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Family functioning in families of first-episode psychosis patients as compared to chronic mentally ill patients and healthy controls

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ABSTRACT

The present study aimed to investigate possible differences in family environment among patients experiencing their First Episode of Psychosis (FEP), chronic patients and controls. Family cohesion and flexibility (FACES-IV) and psychological distress (GHQ-28) were evaluated in families of 50 FEP and 50 chronic patients, as well as 50 controls, whereas expressed emotion (FQ) and family burden (FBS) were assessed in families of FEP and chronic patients. Multivariable linear regression analysis, adjusted for confounders, indicated impaired cohesion and flexibility for families of FEP patients compared to controls, and lower scores for families of chronic patients compared to those of FEP patients. Caregivers of chronic patients scored significantly higher in criticism, and reported higher burden and psychological distress than those of FEP patients. Our findings suggest that unbalanced levels of cohesion and flexibility, high criticism and burden appeared to be the outcome of psychosis and not risk factors triggering the onset of the illness. Furthermore, emotional over-involvement both in terms of positive (i.e. concern) and negative behaviors (i.e. overprotection) is prevalent in Greek families. Psychoeducational interventions from the early stages of the illness should be considered to promote caregivers' awareness regarding the patients' illness, which in turn, may ameliorate dysfunctional family interactions.

1. Introduction

With the advent of deinstitutionalization of psychiatric patients and the simultaneous growth of community mental health care services, the responsibility for patient care has to a great extent been transferred to family members who act as the frontline caregivers (Bloch et al., 1995). The study of family interactions is especially important in the early stages of psychiatric illness when most of the changes in family dynamics are observed (Birchwood and Macmillan, 1993). First Episode Psychosis (FEP), or so called early psychosis, refers to the first time someone experiences a psychotic episode. FEP may lead to a broad range of clinical diagnoses including schizophrenia and bipolar disorder. From a family systems perspective, dysfunction or illness in one family member affects other family members, because a family unit functions as an interconnected whole (Friedman et al., 2003). Thus, relationships and roles have to be adjusted to accommodate the illness and a new equilibrium has to be achieved in order for the family unit to continue functioning.

The link between family functioning and mental illness has mainly been researched in terms of family factors influencing patient relapse and illness course and outcome (Leff and Vaughn, 1985). Family members' attitudes toward the patient, as measured by the level of expressed emotion (EE) and family burden (FB) associated with the caring role, have received a great deal of attention (Awad and Voruganti, 2008; Wearden et al., 2000). Several decades of research has established EE as a highly reliable psychosocial predictor of psychiatric relapse in schizophrenia (Butzlaff and Hooley, 1998; Cechnicki et al., 2013; Hooley, 2007). A high level of EE has been found both in patients with chronic psychosis (Marom et al., 2005; Mavreas et al., 1992) and in those having a first psychotic episode (Bachmann et al., 2002; Barrelet et al., 1990; Gonzalez-Blanch et al., 2010; Heikkila et al., 2002; Huguelet et al., 1995; McNab et al., 2007; Patterson et al., 2000). Furthermore, numerous studies have consistently documented that caregivers of patients with chronic psychosis experience high levels of burden which adversely impacts their health and quality of life (Caqueo-Urizar and Gutierrez-Maldonado, 2006; Gutierrez-Maldonado et al., 2005). In addition, recent findings suggest high

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levels of burden and psychological distress among caregivers of FEP patients soon after the onset of illness (Boydell et al., 2014; McCann et al., 2011).

Family functioning, which refers to the quality of interactions among family members, is a broad concept and is often used as an umbrella term encompassing numerous constructs, including family's sentimental cohesion and adaptability to change. Effective family functioning can be facilitated or prevented depending on level of cohesion and adaptability of the family (Minuchin et al., 1978). Olson et al. developed the Circumplex Model of Marital and Family Systems, describing the family's level of functioning (Olson et al., 1979). The Circumplex Model represents one of the most extensively used models of family functioning, both in clinical and research settings. The Model is particularly useful as a "relational diagnosis", because it focuses on the relational system and it is comprised of three key concepts for understanding family functioning: family cohesion, flexibility, and communication (Olson, 2000). Family cohesion is defined as the emotional bonding that family members have toward one another (Olson, 1993), whereas family flexibility is defined as the quality and expression of leadership and organization, role relationship, and relationship rules and negotiations (Olson and Gorall, 2006). Communication is defined as the positive skills in conveying information used by the family members (Olson and Gorall, 2006) and it is viewed as a facilitating dimension that helps families negotiate cohesion and flexibility (Olson et al., 2007).

Studies assessing family cohesion and adaptability in psychosis have yielded mixed findings, perhaps due to the application of different instruments in evaluating family functioning [i.e. Family Adaptability and Cohesion Evaluation Scales-III (Olson et al., 1985), Family Assessment Device (Epstein et al., 1983)]. Miller et al. (1986) found that family functioning of patients with schizophrenia and bipolar disorder did not differ significantly from control families. However, more recent studies have shown that families of patients with schizophrenia and bipolar disorder may have deficits in family functioning as compared to control families (Chang et al., 2001; Friedmann et al., 1997; Phillips et al., 1998; Romero et al., 2005; Sun and Cheung, 1997). Regardless of specific diagnosis, having a family member in the acute phase of a psychiatric disorder appeared to be a risk factor for poor family functioning (Friedmann et al., 1997).

Although the influential role of the family in the outcome of chronic mental illness is well documented, there has been relatively little research on the intrafamilial relationships during the early stages of the illness, which examined certain aspects of intrafamilial transactions, such as EE and FB (see review by Koutra et al. (2014a)). To date, there are virtually no empirical data regarding family cohesion and adaptability in the context of FEP. In Greece, the vast majority of patients diagnosed with psychosis return to reside with their families in the community (Basta et al., 2013; Madianos et al., 1997) after discharge from hospital and depend on the assistance and continued involvement of their families. Although the Greek family is seemingly a nuclear family (Georgas, 1999; Katakis, 1998; Papadiotis and Softas-Nall, 2006; Softas-Nall, 2003), in reality it functions as an extended one (Georgas, 1999, 2000). Greek families are characterized by cohesiveness and tight knit bonds and interactions. In Greece the family is considered a pillar of society, and thus, problems are expected to be solved by the whole family. This type of family has been called "extended urban family" (Georgas, 2000). In this regard, illness in one family member may affect family dynamics and result in substantial burden for the entire family.

Given the dearth of research on family functioning and FEP and the particularities of Greek families, the present study has a twofold purpose: (i) to provide a comprehensive assessment of intrafamilial relationships in a Greek sample of FEP and chronic patients with a diagnosis of schizophrenia and bipolar disorder by examining a variety of family life aspects; and (ii) to examine possible differences in family functioning of FEP patients in comparison with chronic patients and healthy controls. Since family dynamics play a role in the recovery–relapse and early relapse after the first episode is detrimental to the course of the disease, developing understanding of the family dynamics early on can improve intervention and preventive strategies. Moreover, to our knowledge, thus far no study has compared FEP and chronic patients with psychosis regarding a variety of family variables. Our first hypothesis was that families of FEP patients would show unbalanced levels of cohesion and flexibility as compared to control families and more balanced levels of cohesion and flexibility than families of chronic patients. Our second hypothesis was that chronicity would adversely affect EE, FB and caregivers' psychological well-being.

2. Methods

2.1. Participants

Sample size estimation was based on medium expected effect sizes, according to Cohen's criteria (Cohen, 1988), for power 0.80 and confidence level 0.05. Hence, 50 FEP patients and 50 chronic patients (Response Rate 96.1%) – both randomly selected – were recruited from the Psychiatric Clinic of the University Hospital of Heraklion, Crete, Greece, and their key caregivers were contacted and informed about the purpose of the present study during a 12-month period (October 2011–October 2012). The key caregiver was defined as the person who provides the most support devoting a substantial number of hours each day in taking care of the patient. For the purposes of this study, FEP patients were recruited upon first hospitalization whereas chronic patients had two or more hospitalizations. To be eligible for inclusion in the study, the patients had to meet the following criteria: (i) to be between 17 and 40 years old, (ii) to have a good understanding of the Greek language, (iii) to have been out of hospital for at least 6 weeks and considered stabilised by their treating psychiatrist, (iv) to be living with a close relative, and (v) to have a diagnosis of schizophrenia or bipolar disorder according to Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) or International Classification of Disease (ICD-10) and with no evidence of organicity, significant intellectual handicap, or primary diagnosis of substance abuse. Inclusion criteria for the caregivers were: (i) to be between 18 and 75 years old, (ii) to have a good understanding of the Greek language, (iii) to have no diagnosed psychiatric illness, and (iv) to be either living with, or directly involved in the care of the patient.

The sample of 50 control families was drawn from several sources including a random sample of individuals recruited from community cultural associations and community care centers of the Municipality of Heraklion. Controls were age and gender-matched with the initial sample of 50 caregivers of FEP patients. At the time of participation in the study, control families reported no history of psychiatric illness in the family.

2.2. Procedure

Caregivers were interviewed by the first author in individual sessions in the Psychiatric Clinic of the University Hospital of Heraklion, Crete, Greece, where participants were asked to take part in a study assessing family functioning of patients with schizophrenia and bipolar disorder. Caregivers were given an information sheet describing the aims of the study. The time needed to complete the interview was approximately 75–90 min. Patients' socio-demographic and clinical data were extracted from medical records and confirmed during the interview by the caregivers, whereas patients' symptom severity and functioning were assessed by their treating psychiatrist within two weeks from the caregivers' assessment. All participants involved in the present study were informed about the scope and the purpose of the study and provided written informed consent. The study was approved by the Ethical Committee of the University Hospital in Heraklion, Crete, Greece. Family functioning in terms of cohesion and flexibility, as well as psychological well-being, was evaluated in families of FEP and chronic patients, as well as controls, whereas EE and FB were assessed in families of FEP and chronic patients.

2.3. Measures

2.3.1. Socio-demographic characteristics

Socio-demographic characteristics, such as relative's gender, age, education, marital status, employment status, origin and current residence, financial status,