

Outi Kalla

Characteristics, Course and Outcome in First-Episode Psychosis

A Cross-Cultural Comparison of Finnish
and Spanish Patient Groups



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ABSTRACT

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Characteristics, Course and Outcome in First-Episode Psychosis. A Cross-Cultural Comparison of Finnish and Spanish Patient Groups

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Yhteenveto: Ensikertalaisten psykoosipotilaiden psyykkis-sosiaaliset ominaisuudet, sairauDENkulku ja ennuste. Suomalaisten ja espanjalaisten potilasryhmien vertailu
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This study focused on the early course and 12-month outcome of patients from Finland and Spain with first-episode psychosis. First, the thesis examined cognitive deficits at admission for treatment. Second, personality characteristics and functioning at admission were explored. Third, the duration of untreated psychosis (DUP) and its association with early course characteristics were examined. Finally, the 12-month outcome and factors associated with it were investigated. The Finnish data consisted of four patient groups gathered from three hospitals: Kupittaa (two groups), Keroputaa and Kangasvuori. The Spanish data were collected from the University General Hospital of Gregorio Marañón. Forty-one Finnish and 32 Spanish patients participated in Studies I and II. Forty-nine Finnish and 37 Spanish patients participated in Studies III and IV of whom 68 (79%) were followed up for 12 months. The methods used were the Rorschach (CS), the BPRS, the GAS, the Grip on Life and a standardised semi-structured questionnaire. The patient groups showed less severe cognitive deficits than expected, and these were more often related to inaccurate perception than to thought disorder. They showed signs of maladaptive personality functioning, e.g. poor social skills, lack of interest in interpersonal relationships, poor emotional control and distress. The Finnish patients showed more excessive self-focusing while the Spanish ones showed more coping deficits in interpersonal relations. The mean DUP was 4 months for the Finnish patients and 10 months for the Spanish ones. Long DUP was associated with poor earlier functioning and insidious onset. In the Finnish group long DUP was more strongly associated with a weak social network and maladaptive family relations, while in the Spanish group it was associated with a higher level of positive symptoms at admission. At 12 months, one fourth of the patients experienced psychotic symptoms. About 60 % of patients showed good global functioning and a maintained Grip on Life. The most important predictors of poor outcome were poor earlier functioning and weak social network in both patient groups. Among the Finnish patients, competence in peer relations and among the Spanish ones, family-related factors seemed to weigh heavily in the recovery from psychosis. Overall, although the Finnish and Spanish patients differed in certain aspects, received different treatment, and lived in a different sociocultural environment, they shared many similarities in illness manifestation, course and outcome. However, the prognostic importance of the role played by the patient's social network and family seemed to be mediated by the sociocultural environment.

Keywords: first-episode psychosis, cross-cultural comparison, course, outcome

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LIST OF ORIGINAL PUBLICATIONS

This thesis is based on the following papers, which are referred to in the text by their Roman numerals (I to IV).

- I Kalla, O., Wahlström, J., Aaltonen, J., Holma, J., Tuimala, P., & Mattlar, C-E. (2002). Cognitive deficits in patients with first-episode psychosis as identified by Exner's Schizophrenia Index in Finland and Spain. *Rorschachiana* 25, 175-194.
- II Kalla, O., Wahlström, J., Aaltonen, J., Holma, J., Tuimala, P., & Mattlar C-E. (2004). Rorschach characteristics and comparison of first-episode psychotic patients in Finland and Spain. *Rorschachiana*, 26, 63-84.
- III Kalla, O., Aaltonen, J., Wahlström J., Lehtinen, V., García Cabeza, I., & González de Chávez, M. (2002). Duration of untreated psychosis and its correlates in first-episode psychosis in Finland and Spain. *Acta Psychiatrica Scandinavica*, 106, 265-275.
- IV Kalla, O., Wahlström, J., Aaltonen, J., Lehtinen, V., & González de Chávez, M. 12-month outcome and associated factors in two groups of patients with first-episode psychosis in Finland and Spain. Manuscript submitted for publication.

BACKGROUND

The studies that form this dissertation are part of a collaborative longitudinal research project on first-episode psychosis in Finland and Spain. In this project, the tradition established over the last three decades in Finland of combining research and treatment in psychosis was set alongside work done with patients in the Spanish treatment culture. The institutions involved in this collaboration were the Department of Psychology of the University of Jyväskylä, Finland and Psychiatric Services I of the University General Hospital of Gregorio Marañón, Madrid, Spain.

The present studies are related to the Finnish multicenter API project (The Integrated Approach to the Treatment of Acute Psychosis) concerning the treatment of first-episode psychoses in the schizophrenia group, which began in 1992 (Lehtinen et al., 1996; Lehtinen et al., 2000). The main principles of the API project were drawn from the Need-Adapted approach to treatment of schizophrenia (Alanen, 1997) and from the recommendations of the Finnish National Schizophrenia Project (Lehtinen et al., 1996; Tuori et al., 1998). The aims of the API project were to develop treatment activities for patients with acute schizophrenia-group psychoses and to investigate the use of a psychotherapeutically oriented and family-centred model of treatment for acute psychosis in different treatment settings, especially in relation to the role of neuroleptic drug treatment in line with the principles of the integrated treatment model (Lehtinen et al., 1996). The interest in neuroleptic treatment had arisen out of the clinical experience of the Turku Schizophrenia Project (Alanen et al., 1991; Lehtinen, 1993), which gave support to the hypothesis that the role of neuroleptics is not as central or self evident as has traditionally been assumed (Lehtinen et al., 1996). The API project was run jointly by the National Research and Development Centre for Welfare and Health in Finland (STAKES) and the Universities of Jyväskylä and Turku. The University of Jyväskylä played a central and active role in the development and organisation of the API project.

The collaboration between the University of Jyväskylä and Gregorio Marañón hospital on this research project started in 1997. Before this, Professor Alanen had already collaborated with Doctor Manuel González de Chávez,

Chief of Psychiatric Services I of Gregorio Marañón hospital on the basis of their shared interest in developing integrated psychotherapeutic treatment for schizophrenic patients. Professor Alanen had been invited prior to the inception of the project to lecture on the Finnish Need-Adapted approach at the annual congress on the treatment of schizophrenia organised by the Gregorio Marañón hospital. Since 1997, many other Finnish researchers working within the API project have been invited to lecture at Gregorio Marañón hospital on the Need-Adapted approach, among others Jukka Aaltonen, Klaus Lehtinen and Viljo Rökköläinen.

Data-collection at Gregorio Marañón hospital started in 1997. I was given a research grant by the University of Jyväskylä to work on my doctoral thesis at the hospital, where my role was to act as a coordinator of the project, gather the research data, and become acquainted with the treatment practices of the ward by participating in its daily routines, such as staff meetings, therapy sessions, and patient consultations with the treating psychiatrist. I also interviewed the patients and their families several times during both the inpatient and follow-up periods.

The initial objective of the project was to explore the characteristics of the patients with first-episode psychosis who enter treatment, how they are treated, and how the course of their illness develops in the treatment systems used at the Finnish and Spanish sites. The facts that first-episode psychosis is heterogeneous and that many factors influence its course are already well known from earlier studies. The main interest of the project was to explore whether the factors associated with outcome would differ between the two cultures. Initially, two distinct sets of Finnish research data were available on patients with first-episode psychosis. One set, derived from the API project, contained a comprehensive description of the background characteristics, treatment and 12-month outcome of first-episode patients treated at six sites. From this data set, patients from the Keroputaa and Kupittaa hospitals were chosen, as despite some differences, these two API sites shared the closest resemblance in treatment practices and cultures. The other data set was derived from the local projects initiated after the API project in the Kupittaa and Kangasvuori hospitals and consisted of Rorschach protocols of patients with first-episode psychosis. In Gregorio Marañón hospital our intention was to obtain data which could be compared with both of the Finnish data sets. There are many differences in treatment practices between the Finnish and Spanish sites, but they share the same aim of organising the psychiatric system from a psychotherapeutic perspective.

1 INTRODUCTION

This study focuses on first-episode functional non-affective psychosis. In this introduction issues concerning disorders across the whole spectrum of schizophrenia will be discussed, without referring separately to specific disorders.

Schizophrenia is, along with depression, the most important mental health problem in psychiatry and one of the greatest public health concerns worldwide. It also causes considerable distress, unemployment, social marginalisation, and premature retirement. Schizophrenia is a relatively rare illness compared to many other psychiatric disorders: the annual incidence is estimated to range from 7.7 to 43.0 persons per 100 000 (McGrath, 2005), while the lifetime prevalence is as high as 1 % of the population (Alanen, 1994). It presents an enormous burden on social systems and public health care institutions, mainly owing to the early age of onset and the often serious nature of the illness, which leads many patients to become chronically ill. The cost of mental health care for schizophrenia is also high, accounting for 2-3 % of the total expenditure on health and social services (Knapp, 1997). The costs of schizophrenia are estimated to be over 1 % of the gross national budget in Western countries (Mednick & McGlashan, 1996). In the Northern European countries, schizophrenia is the cause of 4-10 % of disability pensions awards. If the population between 16 and 45 years alone is taken into account, this figure is more than doubled (Alanen, 1994).

During the last two decades, a lot of research has been carried out on the course and optimal treatment of schizophrenia and other psychoses to improve the prognosis and thereby reduce the negative consequences of these illnesses (Gleeson & McGorry, 2004). A considerable body of this research involves patients with first-episode psychosis as they are more responsive to treatment and as they have not yet been exposed to neuroleptic medication. Patients with first-episode psychosis are a very heterogeneous group. Patients with the same diagnosis may differ considerably from each other in their background characteristics, e.g. in personality, earlier social development and functioning, onset features, and relations with their families. These factors have an influence

on the course and outcome of the illness, and have indications for different modes of treatment. Background characteristics also appear to have different relevance for prognosis in different social environments (Jablensky et al., 1992; Jenkins & Karno, 1992).

The introduction begins with a section reviewing the course and outcome of first-episode psychosis. The second section focuses on personality characteristics and functioning of patients with first-episode psychosis. In the third section, the concept of the duration of untreated psychosis (DUP) and factors which have been found to be associated with it are reviewed. Section four is a short review of the treatment of schizophrenic disorders. In the last section, the influence of culture on schizophrenic disorders is discussed.

1.1 Course and outcome of first-episode psychosis

It is better understood and appreciated nowadays that first-episode psychosis shows a variety of presentations and a range of outcomes that are heterogeneous rather than fixed (McGorry, 2000a). Despite major advances in the last decades in their treatment, a large percentage of patients continue to have poor outcomes (Verdoux, 2001). The course of the illness, as well as the factors associated with it, varies for reasons which remain inadequately understood.

First-episode psychosis does not appear to have as negative a prognosis as was originally believed (Karila, 1994; McGorry, 2004). Patients usually respond well to treatment (Lieberman et al., 1993), and during the first year after entry to treatment relapse rates have been reported to be relatively low (Rabiner, Wegner, & Kane, 1986). Edwards et al. (1998) suggest that about one fourth of patients with first episode psychosis experience enduring positive symptoms after 12 months. Lieberman (1996) found that 86 % of first-episode patients recovered from psychosis during the first year, but 78 % relapsed at least once thereafter. Also Marder (1999) reports that 30 % of patients relapsed during the first year of treatment, and Kane (1996) that 60 % relapsed after the first year of treatment. These findings are, however, more favorable than those reported in many other similar studies (Rabiner et al., 1986; The Scottish Schizophrenia Research Group, 1988; Wieselgren & Lindström, 1996; Malla et al., 2002a). Estimation of the level of negative symptoms is complicated by assessment issues, but they are likely to be less prevalent than positive symptoms (Edwards et al., 1998). Although the one-year clinical prognosis seems quite good, relapse rates tend to rise substantially after the first year (Scottish Schizophrenia Research Group, 1992; Leff et al., 1992).

While symptom severity and remission are important measures of outcome, researchers have increasingly focused their attention on various aspects of psychosocial functioning to arrive at a more comprehensive measure of outcome in first-episode psychosis (Salokangas, Rääkköläinen, & Alanen, 1989). It has been argued that such dimensions are independent of symptom

relief and may be more reliably predicted by pre-morbid adjustment (Addington & Addington, 1993). Assessing psychosocial functioning allows one to understand the impact of psychosis on the patient's general well being, role functioning, and community integration (Ho et al., 2000). Moreover, with the shift in treatment of schizophrenic patients from long-term hospitalisation to an outpatient community service, research on psychosocial adjustment has become increasingly important. The psychosocial outcome has been found to be poorer than the clinical one (Salokangas, 1997). About 60% of patients with first-episode psychosis have been found to have good functional outcome at one year (Cullberg et al., 2002).

A number of studies have shown that patterns of change over time in positive symptoms, negative symptoms and psychosocial functioning are not parallel (Loebel et al., 1992; Birchwood, Todd, & Jackson, 1998; Gupta et al., 1997). The results of Eaton et al. (1995) showed that while the prevalence of positive symptoms declines considerably in the year following first hospitalisation, the level of negative symptoms tends to remain relatively stable over time (McGorry et al., 1996; Power et al., 1998). Positive symptoms also tend to improve during the first year of the illness more than the level of psychosocial functioning (Salokangas, 1997; Gupta et al., 1996). The fact that the measures evaluating different aspects of outcome do not often inter-correlate makes outcome a complex phenomenon (Strauss & Carpenter, 1979). Therefore, it is important that the different aspects of outcome, including symptoms and community functioning are examined.

Considerable attention has been focused on factors that may be relevant in predicting the future course and outcome of first-episode psychosis. It is still, however, unclear what distinguishes patients who recover quickly and completely from those who do not. The final objective of finding prognostic factors is to allow one to discriminate, from illness onset, those patients with a good outcome and those with a poor outcome, in the belief that this will have important implications for the management of the illness.

A number of factors have been demonstrated to influence outcome. Some of these are fixed (e.g. gender, mode of onset, age of onset etc.) and some are potentially modifiable (e.g. DUP, family environment, substance abuse etc.). The various factors interact with each other in a complex manner and their relative importance varies at different times.

One of the factors consistently predicting the course of first-episode psychosis is pre-morbid functioning (Harrigan, McGorry, & Krstev, 2003; Larsen et al., 2000; Perkins et al., 2004; Bromet et al., 1996; Wieselgren & Lindström, 1996; Malla et al., 2002b; Haas & Sweeney, 1992; Johnstone et al., 1990; Singh et al., 2004). Variables such as poor premorbid psychosexual adjustment, asociality, (Alanen et al., 1986; Salokangas et al., 1989), weak social network, isolation, poor global functioning at admission (Erickson et al., 1989), poor occupational functioning (Birchwood et al., 1998), poor professional identity (Salokangas et al., 1989), and poor Grip on Life (Alanen et al., 1986; Salokangas et al., 1989) have all been related to poor outcome. Demographic

factors, e.g. male gender (Harrigan et al., 2003; Bromet et al., 1996; Wieselgren & Lindström, 1996; Singh et al., 2004), being single (Salokangas, 1997), and low socioeconomic (Bromet et al., 1996) and educational status (Wieselgren & Lindström, 1996) have been found to be prognostic of poor outcome. Among the clinical and onset characteristics that have been found to influence poor outcome are high levels of positive and negative symptoms (Malla et al., 2002b), insidious onset of psychosis (Jablensky et al., 1992, Häfner, 2000), long DUP (Larsen et al., 2000; McGorry et al., 1996; Carbone et al., 1999; Malla et al., 2002a; Lieberman et al., 1993), and long duration of prodromal symptoms (Harrigan et al., 2003). Moreover, maladaptive family relations has been found to be prognostic of poor outcome (Jenkins & Barrett, 2004; Jenkins, 1988). One indicator of such relations is a high level of expressed emotions (EE) in the family environment, defined as specific attitudes and behaviours such as criticism, hostility and emotional overinvolvement, that close relatives display towards the family member who suffers from a schizophrenic disorder (Brown, Birley, & Wing, 1972; Vaughn & Leff, 1976).

The diverse findings of many of these studies demonstrate that the identification of outcome predictors for first-episode psychosis is more complex than originally thought. Several studies have pointed to the influence of sociocultural environment (WHO, 1979; Birchwood et al., 1992), an issue on which more research is needed. Although certain aspects of first-episode psychosis in terms of its severity and course may to some extent be predetermined, a number of factors can exert favourable and unfavourable effects on its course and outcome (Lieberman et al., 1996). Only a few of these factors are accessible to intervention strategies aimed at reducing their impact on the course of the illness (van Os et al., 1998). It is, therefore, of major interest to identify the prognostic factors that are susceptible of modification by therapeutic interventions.

1.2 Personality characteristics and functioning in first-episode psychosis

1.2.1 Cognitive deficits as measured by the SCZI

The problem of identifying schizophrenic disorders accurately has generated a considerable amount of research and discussion on what constitute their psychological characteristics. Cognitive deficits have for long been regarded as a hallmark of schizophrenic disorders (Bleuler, 1950; Kraepelin, Barclay, & Robertson, 1919). They are present early in the course of the illness and are likely to influence outcome in various aspects of community functioning (Malla et al., 2002b). There is less agreement about the way in which cognitive deficits are manifested and about their severity in schizophrenic disorders (Exner, 2003).

Recent studies suggest that it might be possible to prevent or at least influence the prognosis of schizophrenic disorders by early detection (McGorry, 2004). The possible advantages of early detection have motivated researchers to try to identify early signs and symptoms relating to the development of schizophrenic disorders. Cognitive impairment is one factor that may precede the onset of schizophrenia and it has been suggested that it could be an indicator of vulnerability to schizophrenia (Wahlberg et al., 2000; Metsänen et al., 2004). Accurate assessment of cognitive deficits is important because of their implications for early detection and treatment strategies.

The Rorschach test has historically been used as a way to identify psychological processes associated with cognitive deficits in schizophrenic disorders. Several investigators have attempted to identify the Rorschach variables which would describe the cognitive aspects of schizophrenic disorders and some have developed specific criteria aimed at a more accurate assessment of psychotic symptoms (e.g. Blatt & Rizler, 1974; Exner, 1991; Holt, 1963; Johnston & Holzman, 1979; Lazar & Schwartz, 1982; Meloy, 1986; Rapaport, Gill, & Schafer, 1945; Schwartz & Lazar, 1984; Wagner, 1994; Watkins & Stauffacher, 1952; Weiner, 1966). The Rorschach Comprehensive System (CS) (Exner, 1993, 2003) is widely used in clinical personality assessment, and a number of studies have supported its utility of assessing psychotic symptoms (Exner, 2003; Kleiger, 1999). The CS variables most critical in differentiating schizophrenic patients from other psychiatric patients are those related to the issue of inaccurate perception and thought disorder.

The subject's perceptual accuracy is described in the CS by *Form Quality*, which has been found to decrease as the psychotic disturbance becomes more severe. In their extreme form, perceptual distortions create the basis for hallucinatory experiences (Exner, 2003). Thought disorder can take many forms. The Rorschach responses that appear to reflect disordered thinking (the 6 *Special Scores*) represent the kinds of inflexible, idiosyncratic, and illogical thinking that frequently characterise schizophrenic disorders (Exner, 2003). According to Exner (2003), no group of illnesses other than schizophrenic disorders has been defined as having problems in both perception and thinking.

The Rorschach variables associated with inaccurate perception and disordered thinking form the basis of the Schizophrenia Index (*SCZI*) of the CS, which for the last two decades has been the most effective Rorschach tool in the evaluation of the psychotic process and in aiding the diagnosis of schizophrenic disorders (Exner, 1991). While the diagnostic processes of the DSM-IV are currently based primarily on a description of overt symptoms and diagnosis by exclusion, the *SCZI* is based on the kinds of psychological organization and functioning that are known to play a clearly formulated role in schizophrenic disorders.

Several clinical studies have indicated that the *SCZI* effectively discriminates between individuals with and without a schizophrenic disorder (Hilsenroth, Fowler, & Padawer, 1998; Ilonen et al., 1999; Jørgensen, Andersen, & Dam, 2000). The *SCZI* routinely identifies between 65 % and 80 % of persons

diagnosed as having a schizophrenic disorder, depending on the group studied (Exner, 2003). The false positive rates vary from 10 % to 20 % (Exner, 2003). The results of the study by Exner (1991) concerning patients with first-episode schizophrenia indicated that the *SCZI* successfully detected as many as 84% of the sample. Moreover, in another earlier study by Exner (1986), the *SCZI* identified 83 % of a patient sample with first-episode schizophrenia. The results of a study by Ilonen, Mattlar, and Salokangas (1997), concerning Finnish patients with first-episode schizophrenia, showed that the *SCZI* was able to identify 65% of the patients and differentiated them well from patients with depression (Ilonen et al., 1999). Recent studies on children also support the validity of the *SCZI* (Smith et al., 2001; Stokes et al., 2001).

The results of a study by Hilsenroth et al. (1998) showed that a higher score on the *SCZI* is significantly related to the presence of acute psychotic symptomatology and to the presence of a DSM-IV diagnosis of schizophrenic disorder. Their results also showed that although the *SCZI* constellation criteria indicating impaired perception occurred frequently among patients with schizophrenic disorders, it was also frequently positive in the comparison groups, while the criteria determining thought disorder were found to be most specific to the patients with schizophrenic disorders.

Data from other studies have indicated that the *SCZI* has not been sufficiently sensitive or specific in identifying patients with schizophrenic disorders (e.g. Klonsky, 2004, Archer & Gordon, 1988; Bannatyne, Gacono, & Greene, 1999; Ritsher, 2004). In a study by Archer and Gordon (1988), the *SCZI* detected only 47 % of their sample of adolescent patients with diagnosed schizophrenia. Bannatyne et al. (1999) found that the *SCZI* identified only one fourth of their patient sample with schizophrenic disorders.

The Perceptual-Thinking Index (*PTI*) (Exner, 2003) was recently developed as a more accurate Rorschach indicator of psychosis. It has been designed to have a lower false positive rate than the *SCZI* (Exner, 2000). Unfortunately, we were not able to examine the *PTI* in our research project as some of its variables were not available in the research data.

The Rorschach responses have been found to be at least to some extent culturally bound (Mattlar, 1986). The cross-cultural validity of the *SCZI* has not been well established. The *SCZI* was initially developed on the basis of North-American studies. Also, most of the evidence of the utility of the *SCZI* pertains to North-American settings and may not, therefore, be sensitive among people from other cultural environments. The symptoms and cognitive deficits of schizophrenic disorders are expected to be universal, i.e., found in different sociocultural contexts (Jablensky et al., 1992). It is possible, however, that cultural differences in personality functioning have an impact on the Rorschach protocols and on the *SCZI*. The implications of these differences for psychological assessment are still far from understood (Jablensky et al., 1992; Alarcon et al, 1999; Thakker & Ward, 1998). Studies on the use of the Rorschach in a transcultural research setting have been steadily accumulating but remain rare, especially within the research on schizophrenic disorders. A large

international collaborative project is underway to develop nonpatient norms for the Rorschach, and the preliminary results suggest that the CS has promising cross-cultural validity (Erdberg & Schaffer, 1999).

1.2.2 Personality characteristics

Schizophrenic psychoses are heterogeneous in terms of levels of symptoms and functioning. Patients whose symptoms and diagnosis are similar may differ considerably in personality structure and functioning and vice versa. Taking the adaptiveness of personality functioning into account in the evaluation of baseline characteristics at entry for treatment is important and adds to the incremental validity of the baseline evaluation. Personality assessment may contribute to a better understanding of individuals suffering from psychosis and thereby provide invaluable information for treatment planning.

There has been much research and discussion on the personality characteristics of patients with schizophrenic disorders. Such patients have been found to have problems in different areas of personality functioning. The Rorschach provides both specific and general knowledge about different areas of personality functioning, such as coping style, emotions, managing stress, mediation, ideation, self-perception, and interpersonal relationships. Problems in these areas do not equate directly with psychopathology, but they may relate to difficulties and maladjustment (Exner, 2003; Weiner & Exner, 1991; Exner & Andronikof-Sanglade, 1992).

Much of the disordered thinking in schizophrenic disorders is related to conflicts surrounding the expression or internalisation of affect (Exner, 1986, 1991; Mason, Cohen, & Exner, 1985). Forty percent of first-episode patients have been found to show affect-modulating problems, becoming overly intense in their emotional expressions and showing emotional impulsiveness (Exner, 1991). About half of psychotic patients with first-episode psychosis have been found to avoid emotional stimuli (Exner, 1991) and one third to experience emotional distress (Exner, 1986). Depressive symptoms are common in first-episode psychosis and they may account for a core part of the acute illness (Koreen et al., 1993). In a study by Ilonen et al. (1997) 41 % of patients with first-episode psychosis manifested characteristics of marked depression (DEPI).

Patients suffering from first-episode psychosis have been found to show impoverished or unrewarding social relationships (Exner, 1991; Ilonen et al., 1997). They also show ineffective coping and lack of coping skills (Exner, 1991). They tend to show less reality-based perceptions of others (Exner, 1991), leading to difficulties in interpersonal functioning (Mason et al., 1985). Moreover, in a study by Di Nuovo, Laicardi, and Tobino (1988), three quarters of patients with schizophrenic disorders showed disinterest in people.

Nearly half of patients with first-episode psychosis have been found to show negative sense of self-worth (Exner, 1986; Archer & Gordon, 1988). According to Exner (1991) one third of the patients with first-episode psychosis also show an excess of focusing on the self at the expense of concern with the social environment.

Although people from different cultures have been found to differ in certain personality characteristics in the Rorschach (Mattlar, 1986, 2004; Abel, 1973; Franchi & Andronikof-Sanglade, 1999; Al-Issa, 1970; Dana, 2000; Alvarez et al., 1993; Ephraim et al., 1993; Fuster et al., 1997; Miralles Sangro, 1997; Silva, Novo, & Prazeres, 1990), the issue of whether patients with first-episode psychosis from different sociocultural environments differ in personality functioning, as shown by the Rorschach, has not to my knowledge, previously been subject to investigation. This information might help to generate further recommendations for treatment and rehabilitation. Accordingly, there has recently been a call for transcultural Rorschach data from European countries to be provided for the European Rorschach databank (ERA, 1998).

1.3 Duration of untreated psychosis

During the last decade, delay in the initial treatment of first-episode psychosis has been implicated as an important influence on course and outcome (McGorry et al., 1996; McGorry, 2002; McGlashan, 1996; Verdoux, 2001; Oosthuizen et al., 2005; Perkins et al., 2004). Such delay is generally expressed as the duration of untreated psychosis (DUP), i.e., the period of time which separates the onset of psychosis from the initiation of appropriate treatment. The relationship between DUP and outcome provides the primary rationale for the recent emphasis on early intervention in psychosis (Malla et al., 2002a).

Long duration of untreated psychosis is alarmingly common, with most studies estimating a mean DUP of approximately one year (Norman et al., 2004; Häfner, 2000; Johnstone et al., 1986; Loebel et al., 1992; Beiser et al., 1993; McGorry & Singh, 1995; Larsen, McGlashan, & Moe, 1996). The length of DUP may even extend over several years. In a study by Haas and Sweeney (1992), the mean DUP was as long as three years. These findings suggest that many new patients function for a long time in society with a substantial level of psychopathology.

The data in a study by McGorry et al. (1996) indicate that a DUP of one month but less than six months may constitute the boundaries of a "critical period" for the detection and initiation of treatment. It is during this period that treatment is expected to have the greatest impact on remission or recovery.

A long delay in treatment can have serious consequences. First-episode psychosis most frequently affects adolescents and young people, groups who are particularly vulnerable to disruptions in their developmental pathways. Delay in starting effective treatment has been linked to slower recovery rates and poorer degrees of recovery (Loebel et al., 1992; Edwards et al., 1998; Larsen et al., 2000; Melle et al., 2004; Perkins et al., 2004), greater relapse rates (Crow et al., 1986) and lower levels of social and occupational functioning (Loebel et al., 1992; McGorry et al., 1996; Harrigan et al., 2003). Previous studies have reported a statistically significant relationship between longer DUP and a higher level of positive (Harrigan et al., 2003; Szymanski et al., 1996; Addington, Van Mastrigt,

& Addington, 2004) and negative symptoms after one year (McGorry et al., 1996). The negative effect of DUP on prognosis has been explained at times by a presumed toxic effect of psychosis on the patient's brain or on psychosocial functioning (Wyatt & Henter, 2001).

Several studies have failed to report any relationship between DUP and outcome and have therefore questioned the importance of DUP (Barnes et al., 2000; Craig et al., 2000; Ho et al., 2000). The precise nature of the influence of DUP on outcome remains unclear, as it has been claimed that this association is partially confounded by unidentified factors intrinsic to the patient (Verdoux, 2001). In other words, factors predicting poor prognosis, e.g. poor premorbid functioning, might also independently lengthen the delay between the onset of the disorder and treatment-seeking. On the other hand, many have argued that the effect of DUP on outcome is independent of other prognostic variables (Loebel et al., 1992; Harrigan et al., 2003; Perkins et al., 2004; Addington et al., 2004).

There is lack of knowledge on how patients can remain actively psychotic for such a long time before receiving proper attention (McGlashan, 1996). Many factors are likely to affect how soon after the onset of psychotic symptoms patients enter treatment. Some of these factors are malleable and thereby able to reduce the delay in receiving treatment (Vaglum, 1996). In most cases, delay depends on the health services or on factors related to the patients or their families, e.g. there may be problems in referral pathways, in access to psychiatric services, in recognition of prodromal and early psychotic symptoms, or reluctance to seek help (Vaglum, 1996).

Previous studies have found that poor and/or declining social and occupational functioning in both adolescence and the year before admission for treatment are related to long DUP (Johannessen, Larsen, & McGlashan, 1999, Larsen, Johannessen, & Opjordsmoen, 1998). Long DUP has also been associated with having a weak social network, social withdrawal and poor global functioning in the year before hospitalisation (Verdoux et al., 1998; Johannessen et al., 1999; Larsen et al., 1996). Insidious onset (Larsen et al., 1996), long duration of prodromal symptoms (Beiser et al., 1993), poor insight and low educational level have also been related to treatment delay (Drake et al., 2000; Larsen et al., 1998; Verdoux et al., 1998). Longer DUP has been found to correlate with more severe positive and negative symptoms at admission (Melle et al., 2004; Larsen et al., 1996; Verdoux et al., 1998; Drake et al., 2000). Moreover, patients with a diagnosis of schizophrenia (McGorry et al., 1996) and males, thought to be due to their poorer premorbid functioning, higher level of negative symptoms, more insidious onset and earlier age at onset of psychosis (Larsen et al., 1996; Loebel et al., 1992; Häfner, 2000) have been found to have longer DUP.

It is often within the family context that the signs and symptoms of psychosis are initially experienced by the patient and recognised and interpreted by others. The ill person may often be too disturbed to either recognise the need for care or seek help and thus the family occupies a central role in the initiation of the treatment-seeking process. Families tend to understand and cope with their psychotic family members in accordance with the family traditions. There may be cultural differences in identification of the symptoms that indicate the presence of an "illness" and trigger help-seeking behaviour. Moreover, societies differ in integrity of family structure, tolerance of psychopathology, attitudes towards mental illness and hospitalisation, fear of stigma, and the extent of EE, all of which may have an impact on the timing of the initiation of the treatment-seeking process (Dassori, Miller, & Saldana, 1995; Jenkins, 1988).

Health service-related factors also have an influence on delayed treatment. It is possible and even likely that lack of skill in recognising early symptoms of psychosis on the primary and secondary health care service level are partially responsible for delayed detection and treatment. Societies or countries differ in access to care, availability of services and in cultural characteristics that encourage or discourage the use of professional services.

Identification of the potential factors that may cause treatment delay in different sociocultural environments might increase understanding of the course of schizophrenic disorders, provide an opportunity to influence that course, and help to minimize the negative consequences of delay on outcome.

1.4 Treatment of schizophrenic disorders

Lately, there has been much discussion concerning what constitutes optimal care for patients with schizophrenic disorders (Gleeson & Mc Gorry, 2004). Approaches to treatment are determined by how the illness, on the theoretical level, is understood. Some approaches emphasise a biological understanding of the origin of schizophrenic disorders, while others stress an interactional point of view. Treatment approaches and practices vary between different cultures, psychiatric treatment units, wards and staff members.

The biomedical approach has traditionally been the most dominant orientation in the treatment of schizophrenic disorders (Birchwood & Tarrier, 1994; Tuori et al., 1998). A glance at the more recent international state of research and treatment with respect to this group of illnesses suggests that this state of affairs continues to persist. Neuroleptic medication has in many cases been used as the basic mode of treatment, leaving the use of psychotherapeutic interventions in a rather peripheral role (Alanen, 1994, 1997). There is no doubt that the introduction of neuroleptics has been of considerable benefit to many patients (Dixon & Lehman, 1995) and their usage is considered necessary and fundamental in the treatment of schizophrenic disorders (Suomen Psykiatriyhdistys, 2004; Herz et al., 2002; Lehman et al., 1998; National Collaborating Centre for Mental Health, 2002). While neuroleptics have

demonstrated their therapeutic potential, they also have limitations and harmful side-effects which are insufficiently stressed (Karon, 1989; Wiesel, 1994). During the last decade atypical neuroleptics have revolutionised the medical treatment of schizophrenic disorders and they are being carefully evaluated (Lambert et al., 2005; Haro et al., 2005). The superiority of these new atypical neuroleptics over the traditional ones has been proven (Czernansky, Mahmoud, & Brenner, 2002), even if it remains unclear whether this is due their greater efficacy, fewer side-effects and thereby more compliant usage or, perhaps, both (McGorry, 2004). There is also insufficient proof that the newer medications are superior to the older neuroleptics in efficacy or side-effect profile, where the latter are used in low dosages (Martindale et al., 2000).

Recently, interest in the psychotherapeutic treatment of schizophrenic disorders has undergone a renaissance. There are several reasons, e.g., greater therapeutic optimism, the discovery of new types of medication, the reform of mental health care services to function better within the rest of the society, with an emphasis on client centeredness, and the steady accumulation of scientifically rigorous results on the efficacy of cognitive therapy in the treatment of psychiatric disorders (McGorry, 2004).

There are countries, such as the Nordic countries, where the significance of psychotherapeutic interventions for psychotic patients has been on the increase even within the context of community psychiatry (Alanen, 1997). However, there has been an obvious decrease since around the late 1970s in their use in many other countries (Gleeson & McGorry, 2004; Alanen, 1997), e.g. the US, which used to be at the forefront of the psychotherapeutic treatment of psychoses.

The psychotherapy of schizophrenic disorders underwent a change during the 1980s from individual therapy towards family and milieu interventions, often with a psychoeducational orientation (Birchwood & Tarrrier, 1994; Alanen, 1997). There is also a long tradition of individual psychodynamic and systemic family therapies in the treatment of these disorders (Alanen, 1997). Recently, cognitive individual therapy has gained a lot of attention and has been shown to have a positive impact on the outcome of schizophrenic disorders (Birchwood & Tarrrier, 1994; Jackson et al., 1998; Bustillo et al., 2001; Wiersma et al., 2004). Both family therapy and cognitive behavioural therapy have been found to benefit patients with schizophrenic disorders in recent meta-analyses (Bustillo et al., 2001; Pilling et al., 2002).

Integrated approaches, combining different psychodynamic, psychosocial, and biological treatment orientations with each other, continue to be rarely, if increasingly, seen in the psychiatric research and literature (Alanen, 1997). This is despite the fact that schizophrenic disorders are nowadays generally perceived as a heterogeneous with regard to their developmental history, clinical symptoms, prognosis and the patient's psychological and social condition. Heterogeneity is also perceived in the aetiology of schizophrenic disorders; aetiological factors are considered multi-faceted and are weighted differently in different cases. The process of recovery from psychosis is also

seen as consisting of different phases, each of which has its own particular therapeutic needs (Alanen, 1997; Martindale et al., 2000). Accordingly, treatment in the case of most patients requires an approach where several treatment modalities are optimally combined (Alanen et al., 2000).

Since around the late 1970s, the structure of mental health services in Europe has shifted from hospital-based care towards more community-oriented outpatient services (Alanen et al., 1997, Haro et al., 1998; Korkeila et al., 1998). The pace of change has differed in different countries but has led to an increased need for psychosocial interventions in the treatment of schizophrenic disorders. Several programmes, which benefit from different treatment modalities in a comprehensive way, have been implemented (Martindale et al., 2000). The primary aim of these programmes has been the desire to develop new alternatives to traditional hospital-based treatment and thereby reduce the costs and negative effects of hospital treatment on the patient's social network (Dean et al., 1993).

Finland has an active history in developing an integrated model of psychotherapeutic treatment for psychotic illnesses. The model, known as the Need-Adapted approach, has been widely implemented in Finland (Alanen, 1997). The overall goal of this approach was to develop a programme of treatment for new patients with schizophrenia that is predominantly psychotherapeutic, comprehensive, with psychodynamic and systemic basic orientations and widely applicable to public psychiatric health care (Alanen et al., 2000). Interventions are based on a very careful assessment of the individual and his or her family and life situation. The focus or type of intervention is modified as the needs of the patient change. The emphasis is on a psychotherapeutic basic attitude, and neuroleptic medication is used in some psychiatric units in rather modest doses or is not used at all. The findings of the API project have shown that successful outcomes can be achieved in some patients without the need for any neuroleptics at all, if appropriate psychotherapeutic resources are available. It has been considered particularly important to engage with people undergoing their first episode of psychosis, and with their families and significant others as early as possible and to include them regularly in all treatment situations that concern them when the treatment is being planned and carried out. Moreover, one important element of the Need-Adapted approach has been to organise psychosis teams for catchment areas and thereby integrate the inpatient-outpatient process. The results of such projects have shown the psychological continuity to be good, immediate help well organised, and the patient's social network successfully maintained (Seikkula et al., 2003).

Apart from the Finnish model, other integrated treatment models for patients with schizophrenic disorders are being developed, e.g. in Australia (Edwards & McGorry, 2002; McGorry, 2004), Sweden (Cullberg et al., 2000, 2002), and Norway (Johannessen et al., 2000; Larsen et al., 1996). Although these models differ in many respects, they share in common a high emphasis on psychological and psychotherapeutic aspects of care combined with the use of

low-dose neuroleptic medication. In Spain, an integrated treatment for schizophrenic disorders has also been developed in which the main focus is on group therapy (González de Chávez et al, 2000; González de Chávez & García-Ordás, 1992).

One of the main principles of these projects and other present approaches is early intervention, i.e. to provide patients with psychosocial support and intervention as soon as possible after the onset of psychosis in the expectation that early intervention may reduce the extent and level of morbidity of the illness (McGorry, 2000b, 2004; McGlashan, 1998; McGlashan & Johannessen, 1996). The preliminary results of some of the projects have been very positive, and they have achieved a reduction in DUP (Larsen et al., 1998, 2001; Melle et al., 2004). Although the impact of a reduction in DUP on clinical outcome has not yet been established (McGorry, 2002; McGorry, Krstev, & Harrigan., 2000), the patients involved in these projects have needed hospital beds far less and neuroleptics less often and in much lower doses (Cullberg et al., 2002), and their outcome regarding symptom load and functional state has been favourable.

Early detection and optimal treatment during the critical early years after onset represent an ongoing challenge in first-episode psychosis. All in all, instead of a single treatment model there are many, some of which emphasise the importance of medication, while others focus on specific psychosocial interventions.

1.5 Influence of culture on schizophrenic disorders

Since the late 1960s, increasing interest has been shown in the sociocultural aspects of schizophrenia, extending from international multi-centre studies of prevalence, through national incidence and phenomenological studies in different ethnic groups to outcome assessments in different cultures (Jenkins & Barrett, 2004; Sartorius et al., 1986; WHO, 1979, 1992; Teggin et al., 1985). Jenkins and Karno (1992) have defined culture as a “generalised coherent context of shared symbols and meanings that individuals dynamically create/recreate for themselves in the process of social interaction”. Emotions, attitudes, beliefs, and behaviours are substantially mediated by the culture to which the individual belongs, as is the embodiment of illness patterns and illness behaviour (Jenkins & Karno, 1992). Responses to illness also depend on culturally bound conceptions and on attitudes in the local community to mental illness (Jenkins, 1988).

A number of studies point to the influence of culture on schizophrenic disorders, including definition of the illness, presentation, help-seeking behaviour, response to treatment, and post-treatment adjustment. In general, environmental factors have been identified as having a relatively powerful influence (Dassori et al., 1995; Sartorius et al., 1986; Jablensky et al., 1992). The WHO multi-centre studies of schizophrenia (WHO, 1973, 1979), which examined the prevalence and course of schizophrenia in a number of

developing and developed countries, showed that the manifestation of symptoms is not grossly altered by the cultural background of the patient. Affect, perceptual and cognitive dysfunctions in schizophrenic disorders are highly similar in form in most cultures (WHO, 1973, 1979). However, much of the cross-cultural research emphasises strong cultural differences in how the illness is expressed (Barrio et al., 2003; Katz et al., 1988). In a WHO multi-centre study, common forms of specific cognitive disturbance in schizophrenic disorders were found in all of the sites, but important variations in the emotional and behavioural expression of psychosis were found across cultures in the areas of e.g. affective expressiveness, self-centredness, suspiciousness, and social withdrawal (Katz et al., 1988), and also in excitement, hallucinatory behaviour and somatic concerns (Barrio et al., 2003). More recent studies have found cultural differences in levels of negative symptoms, social withdrawal and cognitive impairment (Dassori et al., 1993).

Differences in the course of schizophrenic disorders between different cultures are particularly intriguing. Much of the motivation for this interest comes from the WHO multi-centre studies of schizophrenia, which showed that the prevalence of schizophrenia does not differ significantly across sites, while the course of the illness, measured by hospitalisation and social functioning, is better in developing than developed countries (WHO, 1979; Sartorius et al., 1986; Jablensky et al., 1992; Leff et al., 1992; Harrison et al., 2001; Hopper & Wanderling, 2000; Craig et al., 1997). This finding, in turn, motivated further investigation into prognostic factors and their relative importance in different social contexts (Jenkins, 1988). Identifying specific environmental factors that may have contributed to the differences in the course of schizophrenic disorders among diverse cultures has, however, turned out to be complicated, as their range has been very broad in the WHO multi-centre studies and as the influence of culture, independent of other sociodemographic factors, is difficult to measure.

There is evidence that similar characteristics of premorbid adjustment, earlier social relations and mode of onset have prognostic importance irrespective of cultural environment (Jablensky et al., 1992, Leff et al., 1992; WHO, 1979). Previous studies have also indicated that non-clinical factors such as premorbid personality characteristics, as well as premorbid social and occupational adjustment, are universally more powerful prognostic forces than diagnosis and level of symptoms (Strauss & Carpenter, 1979).

Some other predictors of outcome may not be valid across all cultural groups and the importance of their role in prognosis may differ. For example, the roles of gender, socioeconomic status, educational level, occupation, and EE in determining prognosis are considered to be more culture-specific than others (WHO, 1979; Jablensky et al., 1992; Jenkins & Karno, 1992; Leff et al., 1992; Karno & Jenkins, 1993).

There has been systematic research on specific aspects of family life that may mediate the course of schizophrenic illness differently in diverse sociocultural environments (Jenkins & Karno, 1992; Karno et al., 1987; Dassori

et al., 1995; López et al., 2004). In addition to their more productive occupational role, the better prognosis found in developing countries has been attributed to better social support, less social isolation, and lower social expectations within the family and community (Lin & Kleinman, 1988; WHO, 1979; Sartorius et al., 1986; Jablensky et al., 1992; Leff et al., 1992; Karno et al., 1987). The extant studies document striking cultural variations in family attitudes, emotional responses, and styles of coping and adaptation to schizophrenic illness (Jenkins, 1988; Ran et al., 2003). For example, Jenkins and Karno (1992) found striking differences in EE, suggesting that the construct is culturally defined, although it is likely to be found in some form and frequency in most of the cultures of the world. Also Mino et al. (1995) argue that the implication of EE is greatly influenced by culture, which could lead to a variety of effects on the social functioning of an ill member of the family. Moreover, differences in the intensity of family bonds and in the integrity of family structure have been identified as strong predictors of outcome (Leff et al., 1987; WHO, 1979; Birchwood et al., 1992; Tuori, 1987). These socio-cultural characteristics are thought to have effects not only on families' EE status, but also on families' attitudes towards patients, and on patients' perceptions of these attitudes (Tanaka, Mino, & Inoue, 1995).

Birchwood et al. (1992) suggest that culture has an impact on the duration of untreated psychosis. The influence of individual, family, social, and health service-related factors on treatment-seeking behaviour might vary according to different cultural contexts (Vaglum, 1996). Cultures differ in the stigma attached to and tolerance shown towards psychotic patients, which may have an effect on treatment delay. In some cultures treatment tends to be delayed because people attempt to cope with the problem of mental illness within the confines of the family and thus treat the symptoms at home (Guarnaccia et al., 1992).

Most of the cross-cultural studies on schizophrenic psychoses have either been comparisons between developed and developing countries or studies which explore the differences between different ethnic groups in one country. There is lack of studies comparing more socioeconomically parallel countries, for example, different European countries. Finland and Spain, representing northern and southern Europe, respectively, show many sociocultural similarities as well as differences. Both countries are developed industrial countries with advanced educational systems and similar rates of unemployment, and their mental health services are community-based. They differ, among other things, in the role played by the family and in the circumstances of social life in the routes taken to adult responsibility in the general population. By the same token, the role of the family and of the health services in the care of psychiatric patients is also different. In Spain, there is a tendency for young people to be deeply rooted in their family of origin, and most young adults live with their family (Rossi, 1997). Thus, the family continues to remain an important source of social support, income, and informal care for a young adult (Gaité et al., 2002). In Finland, the majority of young adults leave their family of origin early to live alone or experiment with

ways of living with others and are expected to get along independently. In such circumstances, the family may have a less important role as a care provider and the social network and peer relations outside the family come to play a substantial role as providers of social support. Thus, good social adjustment and integration may require competence in different aspects of social functioning in these distinct social environments. Such sociocultural differences might be expected to play a part in the course and outcome of the illness of patients with first-episode psychosis in these two countries.

2 AIMS OF THE STUDY

The purpose of the present study was to undertake a cross-cultural comparison of similarities and differences in the characteristics, course and outcome of Finnish and Spanish patient groups with first-episode psychosis.

The specific research aims were the following:

1. To study cognitive deficits in the Finnish and Spanish patient groups as measured by the *SCZI* of the Rorschach CS, to explore the sensitivity of the *SCZI* in these patient groups, and to find out which of the six individual criteria of the *SCZI* are met in these patient groups (Study I).
2. To describe and compare differences and similarities in personality structure and functioning on admission for treatment between the Finnish and Spanish patient groups in their Rorschach response characteristics according to the Rorschach CS (Study II).
3. To examine the length of the duration of untreated psychosis (DUP), to describe and compare early course characteristics, and to examine the association between DUP and these characteristics in the Finnish and Spanish patient groups (Study III).
4. To describe and compare the 12-month outcome and to examine the association between early course characteristics and outcome in the Finnish and Spanish patient groups (Study IV).

3 MATERIALS AND METHODS

The Finnish data consisted of four different groups of patients from three different psychiatric sites: Kupittaa (two groups), Keroputaa and Kangasvuori hospitals (one group from each). The Spanish data were collected from the University General Hospital of Gregorio Marañón, Psychiatric Services I. Kupittaa hospital is located in the city of Turku, in southwestern Finland and serves a catchment area of 80,000 inhabitants. Keroputaa hospital is in the city of Tornio in the northern Finland and serves a catchment area of 72,000 inhabitants. Kangasvuori hospital is in the city of Jyväskylä in central Finland and serves a catchment area of 117,000 inhabitants. The Gregorio Marañón hospital is located in Madrid and serves a catchment area of 300,000 inhabitants. All of the hospitals are municipal psychiatric hospitals.

The patients eligible for participation in all of the studies had to fulfil the following inclusion criteria laid down by the API project: 1) the patient is a new patient with a functional non-affective psychosis according to the DSM-IV (APA, 1994) (Studies I and II) and DSM-III-R (APA, 1987) (Studies III and IV); 2) the patient has residence in the catchment area of one of the psychiatric units; 3) the patient is 16 - 45 years of age (16-44 years of age in Studies III and IV); 4) the patient has been admitted to treatment within the time period specified below; and 5) the patient is able to give an informed consent and is willing to participate. The specific exclusion criteria were as follows: 1) earlier treatment with neuroleptics; 2) earlier psychotherapy (more than 30 sessions); 3) serious physical illness; 4) pregnancy; and 5) serious threat of suicide or violence. These exclusion criteria were necessary because the research purposes of the API project as whole also concerned neuroleptic medication.

The diagnoses were based on all available sources of information, including interviews with patients and family members, medical history and the evaluation data. All diagnostic information was reviewed during meetings with the treating psychiatrist, psychologists and the rest of the research team, and a consensus reached on the final diagnosis. In addition, the Structural Clinical Interview for DSM-IV (SCID, First et al., 1995) was used in the Gregorio

Marañón hospital. The final diagnosis was confirmed after six months. A summary of the research design in Studies I-IV is presented in Table 1.

TABLE 1 Summary of research design in Studies I-IV.

Study	Participants	Variables	Data analysis
Study I	FIN: 21 women 20 men	SCZI criteria: SCZI-1 (X+%<.61) and (S-%<.41) or (X+%<.50)	Mann Whitney U test Pearson's chi-square test
	ES: 17 women 15 men	SCZI-2 X-%>.29 SCZI-3 (FQ->FQu) or (FQ->FQo+FQ+) SCZI-4 (SumLevel 2 Sp.Sc.>1) and (FAB2>0) SCZI-5 (Raw Sum of 6 Sp.Sc.>6) or (Weighted Sum of 6 Sp.Sc.>17) SCZI-6 (M->1) or (X-%>.40) BPRS	Student's t test
Study II	FIN: 21 women 20 men	Criteria concerning the following areas of adjustment difficulties: Coping style (1)* Managing stress (4)	Mann Whitney U test Pearson's chi-square test
	ES: 17 women 15 men	Dealing with experience (4) Modulating affect (5) Using ideation (6) Examining oneself (4) Feeling comfortable in interpersonal relationships (7) BPRS	Student's t test
Study III	FIN: 26 women 23 men	DUP Baseline variables concerning: Onset characteristics (3) Clinical measures (2, BPRS, GAS)	Mann Whitney U test Pearson's chi-square test
	ES: 18 women 19 men	Premorbid functioning during adolescence (3) Interpersonal relations in the year before admission to treatment (4) Occupational activity (4) Global functioning in the year before admission to treatment (2) Family relations (3)	Student's t test Spearman rank correlation

continues

TABLE 1 (continued)

Study IV	FIN:	21 women 19 men	Baseline variables concerning: Onset characteristics (4) Clinical measures (2, BPRS, GAS) Premorbid functioning during adolescence (3)	Mann Whitney U test Pearson chi-square test
	ES:	15 women 13 men	Interpersonal relations in the year before admission to treatment (4) Occupational activity (4) Global functioning in the year before admission to treatment (2) Family relations (3)	Wilcoxon signed rank test Spearman rank correlation
			Outcome variables: Symptoms (BPRS) Global functioning (GAS) Grip on Life	

* Note. Number of variables in parenthesis.

3.1 Studies I and II

3.1.1 Participants

The participants were 73 patients (26 in Kupittaa hospital, 15 in Kangasvuori hospital and 32 in Gregorio Marañón hospital) recruited consecutively from the catchment areas of the psychiatric units of these hospitals. The Finnish patients were admitted to treatment during the years 1994-96, and the Spanish ones during the years 1997-99. The Finnish patients were from the local continuation projects of the API project in the Kupittaa and Kangasvuori hospitals. These projects had been carried out since the end of the API project with the aim of developing further the treatment practices that had been put into place during the life of the project.

The diagnostic composition of the Finnish patient group consisted of 17 cases of schizophrenia, 1 of schizophreniform disorder, 8 of schizoaffective disorder, 1 of delusional disorder, 4 of brief reactive psychosis and 10 of psychotic disorder not otherwise specified (NOS). The Spanish group consisted of 17 cases of schizophrenia, 12 of schizophreniform disorder, 2 of delusional disorder and 1 of brief reactive psychosis.

The Finnish patient group comprised of 20 males and 21 females with a mean age of 27.8. Of these patients 31 were single, 7 were married and 3 were divorced. The average number of years of education completed by this patient group was 10.9 years.

The Spanish patient group consisted of 15 males and 17 females with a mean age of 27.5. Of these patients 27 were single and 5 were married. The average number of years of education completed by this patient group was 10.8 years.

All subjects were willing to participate in the study and gave their informed consent.

3.1.2 Procedure

The patients were administered the Rorschach test according to the CS as soon as possible after admission for treatment and having overcome the acute psychotic state. The average length of time from admission to the administration of the Rorschach was 30.1 days for the Finnish patients and 28.4 days for the Spanish ones. In each psychiatric unit one clinical psychologist was responsible for the test administration and scoring of the protocols of the patient group. All three administering clinical psychologists were well trained in using the method, had successfully completed a two-year course on the CS, and used the method in their work on a regular basis. The protocols were administered and scored according to the standard procedures of the CS.

For the purpose of interrater agreement, 20 Rorschach protocols were chosen at random from the two Finnish samples and rescored independently by the first author (the administrator and scorer of the protocols of the Spanish sample), who was unaware of the other coders' scores. The interrater agreement ranged from a high of 97% for location to 81% for special scores. Subjects, whose protocols showed less than 14 responses, were excluded from the sample due to questionable validity.

The patients' levels of symptoms were measured by the Brief Psychiatric Rating Scale (BPRS, Overall & Gorham, 1962) at the time of the administration of the Rorschach.

3.1.3 Measures

The Rorschach CS was used to assess personality functioning. The CS is an empirically grounded approach with adequate normative data, and it has become the most frequently used system for scoring and interpreting the Rorschach (Exner, 2003). The Rorschach can be conceptualised as a perceptual and cognitive task that induces the participant to use his or her available cognitive, perceptual, and affective resources in organising a response to an abstract problem. The perceptual-cognitive processes that subjects invoke in formulating and articulating their responses provide clues to their characteristic ways of dealing with life experiences, including how they perceive their environment, how they process information, and how they prefer to cope with problem-solving situations (Weiner, 1986). One of the major strengths of the Rorschach is that it provides data that indicate a broad range of fairly stable personality characteristics and orientations (trait-like features) but also data that indicate changes in behaviour due to increases or decreases in needs and/or emotions, or the unexpected experience of stress or the onset of various psychopathological states (state-like features) (Exner, 2003). The results of meta-analytic reviews indicate that the CS has demonstrated adequate reliability, stability, and validity by the usual psychometric standards (Parker, Hanson, & Hunsley, 1988).

Because more detailed information on the various measures is provided in the original articles, only a short summary is given here.

In Study I, the *SCZI* of the CS was used to assess cognitive deficits. The *SCZI* is empirically based on data from patients with schizophrenic disorders. It has been constructed to assess reality testing, thought disorder, inaccuracy of perception, and interpersonal ineptness. The variables making up the 6 criteria of the *SCZI* are shown in Table 1 and in the original article. A score of 4 or higher is a signal that the presence of a psychotic disorder should be seriously considered.

In Study II, the Rorschach indices of adjustment difficulty developed by Weiner and Exner (1991) were used as measures of impaired functioning. The 6 areas of personality functioning that the indices are divided into are shown in Table 1. The 30 variables are shown in the original article. A positive finding on any of the variables suggests the presence of, or potential for, adjustment difficulties. In addition to these indices, coping style (introversive, ambitent, extratensive) and number of key Structural Summary variables, presented in the original article, were examined.

The BPRS was used to measure the level of the patients' symptoms. In the version of the BPRS used, 19 symptoms were assessed on a scale ranging from 1-7, 1 indicating absence of the symptom and 7 severe manifestation of the symptom.

3.2 Studies III-IV

3.2.1 Participants

The participants were 86 consecutively admitted patients (31 by Keroputaa hospital, 18 by Kupittaa hospital and 37 by Gregorio Marañón hospital) who contacted either the two Finnish psychiatric units during 1.4.1992-31.12.1993 or the Spanish unit during 1.6.1997-31.5.1999. The Spanish sample was the same as in Studies I and II and included five new patients as the period of data collection was extended for two months. The Finnish participants were derived from the data collected for the purposes of the API project. All of the Spanish subjects were hospital inpatients, while 55% of the Finnish ones were inpatients. All patients fulfilling the inclusion criteria participated.

The Finnish patient group consisted of 23 males and 26 females with a mean age of 27.7. Of these patients 29 were single, 19 were married, and 1 was a widow. Sixty-one percent lived independently of their family of origin. The Spanish patient group consisted of 19 males and 18 females with a mean age of 27.5. Of these patients 31 were single, 5 were married, and 1 was divorced. Twenty-four percent lived independently of their family of origin.

The diagnostic composition of the Finnish patient group consisted of 19 cases of schizophrenia, 4 of schizophreniform disorder, 12 of schizoaffective disorder, 1 of delusional disorder, 11 of brief reactive psychosis, and 2 of psychotic disorder not otherwise specified (NOS). The Spanish group consisted of 17

cases of schizophrenia, 17 of schizophreniform disorder, 2 of delusional disorder, and 1 of brief reactive psychosis.

The 12-month follow-up data were available for 40 (82 %) Finnish subjects and 28 (76 %) Spanish subjects. Drop-out was due to losing contact with subjects or subjects refusing to continue participating.

All subjects were willing to participate in the study and gave their informed consent.

3.2.2 Procedure

The following methods were used: a) the BPRS; b) the Global Assessment Scale (GAS, Endicott et al., 1976); and c) a standardised semi-structured questionnaire. The BPRS and the GAS were used immediately following admission by the psychiatrist responsible for the patient's treatment. The research team collected the data for the questionnaire from the patients and their families during the first three weeks of treatment.

Each subject was re-evaluated 12 months after admission by the rater (or research team) who had made the initial assessment. The follow-up assessment consisted of the BPRS, GAS, and the follow-up version of the semi-structured questionnaire, which included information on the patient's treatment history since admission.

3.2.3 Measures

Baseline characteristics

The baseline characteristics were measured on admission to treatment by using the BPRS, the GAS and the standardised semi-structured questionnaire.

The BPRS was used to assess the level of patients' symptoms. The version used in Studies III and IV was the same as in Studies I and II, except that instead of 19 items, there were only 18, as euphoria was omitted as no patient had the symptom, thereby also allowing better comparability of the results of the rating scale with other studies in which the latter version is more frequently used. In addition to the BPRS total score, sub-scores for positive and negative symptoms were used on the basis of the BPRS ratings. The positive symptom score included hallucinations, conceptual disorganisation, grandiosity, hostility, suspiciousness, and psychomotoric agitation. The negative symptom score consisted of blunted affect and emotional withdrawal.

The GAS was used as a measure of global functioning. It assesses both symptom severity and level of social functioning, and was rated from 0 to 9 (0 indicating the poorest and 9 the best level of functioning). Patients with a GAS score of 6 or more were classified as having good global functioning. The score of 6, which corresponds to 61-70, indicates slight impairment in functioning such that the patient would not be assessed as being ill by most observers. The scaling of the GAS was erroneous in the API project, a fact which was taken into account in Study IV.

The semi-structured questionnaire is a comprehensive instrument originally developed for the purposes of the Finnish National Schizophrenia Project and supplied for the API project. It includes assessment of the patient's demographic characteristics, onset characteristics, clinical status, premorbid and more recent social and occupational functioning, family relations, and DSM-III-R diagnosis.

The following onset measures were used: DUP, duration of prodromal symptoms, age at onset of psychosis, and mode of onset. The onset of psychosis was defined as the first manifestation of psychotic symptoms such as delusions, hallucinations, thought disorder or inappropriate/bizarre behaviour. These symptoms had to have lasted throughout the day for several days or several times a week, rather than being limited to a few brief moments, and required unambiguous psychiatric intervention. DUP was defined as the time interval between the onset of psychotic symptoms and admission for treatment. The duration of prodromal symptoms referred to the time period from the manifestation of the first non-specific signs of mental disturbance requiring at least some psychiatric attention to the onset of psychotic symptoms. Mode of onset referred to the development of psychosis and ranged from acute to insidious. This variable was defined in terms of the time interval within which the psychotic symptoms developed, thereby also denoting the quality of their intensity or severity. The only clinical measure used in the questionnaire was the patient's level of insight into the disorder.

The measures concerning premorbid functioning during adolescence (12-23 years of age) were: number of peer relations, frequency of asocial behaviour, and level of sexual adjustment. The evaluation was made according to the moment of the highest level of functioning.

The items referring to more recent functioning consisted of a) interpersonal relations in the year before admission for treatment and contained the following items: frequency of social contacts, type of recreational activities (whether social or solitary in nature) and stability in couple relations; and b) occupational activity, including the following items: duration of unemployment and continuous labor incapacity during the year before admission, labor success up to the moment of admission, and stability of professional identity at the time of admission for treatment. In addition to these items, we constructed a sum score representing the strength of the patient's social network in the year before admission and containing the following items: frequency of social contacts, type of recreational activities (social vs. solitary), and stability in couple relations (and in Study III labor success up to admission). The sum score was on a scale from 0 (strong) to 10 (weak) (0 to 13 in Study III); c) global functioning in the year prior to admission for treatment including Axis V DSM-III rating (APA, 1980) and the Grip on Life assessment (see Appendix I). All the measures referring to the patient's functioning during the preceding year were rated on the basis of the patient's general level of functioning without taking into account disease-related sudden changes.

Family relations consisted of the following items: patient's level of psychological dependence on the family of origin, and level of parental criticism and overinvolvement.

Most of the items in the questionnaire were rated on a scale from 0 (good adjustment) to 3 (severe problem). The items were standardised with carefully formulated instructions for each item. The questionnaire was translated into Spanish.

Outcome measures

The BPRS, the GAS, and the Grip on Life were used as measures of 12-month outcome in Studies III and IV. From the BPRS, the total score and assessment of the presence of psychotic symptoms were obtained. The presence of psychotic symptoms was defined as attaining the threshold in at least one of the following BPRS items: somatic concern ≥ 5 ; suspiciousness ≥ 4 ; grandiosity ≥ 3 ; hallucinatory behaviour ≥ 2 ; guilt feelings ≥ 5 ; unusual thought content ≥ 4 ; conceptual disorganisation ≥ 3 . These cut-offs were adapted from McGorry, Goodwin and Stuart (1988) as the lowest possible BPRS scores indicating the presence of psychotic symptoms.

Treatment received during the follow-up

There were many differences in treatment practices between the sites, but all shared the aim of organising treatment from a psychotherapeutic perspective. In the Finnish sites, patients were exposed to a more comprehensive out-patient service compared to the Spanish one. They were treated according to the Finnish Need-Adapted approach (Alanen, 1997). At the time of the study, the patients in the Finnish units entered an early psychosis programme, which offered a comprehensive range of treatments specially tailored to the needs of each patient.

In the Spanish site, patients usually received 2-3 weeks in-patient treatment with group therapy 3 times a week on the ward. Of the Spanish patients, those who continued their treatment in the Gregorio Marañón hospital after discharge participated in group therapy (González de Chávez et al, 2000; González de Chávez & García-Ordás, 1992) once a week in the hospital's psychiatric polyclinic. The rest of the patients were referred to community mental health services where they received standard and relatively limited follow-up care.

The Finnish sites agreed to apply the "minimal use of neuroleptics" regime developed for the API project. This meant that during the first three weeks after admission, neuroleptic treatment was, whenever possible, not started. If the patient's condition clearly improved during this initial phase, the neuroleptisation of the patient was postponed even further or avoided totally. In the Gregorio Marañón hospital neuroleptics were used according to the usual practice, which almost invariably meant immediate neuroleptisation, the planned duration of medical treatment being from one to two years depending on the course of the patient's illness.

The Finnish patients received a more comprehensive range of psychosocial treatments and less neuroleptics than the Spanish ones. All of the Spanish patients were hospitalised and on neuroleptic medication for at least some of the time during the follow-up, while of the Finnish patients, 65 % were hospitalised and 40% were on neuroleptic medication for at least some of the time during the follow-up. At the 12-month follow-up, 40 % of the Finnish and 79 % of the Spanish patients were on neuroleptic medication. Psychological therapy was used in a greater variety of forms among the Finnish patients than among their Spanish counterparts, e.g. 80 % of the Finnish patients received family therapy. Group therapy was used among all the Spanish patients, although in 8 (29 %) cases this was only during the early phase of hospitalisation.

3.3 Data analyses

As most of the variables were not normally distributed, nonparametric statistical tests were generally used in all studies. Group differences were analysed using either the non-parametric Mann Whitney U-test when distributional assumptions were not met or the t-test for independent samples for normally distributed variables. Nominal variables were cross-tabulated, and relationships assessed by the Pearson chi-square test. The changes in outcome measures (BPRS, GAS and Grip on Life) between admission and 12-month follow-up were measured by the Wilcoxon signed ranks test. For the correlational analyses, i.e. calculations for the correlations between DUP and baseline characteristics (Study III), between baseline characteristics and outcome measures (Study IV), and between outcome measures (Study IV), Spearman rank correlation coefficients were employed. All statistical tests were two-tailed. In general, the results were considered to be statistically significant at or below the .05 probability level, except in the case of correlations between baseline and outcome measures (Study IV) where a significance level of .01 was used in order to reduce the chance of accepting randomly occurring significant associations.

4 OVERVIEW OF THE ORIGINAL STUDIES

4.1 Study I

Kalla, O., Wahlström, J., Aaltonen, J., Holma, J., Tuimala, P., & Mattlar, C-E. (2002). Cognitive deficits in patients with first-episode psychosis as identified by Exner's Schizophrenia Index in Finland and Spain. *Rorschachiana*, 25, 175-194.

The main purpose of this study was to provide information on cognitive deficits in first-episode psychotic patients from Finland and Spain and on the sensitivity of the *SCZI* of the Rorschach CS in detecting psychotic disorders across the schizophrenia spectrum within these two patients groups.

Our results did not demonstrate differences on the *SCZI* value between the two patient groups. In fact the results for the groups were surprisingly similar, although they differed from the results obtained in earlier *SCZI* studies. Only 19 % of the Spanish patients and 34 % of the Finnish ones had a *SCZI* value of 4 or more. Only one of the Spanish and two of the Finnish patients had a *SCZI* value of 6. Nearly half of the Spanish patients had a *SCZI* value of 3. The mean *SCZI* was 2.78 for the whole patient group, which was well below the established positive cut-off point of 4 suggested by Exner (1991).

The six individual criteria included in the *SCZI* were also investigated. Most of these criteria were found to occur less frequently among the patients in this study than among the patients in Exner's normative data for hospitalised patients with first-episode psychosis (Exner, 1991). The first three criteria of the *SCZI*, measuring perceptual inaccuracy, were met more often than criteria 4 and 5, measuring thought disorder. The only significant difference between the two patient groups was found in the occurrence of the last *SCZI* criterion due to a higher frequency of distorted human movement (*M-*) answers in the Finnish patient group. In this study, as many as 8 (40%) of the 20 protocols of the patients obtaining a *SCZI* value of 4 or more did not meet either of the two criteria measuring thought disorder (criteria 4 and 5).

4.2 Study II

Kalla, O., Wahlström, J., Aaltonen, J., Holma, J., Tuimala, P., & Mattlar C-E. (2004). Rorschach characteristics and comparison of first-episode psychotic patients in Finland and Spain. *Rorschachiana*, 26, 63-84.

The primary aim of the second study was to explore the personality structure and functioning of patients with first-episode psychosis and to describe the differences and similarities in Rorschach response characteristics between the Finnish and Spanish patient groups.

The Rorschach protocols were examined on the coping style and on the following six areas of maladaptive personality functioning: managing stress poorly, dealing ineffectively with experience, showing affect-modulating problems, using ideation in a haphazard manner, perceiving oneself poorly, and having impaired interpersonal relationships.

Comparisons between the Finnish and Spanish patient groups did not show many significant differences, but instead they were rather similar in many aspects. Nearly half of the patients in both national patient groups showed a preference for an ambivalent coping style, one third being extratensives and only one fifth introversives. Many of the patients lacked social skills, showed little interest in interpersonal relationships and seemed to have an unrewarding social life. They showed signs of impaired emotional control, affect-modulating problems, depressive features, emotional distress, and poor coping capacities. The results support previous findings that affect problems and depressive features are an important part of first-episode psychosis and confirm the presence of cognitive deficits early in the course of psychotic disorder. The occurrence of ideational dysfunction was lower than expected.

The main differences between the two patient groups were established in the measures related to self-perception and interpersonal relations. The Finnish patients showed more excessive self-focusing, were more self-centred and displayed more self-concern and introspection. Thirty-nine percent of the Finnish patients showed an excess of focusing on the self or high self-esteem, while 63% of the Spanish ones showed a negative sense of self-worth. The latter was also true for 44% of the Finnish patients. The Spanish patients had fewer resources for coping and a higher frequency of coping deficits.

4.3 Study III

Kalla, O., Aaltonen, J., Wahlström J., Lehtinen, V., García Cabeza, I., & González de Chávez, M. (2002). Duration of untreated psychosis and its correlates in first-episode psychosis in Finland and Spain. *Acta Psychiatrica Scandinavica*, 106, 265-275.

The aims of the third study were to examine the duration of untreated psychosis, to describe and compare other early course characteristics related to premorbid and more recent psychosocial functioning, onset characteristics, functional and clinical features at admission for treatment, and to examine the association of these characteristics and DUP in the Finnish and Spanish patient groups.

The mean DUP was shorter for the Finnish patients (4.0 months) than for the Spanish ones (9.9 months), although the difference was not significant. The median values of DUP were two months for both patient groups. Among the Finnish patients DUP varied from less than one month to over two years, and among the Spanish ones from less than one month to six years. More than half of the patients in both patient groups had a duration of untreated psychosis of between one and six months. In case of only one fifth of the Finnish and one fourth of the Spanish patients was admission to treatment delayed for more than the critical period of 6 months.

In general, the Finnish patients were functioning better before admission to treatment than the Spanish ones. The Finnish group had a stronger social network, a better Grip on Life, and more social recreational activities in the year before admission than the Spanish group. They also showed more overall laboral success at admission. The Spanish patients had a higher level of symptoms, indicated by a higher BPRS total score and a higher positive symptom score on admission than the Finnish ones. They were also more often single than the Finnish ones and more commonly lived with their family of origin.

In both patient groups, having a longer DUP was associated with insidious onset, schizophrenia diagnosis, laboral incapability and poor Grip on Life in the year before admission. Longer DUP was also related to poorer global functioning at admission and in the year before admission in both patient groups.

Apart from the DUP correlates that were common to both patient groups, there were baseline characteristics that were significantly related to DUP in only one of the two patient groups. Exclusively among the Finnish patients, longer DUP was associated with longer duration of prodromal symptoms, unstable professional identity at the time of admission, few peer relationships during adolescence, a weak social network, few social contacts with friends, lack of social recreational activities, and lack of stability in couple relations in the year prior to admission. Showing psychological dependence on the primary family

and parental criticism were also associated with longer DUP in this patient group.

Among the Spanish patients, longer DUP was associated with a higher level of positive symptoms, especially grandiosity.

4.4 Study IV

Kalla, O., Wahlström, J., Aaltonen, J., Lehtinen, V., & González de Chávez, M. 12-month outcome and associated factors in two groups of patients with first-episode psychosis in Finland and Spain. Manuscript submitted for publication.

The main purpose of Study IV was to describe and compare 12-month outcome between the Finnish and Spanish patient groups and to examine the association between various early course characteristics and outcome to find out whether outcome is related to the same or different factors in the two patient groups. Outcome was measured in terms of levels of symptoms (BPRS), global functioning (GAS) and Grip on Life.

Levels of symptoms and global functioning improved significantly in both patient groups during the follow-up. Less than one fourth of the patients experienced psychotic symptoms and about 60% of them showed good global functioning at follow-up. There was no significant change in Grip on Life. Sixty-five percent of the Finnish patients showed a maintained Grip on Life at follow-up, while the corresponding figure was 43 % for the Spanish ones. Grip on Life was significantly better among the Finnish patients than among the Spanish ones both in the year before admission and at follow-up.

The outcome variables intercorrelated significantly. However, the BPRS was associated with fewer baseline variables than the GAS or Grip on Life. In the Spanish patient group, none of the baseline variables were related to the BPRS at follow-up. Also in the Finnish patient group, clearly fewer variables were associated with the BPRS than with the two other outcome measures.

The baseline characteristics reflecting earlier psychosocial adjustment were strongly associated with outcome in both patient groups. Patients who had a weaker social network, poorer Grip on Life, and poorer global functioning in the year before admission, and who showed more psychological dependence on their family of origin had a poorer outcome.

Several baseline characteristics were associated with outcome in only one or other of the patient groups. In the Finnish group, patients who had fewer social contacts with friends, fewer social recreational activities and less stability in couple relations in the year before admission, fewer peer relations during adolescence, lower socioeconomic status, longer DUP, more insidious onset, poorer GAS at admission, and a diagnosis of schizophrenia, had a poorer outcome. In the Spanish group, patients who experienced a lower level of parental criticism had a poorer outcome.

Neither those Finnish patients who had been exposed to neuroleptic medication nor those Spanish patients who had received group therapy appeared to have better outcome than the others. However, in both patient groups these patients were more severely ill at admission or showed poorer earlier functioning than the others.

5 DISCUSSION

5.1 Outcome and associated factors in the patient groups

Study IV focused on the 12-month outcome and early course characteristics associated with it in the Finnish and Spanish patient groups.

The findings of this study support the notion that patients with schizophrenic disorders experience significant improvement in level of symptoms and functioning during the first-year after admission to treatment (Salokangas, 1997). The outcome of the patients in this study was better than that reported in many other studies of first-episode psychosis with a similar follow-up period, especially as regards psychotic symptoms (Rabiner et al., 1986; The Scottish Schizophrenia Research Group, 1988; Wieselgren & Lindström, 1996; Malla et al., 2002a). Three-fourths of the patients did not experience enduring positive symptoms at follow-up. Our finding that about 60% of patients had a good psychosocial outcome, as indicated by good global functioning or maintained Grip on Life, accords well with other similar reports (Cullberg et al., 2002). Comparison of outcome between studies is, however, complicated due to differences in diagnostic characteristics and outcome criteria.

Characteristics reflecting earlier psychosocial adjustment appear to be strongly associated with outcome in schizophrenic disorders (Alanen et al., 1986; Bromet et al., 1996; Erickson et al., 1989; Jablensky et al., 1992; Larsen et al., 2000; Malla et al., 2002b; Salokangas et al., 1989; Wieselgren & Lindström, 1996). In both groups in the present study, patients who had a weaker social network, poorer Grip on Life and poorer global functioning in the year before admission, and who showed more psychological dependence on their family of origin had a poorer outcome. Variables related to functioning in the year before onset seemed to have a stronger influence on outcome than variables reflecting functioning earlier during adolescence.

Some prominent differences emerged between the Finnish and Spanish patient groups in the associations between certain aspects of pre-treatment social adjustment and 12-month outcome. Those Finnish patients who had

shown poorer functioning in social relations, i.e., fewer social contacts, fewer social recreational activities and less stability in couple relations in the year before admission, had a poorer outcome. Among the Spanish patients, these characteristics did not seem to have such importance in the patients' prognosis. The rather unusual finding of poorer outcome in the Spanish patients with lower parental criticism is consistent with the results of the study by King and Dixon (1995) suggesting that such criticism may prompt patients to be more active in their social role. Thus, one very interesting finding was that in the Finnish patient group, there was a strong association between indicators of the quality of the individual's integration into the extra-familial social field, and outcome, while the one social adjustment characteristic significantly associated with outcome in the Spanish patient group, i.e. parental criticism, was an indicator of intra-familial relations. Moreover, in the Spanish patient group, psychological dependence on the family of origin showed a stronger relation to poor outcome.

Characteristics reflecting earlier social adjustment were more strongly associated with outcome than characteristics indicating clinical status at admission. In the Finnish patient group, characteristics such as long DUP, insidious onset, low socioeconomic status, poor global functioning at admission, and diagnosis of schizophrenia were also associated with poor outcome, which is in accordance with the results of other similar studies (Carbone et al., 1999; Erickson et al., 1989; Jablensky et al., 1992; Larsen et al., 2000; Malla et al., 2002a; Vazquez-Barquero et al., 1999). The results obtained from some earlier studies suggest that outcome is associated rather with level of symptoms following a period of treatment than with the level assessed during an acute episode (Goldman et al., 1993; Norman et al., 1999).

The present results also confirm the findings of other studies showing that, although the outcome variables intercorrelated significantly, the level of symptoms at 12 months is likely to be both reasonably independent of the baseline characteristics measured on admission and more poorly predicted than social functioning (Gaebel & Pietzcker, 1987). In the Spanish patient group, none of the baseline variables were related to the BPRS at follow-up. One reason for this may be that with intensive medical or other treatment psychotic symptoms diminish in most cases during the first year. Also in the Finnish patient group, clearly fewer variables were associated with the BPRS at follow-up than with the two other outcome measures.

The mediating effect of treatment on outcome is difficult to control for in a naturalistic study such as the present one. The two patient groups were treated within very different treatment traditions and with different treatment modalities. The Finnish patients received a more comprehensive range of psychotherapies than the Spanish ones, while all the Spanish patients and only half of the Finnish ones had received neuroleptic medication during the follow-up period. In the Finnish patient group, there were no statistically significant differences in outcome between patients who had and those who had not been taking neuroleptic medication during the follow-up period. Neither were there

differences in outcome among the Spanish patients between those patients who had been in group therapy for more than 8 weeks and those who had not. In both patient groups, however, patients who received these treatment modalities were more severely ill at admission or showed poorer earlier functioning.

Although outcome did not differ considerably between the national patient groups, the results show that many Finnish patients tended to be able to live in society without neuroleptic medication. Thus, these results do not support the view that routine administration of neuroleptics is essential in all first-episode psychoses (Wyatt, 1991). An important future task would be to distinguish those patients who can benefit from neuroleptic medication from those whose potential for an active social life may be put at risk by it. This study does not, however, allow any conclusions to be drawn on the use of neuroleptic medication in general. It was rather surprising that the outcome was so similar between the Finnish and Spanish patient groups, particularly as the former with less severe illness at admission and better earlier social adjustment, might have been expected to have better outcome than the latter. Interestingly, it could be asked whether the Finnish patients with psychotic symptoms at the follow-up might have recovered better had they taken neuroleptics during the follow-up period. Moreover, the fact that the data of the Spanish patients were gathered at a later point in time and thereby they received newer neuroleptic medication, might have had an impact on the results.

The findings of this study suggest that variables related to earlier social adjustment play a role in the prognosis of patients with first-episode psychosis, while their importance is mediated by the social environment. It appears that the respective sociocultural environments of the Finnish and Spanish societies present young adults with different developmental tasks. For Finnish young adults it is a question of establishing social relations outside the family circle (while also living independently of the family of origin), while for Spanish young adults it is one of remoulding relations with members of their family of origin (while living with the family of origin). Our data seem to suggest that the degree to which these patients with first-episode psychosis succeed or fail in these culturally specific age-related developmental tasks, in addition to culturally shared aspects of social adjustment and integration, bears some relation to their respective 12-month outcomes.

5.2 Cognitive deficits in the patient groups

In Study I, cognitive deficits in first-episode psychosis were examined with the aim of finding out whether the *SCZI* would identify the Finnish and Spanish patient groups and whether differences would emerge between them. The false negative rate among these patient groups was as high as 73 %. The results of the study suggest a less severe level of cognitive deficits than earlier research would lead one to expect, and, at least among these patient groups, the *SCZI*

would seem to be far less sensitive than among other similar patient populations with first-episode psychosis, e.g. in the US (Exner, 1991).

Usually in schizophrenic disorders both perceptual impairment and thought disorder are present. In the area of perception, the results of the present study are consistent with previous findings indicating that substantial deficits are present early in the course of psychotic illness (Exner, 1986; 1991; Archer & Gordon, 1988; Di Nuovo et al., 1988; Hilsenroth et al., 1998; Mason et al., 1985; Koide et al., 2002). The criteria reflecting inaccurate perception were found to be the most frequently met in both of the patient groups, while the criteria focusing on disorganised thought were less frequently met in either group. These patients showed notably fewer signs of pathological ideation than might be expected in cases of a psychotic disorder and fewer than have been reported in many earlier studies (Archer & Gordon, 1988; Exner, 1986, 1991; Hilsenroth, 1998). The only significant difference between the two patient groups was found in psychotic ideation tied to less reality-based perceptions of others, which was more common in the Finnish patient group. This was probably due to the significantly higher number of human movement responses in this group.

The fact that the *SCZI* in the present study turned out to give fewer positives than expected, may be due to the existence of factors common to the two patient groups which, also exempt them from Exner's normative data for hospitalised patients with first-episode psychosis and from many other similar studies carried out in the US. Noteworthy, and somewhat surprising, was the close similarity found between the two patient groups of the present study in almost all of the Rorschach variables examined.

We have considered the possibility that the high number of false negatives in the *SCZI* in the present study might have been due to the low number of responses and high Lambda obtained for the Rorschach protocols. Such protocols are less likely to yield positive pathological indices (Exner, 2003). However, only one-third of the false-negatives produced protocols with less than 17 responses and high Lambda ($> .99$).

The patient sample was heterogeneous with respect to diagnosis and also included schizophrenia-spectrum disorders other than schizophrenia. This fact does not, however, seem to have had an impact on the *SCZI* values, as 29% of patients with a diagnosis of schizophrenia or schizophreniform disorder had a positive *SCZI* value, compared to 24 % of patients in the other diagnostic groups.

The timing of the test administration does not explain the differing results between this and previous studies either, as comparison of patients who were administered the Rorschach within one month and who had to wait over one month did not show differences in their respective *SCZI* values. Moreover, medication was not controlled for, although according to Exner (1993) it appears to have a minimal influence on most Rorschach variables.

On the basis of these results, it could be asked whether the patient groups were less disturbed than other published samples with first-episode psychosis or whether the *SCZI* criteria are based on norms which do not apply to the

specific patient groups included in the present study. This study may have accurately identified genuine cross-cultural differences in the personality functioning of patients with schizophrenic psychoses in Finland and Spain compared to similar patients in the US. If this is the case different norms are not needed for different cultural groups. An alternative possibility is that a basically similar personality structure manifests itself differently in the Rorschach in other countries, such as these two European countries investigated here, than in the US, in which case we may not be entitled to generalize directly from Exner's data but instead should work with norms and interpretive cut-off points according to the national characteristics of the populations in question (Mattlar, Forsander, & Mäki, 1997; Mattlar, 2004).

To conclude, as stated by Bannatyne et al. (1999), the *SCZI* index may not be the best Rorschach index of psychosis. A more careful selection of Rorschach protocols with respect to complexity and other features that might moderate the relationship between the *SCZI* and psychotic features might have resulted in more robust findings. It would also have been interesting to have been able to evaluate the sensitivity of the *PTI* with these patient groups, as the *PTI* has recently replaced the *SCZI* as a dimensional measure of psychosis rather than an index specific to schizophrenia. There are to date only a few studies on the psychometric properties of the *PTI*, but the indications are that it may indeed outperform the *SCZI* in accurately discriminating persons with psychosis from those without the illness (Exner, 2000; Smith et al., 2001). While the *PTI* awaits further empirical evidence on its validity, caution is clearly advised when using the Rorschach to assess for psychosis among first-episode patients. It should also be borne in mind that the diagnosis of schizophrenic disorders and understanding of the cognitive deficits involved require a complex understanding of an individual's total personality functioning.

5.3 Personality characteristics in the patient groups

In Study II the Rorschach response characteristics of the Finnish and Spanish patient groups were described to gain more understanding of the personality structure and functioning of patients with first-episode psychosis in general and to examine the differences and similarities between these patient groups.

The findings of the present study confirmed some well-established data on problems in the personality functioning of patients with schizophrenic disorders, while at the same time questioning others. Comparisons between the Finnish and Spanish patient groups did not show many significant differences, but instead they were rather similar in many aspects. The patients in this study showed many deficits in the following six areas of personality functioning: managing stress, dealing with experience, affect modulation, ideation, self-perception, and interpersonal relationships.

The results support previous findings that emotional problems and depressive features are an important part of first-episode psychosis (Addington

& Addington, 1993). The findings indicated that the present patients suffered more from emotional problems than has been reported in earlier studies (Exner, 1986, 1991). In contrast to Exner (1986), who found almost no positive DEPI values in first-episode psychotic patients, one third of the patients in the present study showed a positive DEPI value. In addition, these patients presented somewhat more signs of emotional distress. The number of patients with affect-modulation problems was comparable to those in Exner's data.

The results were consistent with those obtained by Exner (1991), confirming the lack of rewarding social relations and lack of interest in other people that is typical of schizophrenic disorders. This kind of disinterest in and/or difficulty identifying with other people has been reported in a number of studies in the field (Di Nuovo et al., 1988; Exner, 1986, 1991; Mason et al., 1985). Many of the present patients lacked social skills. In regard to self-perception, these patients seemed to overvalue their personal worth or focus on themselves more often than has been reported earlier (Exner, 1986, 1991). More patients showed negative self-worth than in other studies (Archer & Gordon, 1988; Exner, 1986, 1991), mainly due to the low Egocentricity Index of the Spanish patient group.

Self-perception was the area in which the two patient groups differed most from one another. The Finnish patients showed more excessive self-focusing, were more self-centred and displayed more self-concern and introspection, while the majority of the Spanish patients showed a negative sense of self-worth. A sense of negative self-worth is usually related to a tendency to focus more on the external world than on the self (Exner, 2003). However, the present results showed that the Spanish patient group had rather an impoverished social life. In the case of the Finnish patients, the self-centredness of these patients might have been expected to be productive of difficulties in interpersonal relationships. However, the Finnish patients showed significantly more interest in people than did their Spanish counterparts. In fact the Spanish patients showed more problems in coping than the Finnish ones. The Spanish patients also had significantly fewer resources available for coping, i.e., they showed more difficulties and helplessness in contending with the demands of the social world.

If these results reflect differences in the personality characteristics of psychotic patients in Finland and Spain, respectively, rather than national differences in a basically similar personality structure, as manifested in the Rorschach, then in fact these data may have accurately identified real cross-cultural differences in personality.

5.4 Duration of untreated psychosis and associated factors in the patient groups

Study III focused on the duration of untreated psychosis and on factors that might be associated with it in the Finnish and Spanish patient groups.

The vast majority of patients in both groups were admitted for treatment within the critical period of one to six months from onset of psychosis, as suggested by McGorry et al. (1996). This is the period during which treatment is expected to have the greatest impact on remission and recovery. Delay was longer than six months in one fifth of the Finnish patients and in one fourth of the Spanish patients. These psychotic patients, who might be expected to have poor prognosis, are presumably the ones who would benefit most from earlier detection.

The mean duration of untreated psychosis was relatively short for the Finnish patient group (four months), while for the Spanish group (ten months) it was comparable with the period reported in many of the previous studies (Häfner et al., 1993; Johnstone et al., 1986; Larsen et al., 1996, Haas & Sweeney, 1992; Craig et al., 2000). The results also replicated earlier findings showing that the mean DUP is almost four times longer for patients with diagnosed schizophrenia than for those having other functional non-affective psychoses (Lincoln & McGorry, 1999). Of course, in the schizophrenia group the longer delays are at least partly artificial due to the influence of the six-month diagnostic criterion of the DSM-III-R.

The findings of the present study support the results of previous studies which have also revealed substantial variability in delay before treatment (McGorry et al., 1996; Larsen et al., 2004). The median DUP values of two months for both patient groups in our study were much shorter than the mean values, suggesting some long duration outliers. The longest DUP of six years in the Spanish patient group indicated that some patients can live in the community with severe psychopathology for several years.

Universal factors also seem to play a part in the DUP of these patients. In both groups, patients who had more insidious onset, showed poorer earlier functioning and poorer Grip on Life waited longer for treatment. These predictors of DUP have been found in many previous studies (Larsen et al., 1996, 1998).

Some interesting differences appeared between the patient groups in factors associated with delayed treatment. Variables related to the quality of earlier social relations, i.e., weak social network, few peer relations, lack of social activities, lack of stability in couple relations, seemed to be more strongly associated with treatment delay among the Finnish patients than Spanish ones. Moreover, in the Finnish patient group, those who had maladaptive family relations, i.e., psychological dependence on parents and parental criticism, entered treatment later, while in the Spanish group, a higher level of positive symptoms, especially grandiosity, was related to delay in treatment.

Previous studies have pointed to problems in health service level in different parts of the world in the recognition of early psychotic symptoms and in referral for adequate treatment (Vaglum, 1996). In our study, only 4 patients had contacted their health services before being included in the study. Therefore, the delay in treatment did not seem much to depend on lack of recognition or referral on the health service level but rather on factors related to the patients and their families. Patients at risk for developing psychosis, their families and the general population should be the target of awareness-raising campaigns, including information on the signs and symptoms of psychosis and on how to seek treatment.

The findings of the present study might reflect differences in social situation and structure in the two countries. The vast majority of the Finnish patients lived independently of their families, while three-fourths of the Spanish ones lived with their primary family. Moreover, the Finnish patients had a stronger social network outside the family and more social recreational activities than the Spanish ones.

In Finland, social relations outside the family seem to play an important role in the initiation of treatment-seeking. It might be, as Drake et al. (2000) have suggested, that patients who are poorly integrated into the society cause less concern to the surrounding population and thereby experience longer delay to treatment. The role of the family as a care provider is probably less important in Finland than in Spain. One reason for this may be the effort made within the Finnish social policy framework to transfer many of the functions traditionally performed by the family to society. On the other hand, in Spain, where most of the patients lived with their families, family integration may be stronger than in Finland with the result that the social network outside of the family may have only a minor influence on the patient's treatment-seeking behaviour. Moreover, treatment practices in Spain are based more than in Finland on cultural attitudes and patterns of informal care which may delay the treatment-seeking process and help to conceal mental health problems that require professional help. Furthermore, the fact that there was no association between DUP and parental criticism in the Spanish group may possibly support to this notion.

5.5 Methodological evaluation

It is important to draw attention to some of the strengths and weaknesses of the present study.

We chose to carry out a naturalistic prospective observational study, which offers the advantage of including a broader range of patients with multiple treatment modalities and, therefore, yields results that are more representative of "real world" clinical practice (Nash et al., 2004; Pinosof & Wynne, 2000).

The patient groups were equal in the inclusion criteria and methods used, and the results not confounded by earlier long-term medication or

psychotherapy. Although the patient groups were also rather similar in most of their demographic characteristics, i.e., age, sex, educational and socioeconomic status, they differed from each other with regard to certain baseline variables reflecting clinical and functional status (Studies III and IV). These differences should not, however, bias the results regarding the correlations between baseline characteristics and outcome.

Although the various diagnostic groups were unequally represented between the patient groups, we did not perform separate analyses by diagnostic category because the number of subjects in most of the categories was small. Moreover, in the Spanish group, over 90 % of the patients had a diagnosis of either schizophrenia or schizophreniform disorder. In addition, there is always a significant degree of diagnostic instability at the time of the first psychotic episode, and the boundaries between schizophrenia and other functional non-affective psychoses are far from being well-defined (Verdoux et al., 2001).

The fact that the Spanish patients were hospitalised may have caused a bias towards more severely ill patients in this group than among the Finnish patients, of whom 45% were treated initially in an outpatient setting. The fact that fewer Finnish patients were hospitalised, especially in case of Keroputaa, was due to the hospital's policy treating patients as often as possible in outpatient care. Although the number of first-episode patients treated for psychosis in the community is likely to be small, we cannot exclude the possibility that different findings would have been obtained in a Spanish sample that included subjects receiving community treatment without hospital admission.

The treated incidence of first-episode psychosis at the Spanish site was very low, adding to the question of the representativeness of this patient group. It is possible that some people with less severe psychotic symptoms in the catchment area of the Spanish patient sample may not have sought treatment owing to the protective effect of living with their families, a practice which may discourage the use of professional services, especially among those with less severe psychotic symptoms. The low treated incidence may also be due to the fact that patients with less severe symptoms may have been treated by other community health care services for other conditions and therefore not referred to the Spanish study site. In general, in Spain, the vast majority of patients with schizophrenic disorders, like mental health care patients in general, are treated within the public health care system and very rarely in private hospitals or private practice alone (García, Espino, & Lara, 1998). Moreover, it is a standard practice for general practitioners to refer all cases of psychosis to the public mental health services; such specialist services are free at the point of use. The reason for this low figure at the Spanish site is difficult to trace, as the incidence of treated patients reflects the complex interaction between the help-seeking behaviour of the patients, the psychiatric services, the whole health care system and the surrounding community. The publicity surrounding the API project, intensive outpatient case management, as well as an open and well informed referral system might have encouraged a substantially larger proportion of

patients to seek and accept treatment in the Finnish than in the Spanish sites.

The fact that there were drop-outs at follow-up (Study IV) may also have had some effect on the results, although there were no statistically significant differences in the baseline characteristics between patients for whom outcome data were available, and those for whom such data not. In both patient groups the drop-outs tended to have less severe disorders at admission as their diagnosis was more often an illness other than schizophrenia and they had also been ill for a shorter period than the others. As these patients would have been expected to have a better prognosis than the participants, their inclusion at least should not have impaired the outcome results of this study.

Among the weaknesses of these studies is also the fact that we were not able to test interrater reliability regarding the ratings and instruments used, because the Finnish and Spanish patient groups were gathered at different times (Studies III and IV). However, the API questionnaire, which was also translated into Spanish, contained detailed instructions for each item and the members of the research teams received training in using the research methods. Moreover, the data were in most cases obtained from various sources, i.e. patients, family members and/or significant others, staff members, and medical records. The research teams, which performed all the assessments, also participated in the treatment of the patients, which may have caused bias. On the other hand, it can also be argued that teams which are responsible for the day-to-day treatment of patients can acquire much more information on them during this process than an outside researcher could learn during one-off interview (Salokangas, 1997).

A variety of baseline measures reflecting earlier functioning, DUP and other onset characteristics were assessed retrospectively (Studies III and IV). Thus, memory distortions may have limited the reliability and validity of the findings. Moreover, many of the variables were based on the patients' subjective reports, e.g. Grip on Life, which may have caused bias.

Differences in treatment at the sites may have influenced the outcome in these patient groups (Studies III and IV). The effects of the medication and psychosocial interventions received on outcome were not controlled for in this naturalistic research. The patients were treated with a varying range of treatment modalities according to their changing needs. The treatments were in most cases complex and multi-modal, especially in the Finnish treatment units, for which reason, it is unfeasible to compare the effectiveness of treatment between sites. The choice of research methodology originated out of the API project, where the methodology was based on problem-oriented action research principles, aimed at the development of a real life range of therapeutic activities within community psychiatry, rather than constituting a series of trials designed to study the efficacy of single treatment strategies (Alanen et al., 2000).

There were also differences in treatment practices between the Finnish sites. In Keroputaa hospital the treatment orientation was more family-centred with these patients receiving more family therapy, while in Kupittaa hospital other psychosocial treatment modalities, i.e., individual, group, and

occupational therapy, were more frequently used. Moreover, a bigger proportion of patients in Kupittaa hospital also received neuroleptics. These sites did not differ in number of hospitalised subjects during the follow-up, but at admission for treatment more patients in Kupittaa hospital were hospitalised.

One of the methodological limitations in Studies III and IV was the fact that although the patients were all experiencing their first episode of psychosis, they were at different stages of their illness, as also evident by the variation in the length of DUP. Efforts to measure earlier functioning are often contaminated by overt manifestations of the illness, as some patients may already be prepsychotic or even openly psychotic. In our study the items concerning functioning during the year before admission were rated according to normal non-disease-related functioning.

The follow-up period was short and the measurements were performed at a single point in time, i.e., at 12 months (Studies III and IV). A cross-sectional evaluation does not give information about the pattern of the course taken by dynamic illnesses like schizophrenia-group disorders, as the evolution of the patient's illness during the follow-up period is not revealed. A further revision of the patients' diagnoses at 12 months might have shed more light on the course of the illness. This revision had not, unfortunately, been performed for the Finnish patients.

The choice of statistical methods in the data analyses was limited by the restricted psychometric properties of the methods, non-normative distribution of the variables and small sample size, which had the effect of reducing the statistical significance of the results. Owing to the great number of variables, numerous comparisons were made, allowing for the possibility that some statistically significant results might have arisen on the basis of chance alone.

Comparison of the findings of this study with those of other studies is problematic on account of the differences in both baseline and outcome criteria and in the length of the follow-up period. As the associations between baseline and outcome variables (in the Study IV) were based on correlations, we do not know whether these relationships were independent of other variables, i.e., whether some important third variable may have contributed to these relationships. Moreover, with such a small number of subjects, we were not able to study the possible effect of mediating variables such as living situation and gender on the correlations between the baseline variables and outcome, as suggested by Salokangas (1997).

In the absence of control groups, the more specific role that the illness, treatment and sociocultural environment have on the results remains unknown.

5.6 Concluding remarks

The present study, with relatively similar, consecutively admitted and unselected groups of Finnish and Spanish patients gave us an opportunity to explore the course of first-episode psychosis in different cultural environments. Many patients with first-episode psychosis appear to recover at an early stage of the illness. Irrespective of the patients' background characteristics and the type of treatment they receive, the majority seem to be free from psychotic symptoms and function relatively well at the end of the first year. Although the psychotic condition improves in most cases in the short-term, our results cannot be generalized to the long-term prognosis.

As already known from earlier research, first-episode psychosis is very heterogeneous in its characteristics, course and outcome. Patients have proven to differ considerably with respect to their premorbid psychosocial, psychological and clinical characteristics even when they have been selected using well-defined inclusion criteria and are similar in most of their sociodemographic characteristics. Most variability appears to be in the level of earlier psychosocial adjustment. This variability might, in addition to the heterogeneity of first-episode psychosis in general, reflect differences in social expectations and in age-related developmental tasks imposed on young people in different societies.

The course and outcome of first-episode psychosis appear to be influenced by many factors, commonly known from earlier studies. It seems that, in general, poor social network and functioning are the main obstacles to recovery from psychosis and seeking early treatment. The variation found in some of the factors associated with outcome appears to differ considerably in different social environments. Clear interaction between the more general predictive influence of pre-treatment characteristics and some qualities of the respective sociocultural environments of patients from different countries can be seen in the prognostic factors relating to the patient groups studied here. As we interpret it, prevailing social structure and expectations, family integration, tolerance and peer relations are reflected in the present study in the factors associated with outcome and delay in the treatment of first-episode psychosis. The sociocultural context appears to shape the pathways by which family processes are related to the course of illness.

Extra-familial social resources can be expected to play a bigger role in the transition to adulthood in countries like Finland, which value early independence in young adults. This appears to be visible in the importance of the factors associated with prognosis in the Finnish patient group. In societies with strong family integration such as Spain, family support may moderate the impact of social skill deficits on prognosis, while at the same time strong family ties may also hamper the development of social skills. Factors such as psychological independence and parental criticism appear to play bigger role and add to favourable prognosis in these patients with first-episode psychosis.

The results of the present study suggest that special attention should be paid during treatment to supporting and strengthening patients' social network. The family- and network-oriented treatment approach with early intervention developed in Keroputaa hospital and used there during the API project (Seikkula, Aaltonen, & Alakare, 1999; Seikkula et al., 2003) might help patients to become more independent, maintain their social network and support the resources of the family. This would be especially important in case of patients who live with their families, as the latter then have to face the difficulties and stress involved in caring for these patients, in many cases without adequate support from the public health care system. The network-centred treatment model has been found to maintain the resources of the patient's social network and in some cases increase the patient's level of functioning. Moreover, early intervention can prevent the diminution of the patient's social network (Kauranen, Seikkula, & Alakare, 2000). Further investigation is needed into social skills training, as greater competency in these areas might increase the opportunity for social relationships and leisure activities, thereby improving a person's self-esteem which, in turn, will be likely to impact positively on their work and social relationships (McGilloway & Donnelly, 2000).

The present result that many patients can be successfully treated without neuroleptics is noteworthy and in line with the results of Cullberg et al. (2002). This result runs contrary to the current guidelines for optimal treatment, which usually recommend neuroleptics in the treatment of all patients with first-episode psychosis (McGorry, 2004; Suomen Psykiatriyhdistys, 2004). Routine neuroleptic medication is possibly less necessary in the treatment of all first-episode patients than has commonly been thought, if comprehensive and intensive psychotherapeutic treatment with a family orientation is available. Treatment strategies favouring lower doses of neuroleptics should at least be seriously considered (McGorry, 2004). This issue is an important one which should continue to be studied.

Psychosocial adjustment as an outcome measure appears to be influenced more by patients' pre-treatment characteristics than by their clinical status, and is thereby perhaps more amenable to change through interventions. As severe psychosocial limitations are present even in the early stages of psychosis, and with the shift in the treatment of patients with schizophrenic psychoses from long-term hospitalisation to an outpatient community service, research on psychosocial adjustment has become increasingly important.

As concerns the results of the Rorschach, lack of adaptive personality functioning of the patients appeared to be of more note than the characteristics referring to their acute psychotic state. The examination of maladaptive personality functioning seems to generate more important information on the characteristics of first-episode psychosis than perceptual inaccuracy and thought disorder. Such information which takes into account the patient's personality resources, could prove invaluable in treatment planning. In this way also a patient's assets as well as liabilities can be utilized in treatment planning. Research on the influence of personality characteristics on the

prognosis of psychosis remains to be done. It is our intention to explore the associations between the Rorschach data and outcome of the Spanish patient group in the future.

The fact that many of the same factors which are associated with prognosis seem to delay treatment is noteworthy. On the basis of this study it cannot, however, be known whether these relations are independent or whether treatment delay functions as a mediating factor. This finding underscores, once again, the importance of assisting people with psychosis to maintain their social networks with both family and friends.

The present study has the value of illuminating the factors to which attention should be paid. However, at this point the nature of the mechanisms mediating prognostic factors and outcome remain no more than hypothetical. Further research could help us gain a better understanding of these mechanisms. In this study consideration of such mechanisms was impossible as the implementation of the study was determined by the data available from the API project.

Although it seems undisputable that cross-cultural differences exist in recovery from psychosis, the mechanisms underpinning them should be identified. In future investigations, attention should be focused on the role of specific societal differences. Studies investigating the various hypotheses that have been modelled as the underlying reasons for given cross-cultural differences should be operationalised.

Understanding the role of cultural influences on schizophrenic treatment has become more important nowadays with the growing number of culturally diverse patients in the same treatment setting. The ultimate aim of research on the course and outcome of psychosis is to be able to discriminate successfully from illness onset between those patients with good outcome prospects and those with poor outcome prospects in the belief that this has important implications for the management of the schizophrenic illnesses.

The present day level of knowledge on the course and treatment of schizophrenic disorders could already substantially reduce the number of psychotic patients and enable patients to enjoy a higher quality of life, providing at the societal level these matters are accorded the importance they deserve and there is the willingness to allocate resources to them.

TIIVISTELMÄ

Tässä väitöskirjatutkimuksessa tarkasteltiin ensikertalaisten psykoosipotilaiden psyykkis-sosiaalisia ominaisuuksia, sairaudenkulkua ja ennustetta Suomessa ja Espanjassa. Psykoosista parantuminen ei vielääkään ole tyydyttävällä tasolla, eikä sairaudenkulkua ja ennusteeseen liittyviä tekijöitä tunneta, vaikka hoidon kehittämiseen onkin panostettu mielenterveystyössä paljon viime aikoina ympäri maailman. Lukuisten kansainvälisten tutkimusten perusteella eri tekijät vaikuttavat eri sosiokulttuurisessa ympäristössä sairauden kulkuun ja ennusteeseen eri tavalla.

Tähänastisessa kulttuurienvälisessä psykoositutkimuksessa on tutkittu lähinnä eroja kehitysmaiden ja kehittyneiden maiden välillä. Vaikka Suomi ja Espanja ovat länsimaita, ne eroavat monessa suhteessa sosiokulttuurisilta tekijöiltään, esim. perheen rooli ja sosiaalisen integroitumisen asettamat sopeutumisvaatimukset nuoren itsenäistymiskehitykselle eroavat maiden välillä. Suomessa suurin osa nuorista muuttaa primääriperheestä aikaisin pois, jolloin itsenäinen pärjääminen korostuu. Näin ollen perheen ulkopuolisella sosiaalisella verkostolla saattaa olla iso rooli sosiaalisena tukijana. Espanjassa sitä vastoin nuoret asuvat primääriperheensä kanssa pitkään, jolloin perheen rooli sosiaalisena tukijana ja epävirallisen hoidon antajana painottuu. Täten sosiaalinen sopeutuminen saattaa vaatia pärjäämistä eri sosiaalisen toiminnan osa-alueilla näissä eri sosiaalisissa ympäristöissä. Nämä erot erilaisten kulttuuriympäristöjen asettamissa sopeutumisvaatimuksissa saattavat myös näkyä hoitoviiveen pituudessa ja psykoosin sairaudenkulussa niihin yhteydessä olevien tekijöiden roolin korostuessa eri tavalla.

Tämä tutkimus mahdollisti tarkastella sosiaalisen ja kulttuurisen kontekstin yhteyttä sairaudenkulkuun ja ennusteeseen suomalaisten ja espanjalaisten psykiatristen yksiköiden hoitoympäristöissä. Tutkimuksen naturalistisella tutkimusotteella pyrittiin kontrolloidun tutkimusasetelman sijaan tutkimaan, mitä näille potilaille tapahtuu heidän sairastuessaan ensikertaa psykoosiin, miten heidät hoidetaan ja miten he parantuvat näiden hoitoyksiköiden vastuualueilla, jotka eroavat hoitosysteemeiltään, hoitomuodoiltaan sekä sosiokulttuuriselta ympäristöltään.

Väitöskirjatutkimukseni on yhteydessä valtakunnalliseen monikeskustutkimukseen, nk. API-projektiin (Akuutin Psykoosin Integroitu Hoito-projekti). API-projektin tavoitteena oli kehittää edelleen akuutin skitsofreniatyyppin psykoosien hoitoa tarpeenmukaisen hoitomallin mukaisesti ja tutkia, miten sitä voidaan toteuttaa erilaisissa hoitoympäristöissä sekä tutkia hoidollista lopputulosta ja neuroleptilääkityksen merkitystä ennusteen kannalta.

Tutkimusmateriaali koostui neljästä potilasaineistosta, jotka kerättiin kolmesta hoitoyksiköstä: Kupittaaan (kaksi eri potilasaineistoa), Keroputaan ja Kangasvuoren sairaaloista. Tutkimuksissa I ja II käytetty suomalaismateriaali kerättiin Kangasvuoren ja Kupittaaan sairaaloista vuosina 1994-96. Tutkimuksien III ja IV suomalaisen aineiston muodostivat API-projektin potilasaineistot

Keroputaan ja Kupittaaan sairaaloista ajalta 1.4.1992-13.12.1993. Espanjalainen potilasaineisto kerättiin Madridin yliopistollisesta sairaalasta (Hospital General Universitario Gregorio Marañón) ajalta 1.6.1997-31.5.1999. Potilasaineistot käsittivät kaikki ensikertaa hoitoon tulevat potilaat eri hoitopaikkojen hoitovastuualueilta, joiden diagnoosina oli funktionaalinen ei-affektiivinen skitsofreniaryhmän psykoosi DSM-IV:n mukaisesti tutkimuksissa I ja II ja DSM-III-R:n mukaisesti tutkimuksissa III ja IV. Tutkimuksissa I ja II kartoitettiin potilaiden kognitiivisia häiriöitä sekä persoonallisuuden rakennetta ja toimintoja, joiden arviointimenetelmänä käytettiin Exnerin Rorschach CS-menetelmää. Tutkimuksien III ja IV perustutkimusvaiheessa selvitettiin potilaiden aiempi sosiaalinen ja työelämän toimintataso, psyykkinen oireilu, sairauden puhkeaminen ja perhesuhteet. Tutkimusmetodeina oli GAS, BPRS sekä standardoitu semistrukturoitu kyselylomake. Tutkimukseen IV sisältyi vuoden seuranta, jolloin hoitotuloksen arviointimittareina käytettiin oireiden tasoa (BPRS), globaalista toimintatasoa (GAS) sekä elämänotetta (Grip on Life).

Tutkimuksiin I ja II osallistui 41 suomalaista ja 32 espanjalaista potilasta. Tutkimuksien III ja IV perusvaiheen tiedot kerättiin 49 suomalaiselta ja 37 espanjalaiselta potilaalta. Vuoden seurantaan osallistui 79 % potilaista. Kaikki espanjalaisen aineiston potilaat olivat sairaalassa hoidon alkaessa, kun taas suomalaisista 55 % oli sairaalapotilaita.

Väitöskirjani tavoitteena oli selvittää, millaisia potilaita tutkimusyksiköissä hoidettiin ensimmäistä kertaa skitsofreniatyyppin psykoosin vuoksi ja erosivatko potilasryhmät psyykkis-sosiaalisilta ominaisuuksiltaan hoitoon tullessa. Toiseksi tarkasteltiin, miten potilaiden hoito ja vointi etenivät vuoden kuluessa hoitoon tulosta. Lisäksi selvitettiin, mitkä tekijät olivat yhteydessä 12 kuukauden seurantahetkellä vallitsevaan psyykkiseen tilaan ja toimintatasoon.

Ensimmäisessä tutkimuksessa selvitettiin kognitiivisten häiriöiden ilmenevyyttä hoidon alussa suomalaisilla ja espanjalaisilla potilailla Rorschach CS:n Skitsofrenia Indeksillä (SCZI) mitattuna. Tulokset osoittivat, ettei SCZI ollut herkkä havaitsemaan kognitiivisia häiriöitä kummankaan potilasryhmän kohdalla tunnistuen vain 34 % suomalaisista ja 19 % espanjalaisista potilaista. Eli ilmeisesti näillä potilailla oli vähemmän ajatushäiriöitä ja ongelmia havainnoinnissa kuin aiemmissa vastaavissa tutkimuksissa. Etenkin ajatushäiriöihin liittyvät ongelmat olivat potilailla lievempiä kuin psykoottisilla potilailla yleensä.

Toisessa tutkimuksessa kuvattiin ja verrattiin suomalaisten ja espanjalaisen potilaiden persoonallisuuden rakennetta ja toimintoja hoidon alussa Rorschach CS:n avulla. Näitä tarkasteltiin kuuden tulkinnallisesti keskeisen klusterin kautta, joista kukin edustaa tietyn persoonallisuuden alueen sopeutumisongelmia tai häiriöitä ajatusten, tunteiden ja mielikuvien sujuvassa käsittelyssä. Klusterit olivat 1) kyky kontrolliin ja stressin sietoon, 2) suhtautuminen kokemuksiin, 3) affektien kokeminen ja käsittelykyky, 4) ajatteluprosessien sujuvuus, 5) käsitys itsestä ja 6) interpersoonallinen havainnointi ja kokeminen. Tutkimus osoitti, että molemmilla potilasryhmillä oli ongelmia persoonallisuuden organisaatiossa ja toiminnoissa monilla persoonallisuuden osa-alueilla. Potilailla ilmeni vaikeuksia tunne-elämään (heikkoa emotionaalista kontrollia,

ongelmia tunteiden muokkauksessa, depressiivisiä piirteitä, emotionaalista ahdistusta), sekä sosiaaliseen vuorovaikutukseen liittyen. Suurimmat erot potilasryhmien välillä liittyivät minäkäsitykseen ja vuorovaikutussuhteisiin. Suomalaiset potilaat osoittivat enemmän keskittymistä itseensä kuin espanjalaiset. Suurimmalla osalla espanjalaisista oli matala itsearvostus ja heillä oli enemmän vuorovaikutukseen liittyviä ongelmia kuin suomalaisilla.

Kolmannessa tutkimuksessa kartoitettiin hoitoviiveen pituutta, sekä siihen yhteydessä olevia tekijöitä suomalaisilla ja espanjalaisilla potilailla. Lisäksi tutkittiin, miten potilasryhmät eroavat psyykkis-sosiaalisten taustamuuttujien suhteen hoitoon tullessa. Tutkimuksen tulokset osoittivat, että kummankin ryhmän potilaat olivat psyykkis-sosiaalisilta ominaisuuksiltaan kovin heterogeeninen joukko. Kaiken kaikkiaan espanjalaiset potilaat olivat alkutilanteessa sairaampia, ts. heillä oli enemmän psykoottisia oireita, heikompi aiempi sosiaalinen verkosto, vähemmän ystävyysuhteita, heikompi menestys työelämässä sekä heikompi elämänote. Suurin osa espanjalaisista potilaista asui primääriperheen kanssa, kun taas suomalaisista suurin osa asui itsenäisesti.

Hoitoviiveellä viitattiin ajanjakson pituuteen psykoottisten oireiden puhkeamisesta hoidon aloittamiseen. Tulokset osoittivat, ettei hoitoviive eronnut merkittävästi potilasryhmien välillä. Suomalaiset potilaat hakeutuivat hoitoon keskimäärin neljän kuukauden kuluttua psykoottisten oireiden alkamisesta, ja espanjalaiset potilaat vastaavasti kymmenen kuukauden kuluttua. Hoitoviive vaihteli molempien potilasryhmien sisällä paljon, mutta suurimmalla osalla potilaista hoito aloitettiin kuitenkin ensimmäisen puolen vuoden aikana sairauden puhkeamisesta. Hoitoon tulo oli lähes kaikille potilaille ensimmäinen kontakti psykiatriseen hoitojärjestelmään psykoottisten oireiden takia. Pitkään hoitoviiveeseen yhteydessä olevia tekijöitä oli molemmissa potilasryhmissä mm. hidas oireiden puhkeaminen, skitsofrenia diagnoosi, työkyvyttömyys, heikko elämänote, ja heikko globaali toimintataso. Näiden yhteisten tekijöiden lisäksi maiden välillä oli myös eroja hoitoviiveeseen yhteydessä olevissa tekijöissä. Suomalaisilla potilailla oli pitkään hoitoviiveeseen yhteydessä prodromaalioireiden pitkä kesto, heikko ammatti-identiteetti, aiempaan heikkoon sosiaaliseen verkostoon liittyvät tekijät, (ts. vähäiset sosiaaliset kontaktit ystäviin, sosiaalisten harrastusten ja vakituisen parisuhteen puuttuminen), vanhempien kriittisyys sekä potilaan psykologinen riippuvuus primääriperheestä. Espanjalaisilla positiivisten psykoottisten oireiden taso oli yhteydessä hoitoviiveen pituuteen.

Neljännessä tutkimuksessa tarkasteltiin, miten suomalaisten ja espanjalaisien potilaiden psyykkinen vointi ja toimintataso muuttuivat hoitoon tulosta vuoden seurantaan, sekä mitkä tekijät olivat yhteydessä ennusteeseen. Tutkimus osoitti, että sekä oireet että globaali toimintataso paranivat potilailla merkittävästi seurannan aikana. Vain vajaalla neljänneksellä molemmista potilasryhmistä ilmeni psykoottisia oireita seurannan aikaan. Noin 60 % potilaista oli hyvä globaali toimintataso, kun taas elämänote oli säilynyt 65 % suomalaisista ja 43 % espanjalaisista. Suomalaisilla oli parempi elämänote sekä hoitoon tuloa edeltävänä vuonna että seurannassa. Hoitotulosta mittaavat tekijät

korreloivat keskenään molemmissa ryhmissä, joten niitä ei eroteltu tuloksia raportoitaessa. Molemmissa ryhmissä taustamuuttujat olivat voimakkaammin yhteydessä seurantahetken toimintatasoon ja elämänotteeseen kuin oireiden tasoon. Espanjalaisilla potilailla mikään tutkituista muuttujista ei ollut yhteydessä oireiden tasoon. Tulokset osoittivat, että molemmissa potilasryhmissä oli yhteisiä ennusteeseen yhteydessä olevia tekijöitä, jotka on raportoitu myös aiemmassa kansainvälisessä kirjallisuudessa. Molemmissa potilasryhmissä muuttujat, jotka mittasivat hoitoon tuloa edeltävän vuoden psykososiaalista sopeutumista, olivat yhteydessä hoitotulokseen, ts. potilailla, joilla oli heikompi sosiaalinen verkosto, globaali toimintataso ja elämänote oli heikompi ennuste. Lisäksi myös psykologinen riippuvuus primääriperheestä liittyi heikompaan ennusteeseen. Ryhmille yhteisten tekijöiden lisäksi tutkimuksessa ilmeni tekijöitä, jotka olivat yhteydessä ennusteeseen vain toisessa potilasryhmässä. Suomalaisille potilaille oli ominaista, että vähäiset sosiaaliset kontaktit ystäviin, sosiaalisten harrastusten ja vakituisen parisuhteen puuttuminen hoitoon tuloa edeltävänä vuonna, vähäiset ystävyysuhteet nuoruusiässä, heikko sosio-ekonominen asema, pitkä hoitoviive, hidas sairauden puhkeaminen, heikko globaali toimintataso hoitoon tullessa sekä skitsofrenia diagnoosi olivat yhteydessä heikompaan ennusteeseen. Espanjalaisilla potilailla vanhempien kriittisyys oli yllättäen yhteydessä parempaan ennusteeseen.

Potilaiden ensimmäisen vuoden aikana saama hoito erosi huomattavasti ryhmien välillä. Suomalaisten potilaiden kohdalla käytettiin enemmän psykososiaalisia hoitomuotoja ja vähemmän neuroleptilääkitystä. Kaikki espanjalaiset potilaat ja puolet suomalaisista saivat neuroleptilääkitystä seurannan aikana. Tutkimuksessa ei löytynyt merkitsevää yhteyttä hoidon ja ennusteen välillä, ts. suomalaisilla potilailla neuroleptilääkitys ei ollut yhteydessä ennusteeseen eikä vastaavasti espanjalaisilla potilailla ryhmäterapiaan osallistuminen ollut yhteydessä ennusteeseen. Muiden hoitomuotojen yksittäistä vaikutusta hoitotulokseen oli mahdotonta kartoittaa, koska suomalaisten potilaiden hoito muodostui useimpien potilaiden kohdalla useasta hoitomuodosta.

Mitä tutkimustuloksista voidaan sanoa? Aiempi toimintataso sekä sosiaalisen verkoston lujuus näyttävät tämän tutkimuksen mukaan olevan tärkeitä sekä ennusteeseen että hoitoon hakeutumisen ajankohtaan vaikuttavia tekijöitä ensikertalaisilla psykoosipotilailla. Tuloksissa näyttäisi lisäksi nousevan esiin sosiaalisen rakenteen vaikutus psykoosipotilaiden ennusteeseen yhteydessä oleviin tekijöihin. Suomalaisessa yhteiskunnassa, jossa suuri osa psykoosiin sairastuneista ihmisistä asuu itsenäisesti, tekijät, jotka tukevat potilaiden perheen ulkopuolista sosiaalista integroitumista näyttävät olevan tärkeitä ennusteeseen ja hoitoon hakeutumiseen yhteydessä olevia tekijöitä. Espanjalaisessa elinympäristössä taas tekijät, jotka liittyvät perhesuhteisiin sekä tukevat psykoosiin sairastuneen henkilön itsenäistymistä perheestä näyttävät olevan tärkeitä ennustetta ja hoitoon hakeutumista määrääviä tekijöitä. Kulttuurin ja sosiaalisen ympäristön vaikutuksen huomioimisella psykoosipotilaiden sairauden kulkuun ja ennusteeseen yhteydessä oleviin tekijöihin saattaisi olla myös selkeitä indikaatioita hoitomuotojen valintaan.

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APPENDIX

GRIP ON LIFE

(Alanen et al., 1986; Salokangas, Rökköläinen, & Alanen, 1989)

The Grip on Life is a comprehensive assessment of psychosocial adjustment, which evaluates the patient's efforts to achieve the goals and modes of satisfaction normally associated with the interpersonal relationships, social life and occupational activity of an adult person. The assessment is based largely on observational information on the patient's subjective attitudes. Attention is also given to the patient's thoughts concerning his or her future, as well as current situation.

The Grip on Life is rated as follows:

0. Good grip on goals related to course of life and satisfactions offered by human relations
1. Grip on goals of life and modes of satisfaction mainly retained
2. Considerable part of grip lost; signs of apathy, passiveness, sense of hopelessness; however, there is still some hope that the goals may be achieved in the long run
3. Total abandonment of the external goals of life that are important to adult humans and no serious effort to achieve satisfaction through human relations

The most important dividing line runs between scores 1 and 2. Patients scoring 0 or 1 are classified as having a maintained Grip on Life, while those who obtain scores 2 or 3 have clearly lost their Grip on Life.