to be put on Prozac. In the initial period of dosage adjustment she had a suicide attempt in the bathroom of her psychiatrist's clinic. Fluoxetine was gradually increased and she began to improve. Her mood stabilized. All of a sudden she found herself in an America where depression had come out of the closet and Prozac was the new panacea for all ills, "I never thought that depression could seem funny, never thought there'd be a time when I could be amused that of the \$1.3 billion spent on prescriptions of Prozac last year, some of them might be even for our household pets".

She found that The New York Times had reported on the 11 million people who had taken Prozac worldwide (6 million in the US alone) and declared this a legal drug culture. Newsweek's cover showed a large missile like capsule beneath which was the caption saying "Beyond Prozac".

Elizabeth Wurtzel had suddenly found herself in a culture where depression and mental illness was being mainstreamed. She realized that being depressed in the 1990's was downright trendy. America was suddenly one big Prozac Nation.

This book describes a young girls journey through the black waves of depression and the rapidly changing social environment of America in the 1980's and 90's. It is a

perceptive, entertaining and thought provoking book. She is honest with herself, often describing herself in terms which are less than complimentary. The author is extremely witty and has a sense of ridicule. This book describes the struggles of Elizabeth Wurtzel's life with great depth and sensitivity. For anyone working with patients with depression or suffering from depression, this book is an important landmark. It makes us realize what private hells people go through. This book stand out in contemporary writing about mental illness. It brings to mind, books like J.D. Salinger's Catcher in the Rye. The social milieu in America among young people is very well described. All mental health professionals should read this book.

Review submitted by :

Dr. Elizabeth Davis, Consultant Psychiatrist, Davis Institute of Neuro Sciences, Ranchi-834006, Jharkhand, India

KORO-LIKE PSYCHOPATHOLOGY IN A CAUCASIAN MALE WITH RECURRENT PSYCHOTIC DEPRESSION

Sir,

Here we describe the case of an elderly Caucasian gentleman who presented with koro-like symptoms during multiple episodes of psychotic depression.

The syndrome of genital retraction (SGR) is characterised by the conviction of genital hyperinvolution, acute anxiety and fear of impending death as soon as the genitals have disappeared completely into the abdomen. It is best known as a culture-bound syndrome in Asia: koro in Indonesia and suo yang in southern China (Freudenmann & Schonfeldt-Lecuona, 2005).

CASE REPORT

WS, a 73-year old Caucasian gentleman, presented to the psychiatric services in Ayrshire, for the first time in September 1995. His main complaints were that his "penis was getting smaller-shrinking" over the last few weeks. He attributed this to the many sexual relationships that he had indulged in while serving in the army during the Second World War. He felt guilty about these relationships. He also had low mood, decreased interest in his hobbies, felt tired all the time and was constantly tearful. His sleep, appetite and concentration were disturbed and he had lost significant weight. WS lived alone in a council house. He managed well with his pension. His sister came to visit him quite often. He had no other family of his own. He never had married and had no children. He had been the primary carer for his father who died at the age of 93 years. WS said that he had attended to his responsibilities towards his father for a long time, never thinking about his personal life. It was 'too late' to get married, after the death of his father. He had served for four years during the Second World War and had spent this time in

South-east Asia. After the war he worked as a timber feller until he retired at the age of 60 years.

He had no family history suggestive of psychiatric disorders. At this point he had no previous history of psychiatric illness. He appeared to be premorbidly well adjusted.

During the initial interview, WS attributed his low mood to his shrinking penis and felt that if that was corrected, everything would be fine. His belief that his genitalia were shrinking was unshakeable and no amount of reassurance could make him feel otherwise.

The working diagnosis at this point was 'Severe depression with psychotic symptoms'. He was initially treated with various antidepressants (including lofepramine, fluoxetine and citalopram). Ultimately he was admitted to hospital and given a course of electroconvulsive therapy over two months. He improved significantly. He felt that his penis was not shrinking anymore. He was ultimately discharged on clomipramine.

He remained well until March 2003, when he was admitted with similar symptoms and diagnosis. This time too he improved with ECT and was discharged after a month of hospitalization.

He was admitted for the third time in March 2006. This episode seemed to be triggered by the death of his sister in February 2006, who at this point had been living with him for the past few years. During an interview he again expressed the belief that his penis was shrinking due to 'too much sex' at one time. His belief was fixed and unshakeable. He was again given ECT and improved. He was discharged after three months.

At one point we did ask him, whether he had picked up this belief or the possibility that such a phenomenon was possible, from his years in South-east Asia. WS denied this and said that he had felt it happening to himself when he was depressed. Though he no longer felt that his genitals were shrinking when his mood became euthymic, he never developed full insight. He still believed that his genitals had been shrinking in the past, only now it had stopped and his physique had returned to normal.

DISCUSSION

There have been a variety of cases reported in western literature, describing SGR or "koro-like" symptoms. To the best of our knowledge, this is the first case reported from Scotland.

In the west, the few case reports of Caucasian males developing symptoms of SGR have all been associated with a co-morbid psychiatric syndrome or evidence of drug use, in contrast to South-east Asia, where koro can occur in otherwise normal subjects (Wilson & Agin, 1997; Kalaitzi, 2006). Hence the cases from the west are called "koro-like", since they resemble the South-east Asian syndrome in psychopathology but do not show a particular cultural context.

This case adds to the widening boundaries of this interesting psychopathological phenomenon and adds to the debate regarding its description as a primarily culture-bound syndrome.

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1. **Dr. Nandini Chakraborty**, MD, DNB, MRCPsych, (Corresponding author), Senior House Officer in Psychiatry, Arnold Lodge Medium Secure Unit Leicester, UK., Email: brownie_nand@yahoo.co.in
 2. **Dr. W.J. Creaney**, MRCPsych, Consultant Psychiatrist (Old age psychiatry) and Associate Medical Director, Arnold Lodge Medium Secure Unit Leicester, UK.
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LIVING WITH AUTISM

The article that follows is part of the Indian Journal of Social Psychiatry's (IJSP) Memoirs series. We hope that mental health professionals will take the opportunity to learn about the issues and difficulties confronted by the patients. In addition we hope that these accounts will give patients and families a better sense of not being alone in confronting problems that can be anticipated by persons with serious emotional problems. We welcome other contributions from patients, ex-patients or family members.

Clinicians who see articulate patients should encourage these patients to submit their articles to Editor, IJSP, Memoirs, Central Institute of Psychiatry, Ranchi-834006—The Editors

Hello everybody! A beautiful day today, is not it. I bet this is what you all wanted to hear from me. Converse like all of you do.

You all realize that I am different but unfortunately, you all forget to communicate things differently leaving me confused and unable to learn properly.

I love structure and routine. I slowly learn that after a certain activity something interesting will follow. I do not know why I am unable to initiate and so I just do not know what to do next or what is expected of me. When suddenly I am told of the change I get upset. Yes, I agree I do tend to get difficult and my temper tantrums upset you all but this is way I can communicate to you that I do not like what you are imposing on me. You see, most of my frustration is a result of my inability to communicate appropriately. These languages are so tough. And the grammar is worse. It is so much easier just repeating what you say.... at least that takes care of the grammar part! Please devise easier ways for me to communicate (pictures really help).

Perhaps you all should attempt to understand why I behave the way I do sometimes. Find the reason I say.

And just as I like to repeat after you please repeat instructions

for me too. Please do not assume that I heard or that I remember. Keep the instructions crisp and small. I prefer it that way. The other day my mommy took me to a park. She bent down and looked me in the eye and said in a low tone, (I love my mommy's voice) "do you want to sit on the swing or see-saw?" I was given a choice between two real things. I went to the swing. But why are others not like my mommy? They tell me, "do you want to sit on the see-saw?", or "Sit on the see-saw I will give you a chocolate." I hate this give and take. Right here right now give me a choice (and the chocolate... I love chocolates with nuts! Yummy)

Even my teacher understands. I used to have a bad habit. I would keep peeling off my wounds with my nails. It was good pass time and stimulating too. My teacher would say it is bad. It will hurt. But I did not how to stop it. My fingers wanted to do it. Then one day my teacher put a sticker underneath my foot and asked me to peel it. It was fun and gave me same stimulation. I still do not understand why they are happy that I stopped playing with my wounds. But it helped. I was tired of hearing them nag.

Overall, I am a lovable kid. Keep to myself, do not interfere in your activities, and get stimulated by little-little things. Strings and their movement on the floor excite me. Don't you think I am easy to please? Then do not take away these small inexpensive pleasure-providing activities. O.k. maybe I cannot play with the string the whole day but at least put in a time in a day when I can engage in it.

Well, it is time for me to end the letter. Have to go to school, so mummy says. Do think over what I said.

Truly,
Mommy's pet and teacher's too!

Submitted By:

Ms. Radhika Tanksale, M.A., M.Phil, Psychotherapist, Community Services Institute, 1695 Main Street, Springfield, MA, 01103, USA, Email: rads26@gmail.com

INSTRUCTION FOR AUTHORS

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This should contain the title of the contribution, and the name(s) and address(es) of the author(s), and position titles at their respective institutions/places of employment. Make titles concise, and as precise and specific as possible for abstracting purposes. The full postal address, telephone and facsimile numbers, and Email address (if available) of the author who will receive correspondence and check the proofs should be included, as well as the present address of any author if different from that where the work was carried out. Addresses for authors other than the correspondence author should contain the department, institution, city and country. Position titles of all authors at their respective institutions/places of employment should be included.

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A summary of the paper must be in the form of a **structured abstract** using the format below. However, abstract may be unstructured for review articles (as mentioned above). Case reports, letters, and film/book reviews do not require any abstract.

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Background: need for the study with specific aim or objectives

Method: design, setting, sample, interventions (if appropriate), chief outcome measures.

Results: provide main findings with p values.

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Pejorative Language: Do not use pejorative labels like 'schizophrenics', 'psychotics' and 'neurotics'. Instead refer to 'patients with schizophrenia', etc.

Abbreviations: Abbreviations should in general be avoided. However, phrases may be abbreviated if their shortened form is widely known and they are used repeatedly (e.g. CNS, OCD etc). When first used in the text, they should be spelt out in full followed by the abbreviation in brackets.

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Bhugra, D. & Mastrogianni, A. (2004) Globalization and mental disorder: Overview in relation to depression. *British Journal of Psychiatry*, 184, 10-20.

Rosenberg, A.A., Solarz, A.L., Bailey, W.A.(1991) Psychology and homelessness: A public policy & advocacy agenda. *American Psychologist*, 46, 1239-1244.

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