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Risto Antikainen

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ABSTRACT

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Patients suffering from borderline personality disorders (BPD), or related disorders, are recognized to belong to a group for which specific inpatient treatment approaches are needed. In this prospective study, in *the Kuopio University Hospital Department of Psychiatry*, changes in symptoms and social management - were monitored in 62 borderline patients admitted in 1989 to an open ward, specializing in the psychotherapeutic treatment of borderline level disorders. The duration of hospitalization was 91 days, on average (range 21 - 296 days). The average follow-up period was 3.4 years. Patients were evaluated using various rating scales, including the Beck Depression Inventory (BDI) and Hamilton Depression Rating Scale (HDRS), at the beginning, middle and end of their stay in hospital and after the follow-up period. Forty-two patients (70%) participated in the follow-up evaluation. Most patients suffered from overt anxiety and depressive symptoms at the beginning of hospitalization. These symptoms declined significantly during hospital treatment. An active, positive attitude towards symptom alleviation and treatment predicted a good outcome, a passive, projective attitude predicted a poor outcome. Standard background variables and medical diagnosis did not differentiate between outcomes. It was concluded that in crisis situations patients with borderline level disorders and relatively mild symptoms benefit from treatment lasting longer than immediate symptom alleviation necessitates. Further treatment, on an outpatient basis, was recommended for all discharged patients. Three years later a regular contact had been established by about one third. Depressive and anxiety symptoms were at the same level as on discharge, as assessed by the BDI and HDRS. Although better affect regulation was attained on average, some patients suffered continually from serious problems, of which suicidal behaviour was the most marked sign. During follow-up the sample clearly differentiated into two groups: those continually capable of work and those chronically incapable of work, the latter a group at risk of social marginalization. Patients with concomitant physical illness benefited less from inpatient treatment than other patients. This was attributed to intolerance of psychic conflict.

Key words: Personality disorder; hospital treatment; longitudinal study; psychotherapy; treatment outcome

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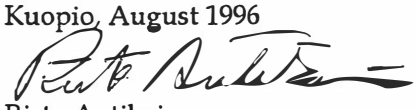

Risto Antikainen

LIST OF ORIGINAL PUBLICATIONS

This thesis is based on the following original articles:

I Antikainen R., Lehtonen J., Koponen H., & Arstila A. (1992). The effect of hospital treatment on depression and anxiety in patients with borderline personality organization. Nordic Journal of Psychiatry, 46, 309-405.

II Antikainen R., Koponen H., Lehtonen J., & Arstila A. (1994). Factors predicting outcome of psychiatric hospital treatment in patients with borderline personality organization. Nordic Journal of Psychiatry, 48, 177-185.

III Antikainen R., Hintikka J., Lehtonen J., Koponen H., & Arstila A. (1995). A prospective three-year follow-up study of borderline personality disorder inpatients. Acta Psychiatrica Scandinavica, 92, 327-335.

IV Antikainen, R., & Hintikka, J. (in print). Somatic comorbidity in personality disorder inpatients: effect on treatment outcome in a 3-year follow-up study. Nordic Journal of Psychiatry.

These papers are referred to in the text by means of the Roman numerals indicated.

Abbreviations

BDI	Beck Depression Inventory
BLD	Borderline Level Disorder
BPD	Borderline Personality Disorder (in accordance with DSM-III-R)
BPO	Borderline Personality Organization
BPRS	Brief Psychiatric Rating Scale
GAS	Global Assessment Scale
DSM-III	Diagnostic and Statistical Manual of Mental Disorders. 3rd edition
DSM-III-R	Diagnostic and Statistical Manual of Mental Disorders. 3rd edition, revised
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders. 4th edition
HDRS	Hamilton Depression Rating Scale
LOS	Length of Stay (in treatment)
SCID-II	Structured Clinical Interview for DSM-III-R Personality Disorders
SD	Standard Deviation

CONTENTS

1 INTRODUCTION

Although there is a general trend towards outpatient treatment of mental-health disorders, needs for hospital treatment of some patient groups are recognized. Patients with severe personality disorders, including borderline disorders, form a group for which inpatient treatment lasting longer than the acute symptoms necessitate is sometimes recommended (e.g. Kernberg, 1984). Under present-day economic pressures such recommendations lead to questions about the therapeutic adequacy and cost-effectiveness of inpatient treatment methods, and in general to questions concerning outcome of treatments.

Research into the outcome of treatment of mental health disorders is a subject in relation to which researchers, clinicians and authorities do not always agree on what should be studied and how studies should be conducted. The more psychotherapeutically oriented the focus of attention, i.e. the instruments of treatment, are, the more problematic communication will be. It has recently been stated that the gap between psychotherapy researchers and clinicians resists closure and threatens to become wider (Greenberg, 1994). However, hope has also been expressed and efforts made to integrate research and clinical practice (Kernberg & Clarkin, 1994).

The problem of outcome research can be expressed in terms of whether treatment helps patients effectively, or whether treatment can be proven by reliable, validated methods to doubtful, or even suspicious, outsiders or concerned authorities to be effective. Researchers often find themselves at odds with clinicians when both try to answer to such questions. Clinicians are committed to creating a particular sort of intimate relationship within which a patient can change. Researchers are committed to asking hard questions about these relationships and changes that may stem from them. Researchers often feel their findings are unfairly ignored. Their hard data seem wasted by those who could benefit from them. From the clinicians' standpoint, research data seem to reflect interplays between artificial, over-simplified forces (Greenberg, 1994; Spence, 1994). Researchers find many interesting and exiting clinical studies flawed by reliance on single case histories, incomplete data, metaphor, and tendencies to believe that what is felt by one clinician should be felt by all (Spence, 1994).

The problem is as old as the psychotherapeutic treatment of mental disorders. Greenberg (1994) has claimed that ever since Freud tried to convince the Viennese medical establishment that he was on to something about the inner experience of hysterics (and thus about the aetiology of neurosis), psychotherapists have been unsuccessful at persuading outsiders of the validity of their findings and of the utility of their methods. Today, similar words could be used in relation to psychotherapy research (see, e.g., Aveline, M., & Shapiro, 1995; Miller, Luborsky, Barber, & Docherty, 1993; Talley, Strupp, & Butler, 1994), and to outcome research in general, as far as psychotherapeutically-oriented treatment methods are concerned.

Literature on the topic of this study, i.e. on the clinical course and outcomes of inpatients treated for borderline disorders also highlights a duality that is characteristic of outcome research. In some of the literature the topic is examined from the standpoint of psychodynamic personality theories and psychotherapeutic clinical practice. In such studies, the psychological background and phenomenology of borderline disorders, and individual results of their treatment are extensively discussed. In contrast, in studies based on quantifiable measures, and aiming at generalization, the stated goal is often, though not always, to develop descriptive, behaviour-based approaches, as free as possible from theoretical assumptions (see, e.g., Jacobson & Cooper, 1993). Clinicians and researchers even today have different concepts of the borderline disorder. So far, few bridges have been built between the two areas.

Despite these problems, research into outcomes of treatment and the efficacy of the psychotherapeutic approach is necessary. There is a constant need to develop new methods of treatment, and to convince decision makers of their utility and necessity. Dwindling financial resources in Finnish health-care over the past few years have not reduced needs for such research. When resources diminish, needs for specialized forms of treatment required by small patient populations may be marginalized in favour of established treatments and larger patient populations. The greater the costs of a treatment method, the greater the economic pressure. Inpatient treatment of borderline disorders after alleviation of an acute crisis is one such specialized form of treatment.

The study reported here describes the clinical course and immediate outcome with psychotherapeutically-oriented inpatient treatment of borderline disorders in an open ward of the Kuopio University Hospital Department of Psychiatry and the durability of outcomes.

The psychiatric ward described here is situated in the province of Kuopio, Eastern Finland, in a town of about 90,000 inhabitants. Patients are admitted to the ward from all parts of the province. Patients from other provinces of Eastern and Middle Finland are also admitted, provided certain preconditions are met. The number of inhabitants of the province of Kuopio is about 250,000. In the total area of responsibility of the University Hospital it is about one million.

The province of Kuopio has been known for high suicide and hospitalization rates. In 1973 there were 1,440 beds in mental hospitals in the area (Achté et al., 1973). In 1995 the corresponding number was 290. There has accordingly been a decrease in number of beds, from 5.4/1,000 to 1.1/1,000 inhabitants

(Jääskeläinen & Ranta, 1995). In the last 15 years, the number of outpatient consulting hours increased by 400% in the area. The total number of personnel connected with psychiatric treatment diminished by 25%, and costs decreased by 25-30% (Jääskeläinen & Ranta, 1995). Suicide figures in the province of Kuopio, especially among men, have been far higher than the Finnish average. In 1987 (Saarinen, 1995) the suicide rate was the highest in Finland. Since then, the rate has fallen. In the early 1990s, it was below the national average (Lehtonen & Hintikka, 1995).

The decades mentioned above have also been years of increasing understanding of borderline disorders, worldwide and in Finland. A need for a ward specialized and a staff trained to meet problems characteristic to this patient group was acknowledged also in Kuopio area in the late 1970s. The new staff started at the Department of Psychiatry, Kuopio University Hospital in 1980. From the beginning patients were admitted on basis of expected gain from psychotherapy and community treatment and of patient's own decision. Studies on the outcomes of inpatient treatment of borderline disorders have been few, especially as compared with some other patient groups, for example schizophrenics. These factors, among others motivated conduct of research on the outcomes of treatment in the study ward.

The approach employed in this study was to assess the outcome of treatment of mental disorders quantitatively. The above-mentioned conflict between statistically reliable and clinically relevant data is a challenging methodological problem in the study reported here. In the study presented here, functioning of patients during and after treatment was monitored using several methods of charting changes in symptoms, moods and social functioning. The results have been reported in original papers I, II, III and IV. The results prompted examination of certain aspects in greater detail. Results of these analyses are reported here.

2 DEFINING, UNDERSTANDING AND TREATING BORDERLINE DISORDERS

2.1 From "Pseudoneurotic schizophrenia" towards specificity

In 1938 Stern (1983) identified a group of patients in his psychoanalytical practice who persistently disregarded the usual boundaries of therapy, and whose personality organization differed from that seen in psychotic or neurotic patients. Hoch and Polatin (1949) described a group of patients who they called "pseudoneurotic schizophrenics". Although these patients appeared healthy, they underwent regression in the psychoanalytical context in which they developed psychotic transferences. Knight (1953) wrote about a group of patients who created considerable interstaff splitting in hospital settings, and who evoked major countertransference problems. He suggested that such patients did not fit into any of the usual categories, and gave significance to the clinical meaning of the borderline syndrome.

Since the 1950s, and especially in the past 25 years, the use of the diagnostic category "borderline personality" has grown markedly, but the term has undergone dramatic shifts of meaning. According to Gunderson (1994) the borderline construct has been conceptualized in three ways:

1. *The borderline personality organization* (BPO) construct arose from psychoanalytical observations. It related primarily to description of the intrapsychic structure, and was linked to the emergence of ambitious curative treatment strategies.

2. A *borderline syndrome* construct involved the disorder being considered as an atypical form of schizophrenia, later as an atypical affective disorder. Emphasis was on descriptive characteristics. Treatment moved towards psychopharmacological interventions and other time-limited techniques.

3. *The borderline personality disorder* (BPD) construct, which has relatively well-defined descriptive boundaries, is, according to Gunderson (1994), tied to

significant knowledge about its origins and long-term treatment strategies of the disorder.

There has been interaction between these conceptualizations as they have developed, involving different sources of data, research approaches, and methods. Developments of the three conceptualizations are summarized below.

2.1.1 Borderline personality organization

As mentioned above, in the 1950s psychotherapists and psychoanalysts began to describe patients who could consciously experience primary process material but who lacked capacity for introspection, insight and working through. The earliest conceptualization of the term borderline was very broad, somewhat synonymous with the "difficult patient" (Kernberg, Selzer, Koenigsberg, Carr, & Appelbaum, 1989). The term "borderline" became widely recognized in the late 1960s as Kernberg (1967, 1968) wrote seminal articles on the borderline personality organization construct and its treatment. These were followed by Masterson's descriptions (1972) of borderline adolescents.

The BPO diagnosis is based on three structural criteria: identity diffusion, level of defensive operations, and capacity for reality testing. Identity diffusion is defined as lack of integration of the concept of the self or significant other. It is revealed in patients' subjective experience of chronic emptiness, contradictory self-perceptions and behaviour, impoverished and contradictory perceptions of others, and difficulties in empathizing with others (Kernberg, 1975). They often show severe mood swings as well as striking tendency to perceive significant other as all good or all bad (Kernberg, 1980). The defensive organization centres on the mechanism of splitting and other mechanisms related to it, for example primitive idealization, early forms of projection, denial, omnipotence and devaluation. All of these are supposed to protect the ego from conflict by dissociating contradictory experiences of the self and of significant other. Reality testing is defined as the capacity to differentiate self from nonself, and intrapsychic from external origins of perceptions and stimuli, and to evaluate personal affect, behaviour and thought content in terms of ordinary social norms. BPO also shows itself in nonspecific manifestations of ego weakness (lack of impulse control, lack of anxiety tolerance, and lack of developed channels for sublimations), in superego pathology, and in chronic and chaotic object relations, but a BPO-diagnosis depends only on the criteria of identity diffusion, defensive operations, and reality testing (Kernberg et al., 1989).

According to Tähkä (1993), only after Kernberg's systematic treatise on the subject did borderline pathology start to attract increasing interest from psychoanalysts, leading to a expansion of the literature (see, e.g. Kohut, 1971, 1977, Tähkä, 1976, 1984, 1993, Volkan, 1976, 1981, to mention only a few papers well-known in Finland). Apart from Kernberg's work, only Tähkä's contribution is described below in detail. The psychotherapeutic principles and theoretical formulations of Tähkä had a marked influence on development of the study ward, and on clinical principles adapted for use there, especially during the early 1980s. Kernberg's work is described in detail here because it has led to research projects

in which efforts to integrate his psychoanalytic theoretical formulations with the tradition of treatment-outcome research based on quantifiable variables have been made. Some of these projects are also described below.

2.1.2 Borderline syndrome

At the same time as Kernberg and Masterson were writing their papers, in the late 1960s, the borderline construct initially attracted descriptive psychiatric attention (Gunderson, 1994). Grinker, Werble and Dryer (1968) identified identity problems, depression, dependent relationships and anger as the four defining characteristics of such patients. The latter study legitimized, according to Gunderson (1994), the "borderline" patient as a proper subject in academic psychiatry. Subsequent descriptive research (Gunderson & Kolb, 1978) defined the borderline syndrome as characterized by instability of identity, cognition and affect. While instability of identity can be related to the earlier psychoanalytical observation and borderline personality organization construct, instability of cognition and affect immediately raised the question of whether the patients had an atypical form of schizophrenia or affective disorder (Gunderson, 1994). A survey by Spitzer, Endicott and Gibbon (1979) among American psychiatrists offered means of distinguishing the borderline personality construct from the "borderline schizophrenia" (subsequently retitled "schizotypal personality") construct. This was a precondition for the borderline personality category to be included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) (American Psychiatric Association, 1980). The development of a standard set of criteria, and the availability of reliable diagnostic methods, resulted in a substantial increase in research.

The question of whether the borderline syndrome represented an atypical form of affective disorder remained. After many descriptive, longitudinal, family-history and psychopharmacological studies, and examinations of claims made for psychoanalytical therapy, it is, according to Gunderson (1994), now clear that the borderline syndrome cannot be understood as an atypical form of affective disorder. Its multifactorial sources probably include predispositions in the area of affect dysregulation but also in the area of impulse dysregulation. Gunderson's view of shared and unshared characteristics of BPD and unipolar depression is summarized in Table 1.

Table 1 Shared and unshared characteristics of unipolar depression and borderline personality disorder, according to Gunderson (1994)

Characteristics of unipolar depression	Shared characteristics	Characteristics of personality disorder
Guilty, remorseful	Depressed affect (early onset, sustained)	Empty, lonely
Withdrawn/ agitated	Worthlessness and hopelessness	Angry/ needy
Suicidality, serious if present	Object hunger	Repeated suicidal gestures
Stable relationships	Dependency	Demanding hostile-dependent relationships
Concerned with defeat, failures	Fragile self-esteem	Concerned with interpersonal loss, separation
Welcomes care-giving (with history of independence)		Illusory self-sufficiency (with history of dependency)

2.1.3 Borderline personality disorder

Perhaps the narrowest approach is represented by the concept "borderline personality disorder" (BPD), as defined in the revised Manual of Mental Disorders (DSM-III-R) (American Psychiatric Association, 1987) and its successor, DSM-IV (American Psychiatric Association, 1994). The definition is based on descriptive, circumscribed, phenomenological features. An approach which is theoretically uncommitted, and free from assumptions about aetiology or treatment strategies, is underlined by the authors as the aim of DSM systems. In DSM-III-R, BPD is described as a pervasive pattern of instability of mood, interpersonal relationships, and self-image, beginning by early adulthood, and present in a variety of contexts. At least five of the following eight items are necessary for confirmation of diagnosis: unstable interpersonal relationships, impulsiveness, affective instability, inappropriate anger, self-damaging acts, identity disturbance, chronic boredom, and problems tolerating being alone.

The suitability of such a definition for many purposes, among others research, has been widely recognized since publication of DSM-III. However, it has been lately argued that the utility of BPD in clinical and research practice is largely because the borders of the diagnosis are so flexible (Tyrer, 1994). The borderline construct included in the two editions of DSM-III has been criticized because the criteria overlap with those of other severe personality disorders (particularly schizotypal, histrionic, antisocial and narcissistic) and consequent confusion as regards aetiology, treatment and prognosis (Kernberg, 1984), and

because it fails to distinguish common features of severe personality disorders from those of less severe disorders. According to Kernberg and his colleagues the approach has proved less than ideal for many clinical purposes (Kernberg et al., 1989).

Research since late 1980s has demonstrated that BPD overlaps with other personality disorders but that the overlap was, in part, a product of criteria set for DSM-III and DSM-III-R, which grossly overlapped: i.e. which were high on sensitivity but low on specificity (Gunderson, 1994). Borderline criteria that most exemplified this problem in relation to DSM-III-R were those concerning identity disturbance, affective instability and unstable relationships (Gunderson, Zanarini & Kisiel, 1991). More importantly, none of the personality disorders were defined on the basis of either their aetiological or therapeutic specificities. This underlined the importance of giving substance to the borderline construct by relating its psychopathology to pathogenesis and treatment (Gunderson, 1994).

The borderline personality disorder construct has now become an official part of the International Classification of Diseases (ICD-10) (WHO, 1992), in which it was not formerly included (see, e.g., WHO, 1977). In ICD-10, Emotionally unstable personality disorders include Impulsive type and Borderline type. For Borderline diagnosis, besides at least three Impulsive-type criteria, at least two of the following symptoms (abbreviated) should be present: disturbances of self-image, liability to intense and unstable relationships, excessive efforts to avoid abandonment, threats or acts of self-harm, chronic feelings of emptiness. By the time of the study described here, the Finnish classification of mental disorders (Tautiluokitus 1987, 1989) was based on DSM-III-R. Developments and contents of ICD classifications are therefore not described further.

2.1.4 Prevailing consensus: the borderline construct in the 1990s

It is now recognized that borderline psychopathology represents a specific form of personality disorder, in which low heritage and extreme emotional neglect have some aetiological specificity relative to other personality disorders (Gunderson, 1994). The revised description of the essential feature for this disorder in DSM-IV has more specificity in relation to distorted self-image problems, more significance in relation to impulse-control problems, and a better defined, more specific definition of affective reactivity. It also includes a new criterion reflecting types of reality-testing problems, especially dissociative and paranoid reactions.

Creation of the DSM-III system revealed, according to Jacobson and Cooper (1993), tension between research psychiatrists and psychodynamically-oriented clinicians. Because the new DSMs served research needs for reliable diagnostic categories better than the previous diagnostic manuals, the resulting studies were weighted toward achieving nosological reliability, often at the cost of validity. The DSMs define diagnostic categories on the basis of discrete, observable behaviour, with minimal resort to clinical theory.

Concepts created by clinicians, such as borderline personality organization (Kernberg) have more relevance than the DSMs to a presumed psychodynamic aetiology, personality development, especially the structuralization process,

and optimal treatment. Kernberg et al. (1989) admit that their concept is less precise than the diagnostic categories of the DSM-III-R. According to psychoanalytically- oriented researchers, the current DSM system is struggling under the burden of its exclusion of psychodynamic data, resulting from the stated goal of the system (Jacobson & Cooper, 1993), namely, to develop a descriptive, behaviour-based approach to diagnosis as free as possible of theoretical assumptions. This results in omission of some of the most useful and widely confirmed concepts of modern psychiatry: unconscious mental processes, intrapsychic conflict, and defences. Diagnoses such as borderline personality or narcissistic personality are important, because they are believed to have implications for the structure of defences. According to Howard et al. (1995), DSM-III-R has not been useful in assigning patients for psychotherapeutic treatment.

Jacobson and Cooper (1993) suggest that because of the limitations of the DSM system, supplementary measures for specification of psychodynamic diagnosis are needed. Diagnoses should include descriptions of defence mechanisms, core conflicts, internal psychological resources, and severity of psychiatric illness. Psychotherapy researchers have proposed new concepts for the assessment of mental disorders in clinical research, e.g. psychodynamic diagnosis (Jacobson & Cooper, 1993) and psychological development level (Hartley, 1993). It would seem that while reliable definition and more accurate description of mental disorders is desirable, DSM-III-R and its successors do not offer optimum solutions as regards studies of outcomes of psychiatric inpatient treatment. The more psychotherapeutic elements in inpatient treatment, the greater reason to look for new ways of classifying the mental problems of patients in outcome and other studies.

Due to the difficulties of conceptualization and varying research methods epidemiological data on prevalence rates of personality disorders are controversial. In a 16-year follow-up in Finland (Lehtinen & el., 1993) personality disorders showed age-adjusted prevalence of 6.3% in men and 1.9% in women, and disorders of psychotic severity (including borderline states) 4.1% in men and 4.7% in women. Diagnosis of borderline state was partly based on definition by Hoch and Pollatin (1949) and showed prevalence of 0.2 among men and 2.8 among women. In early epidemiologic studies in other countries prevalence rates for personality disorders varied strikingly (between 0.1% and 9.8%), but in more recent studies more consistently from 10.3% to 13.5%, according to Girolamo and Reich (1993). Specification of definitions and assessment methods will produce confirmed data on prevalence rates for personality disorders.

2.2 Psychotherapeutic approaches to borderline pathology

Following Tyrer's statement in 1994, interest in treatment of borderline disorders, previously considered to be a group of untreatable conditions, have been in focus of great therapeutic interest. According to Gunderson (1994), recognition that a

patient has a BPD should indicate to a clinician a need for initial containment, and long-term commitment, and the importance of support and structure in developing a working relationship.

Kernberg has called the form of psychotherapy suitable for borderline psychopathology "expressive psychotherapy". Expressive psychotherapy is designed to enhance a patient's ability to experience self and other as coherent, integrated, realistically perceived individuals, and to reduce needs to use defences that weaken ego structure by reducing the repertoire of responses available. The expectation is that this will result in increased capacity to control impulses, tolerate anxiety, modulate affect, and develop more stable and satisfying interpersonal relationships. The aims are achieved through "the diagnosis and clarification" of the dissociated or split-off components of the patient's internal object world, revealed in transferences to the therapist (Kernberg et al., 1989).

According to Tähkä (1993) the core pathology in borderline patients results from disturbances and arrests of personality development in the stage that begins with differentiation of self and object representations from each other, marked by "the eight-month anxiety" (Spitz, 1965), and that ends when an individual identity and individual objects become differentiated and integrated in a child's experiential world, around age three years. This development has been described by Mahler (1968) as a separation-individuation process, resulting in object constancy. The representation of the developmental object during this period is characteristically experienced as existing, self-evidently, only for the child, and fully possessed and controlled by him. Before consolidation of self and object constancy, the child's self remains experientially omnipotent, because it owns an omnipotent servant (Tähkä, 1993). Object-relatedness is functional (Tähkä, 1984). Disturbances in the process of structure-building identification have been described by Tähkä (1993) to be the specific cause of the deficits and distortions in the psychic structure of borderline patients, leaving them dependent on functional services from external objects as missing part of their self structure, and thus unable to attain self and object constancy. Like a child during normal development before object constancy, borderline patients experience functional objects' services as self-evidently belonging to themselves. When they are not forthcoming, the immediate response is narcissistic rage or panic. Tähkä calls these disorders resulting from arrest of early childhood development borderline level disorders (BLD).

The goal of psychotherapy is, according to Tähkä (1993), similar to the ideal outcome of a human being's development during formative years: establishment of relative subjective autonomy. In the case of a BLD patient this means growing individuation, i.e. achievement of self and object constancy. The psychotherapist's phase-specific function, as a new developmental object, is to provide the patient with adequate models for functionally selective identification. This restarts the once arrested process of building up the personality structures. The phase-specific way in which a therapist can provide a patient with models for functionally selective identification was previously called "empathic explanation", later "empathic description", by Tähkä (1984, 1993). It implies continual effort to appreciate a patient's subjective way of experiencing, and to communicate this

empathic understanding to the patient (Tähkä, 1993), especially during times of frustration (Tähkä, 1984). The technique leads psychotherapists to intervention models other than the expressive technique described by Kernberg. It also alters opinions about curative factors in the psychotherapeutic community.

2.3 Need for and aims of inpatient treatment of borderline patients

There is widespread agreement that patients with borderline disorders sometimes need brief or even lengthy hospitalization. An immediate decision to hospitalize a borderline patient is usually determined by some obvious external necessity (Hartocollis, 1980). Short-term hospitalization is indicated when a patient has severe symptomatic decompensation, experiences intense panic and emptiness, has attempted suicide, has engaged in drug or alcohol abuse, or has experienced emotional turmoil threatening the patient's survival in the social system. Patients may also require brief hospitalization when there is risk of irreversible damage to their social situations, e.g. loss of job or expulsion from school. A breakdown in the family and social support system may culminate in a crisis in relation to which short-term hospitalization is required (Adler, 1977; Kernberg et al., 1989).

Some borderline patients may require long-term hospitalization. Hartocollis (1980) and Kernberg (1975, 1984), among others, have described characteristics of these patients. They include poor motivation in relation to treatment, lack of anxiety tolerance and poor impulse control, and poor object relations. Patients often have fragile object relationships, engage in chronic acting-out behaviour, are suicidal or promiscuous, have a chaotic life history, and have taken part in many unsuccessful treatment attempts, including brief hospitalizations.

Indications for hospitalization can also be described in terms of the therapeutic opportunities which treatment in a hospital milieu can offer. Hospitalization may be the first stable situation in a long time for a desperate, disorganized borderline patient, and may provide for a first opportunity to collaborate in thorough evaluation and treatment, involving trial of psychotherapy (Adler, 1977). According to Kernberg et al. (1989) indications for long-term hospitalization exist only in relation to patients whose personality characteristics militate against success of outpatient therapy but who could benefit from dynamic therapy in a setting enabling them to tolerate it. Patients with severe secondary gain of illness and acting-out behaviour that cannot be controlled in their ordinary social environment may also require long-term hospitalization.

Tucker, Bauer, Wagner, Harlam, & Sher (1987) have noted risks with "extended" inpatient treatment of borderline patients. "Extended" hospitalization in the study mentioned lasted for more than 12 months. "Intermediate" hospitalization was for 6 to 11 months. On the basis of their experience in a psychoanalytically oriented hospital ward, developed specifically for such patients, they state that extended hospitalization should be one but in most cases the last form of treatment to be considered, because it interrupts a patient's life, and can promote

regression through secondary gain, takes time and costs money. A patient hospitalized in the unit concerned is typically polysymptomatic. Severe self-destructiveness and impaired impulse control contraindicate other forms of treatment. Patients also possess strengths indicating that they could benefit from treatment.

2.4 Organizing inpatient treatment

According to Tucker et al. (1992), borderline patients instead of experiencing ambivalence, an intrapsychic experience, convert the states concerned into interpersonal relationships. The extremity of their feelings, attitudes, and behaviour is obvious in their dealings with people, especially in treatment settings. In planning inpatient treatment, transformation of intrapsychic into interpersonal should be seen not merely as contributing to treatment but more as an intrinsic component of the hospital's power to generate change. The processes concerned, when contained by the treatment programme, promote gradual integration of more realistic experiences of the self, others and affects (Tucker et al., 1992).

The longer the planned hospitalization, the greater the extent to which treatment opportunities depend on disorder-specific skills, experience and knowledge of the staff. Staff gaining experience in handling borderline patients will learn to utilize empathically based countertransference fantasies and feelings as parts of assessments (Adler, 1977). Training in acknowledging and tolerating, to the necessary degree, the splitting mechanisms typical of this patient group may help the staff to avoid regressive reactions and processes that could disorganize the work of untrained staff, and lead to abandonment and rejection of the patient (Kernberg, 1984), and splitting of personnel into two groups: those pro and those contra (Hartocollis, 1980). To an even greater degree, the staff should regard the contradictory behaviour and feelings of the patient, the "as if" nature of his or her behaviour as an important source of knowledge about the inner object relations of the patient (Kernberg & Haran, 1984). A hospital setting may be described as "a protective environment" (Adler, 1977) fulfilling many aspects of Winnicott's "holding environment" (1965). Tucker et al. (1992) suggested that the hallmark of inpatient treatment should be systematic understanding of the transference/countertransference paradigm suggested by Gabbard (1988): "The drama of hospital treatment that is played out in the milieu derives from the theatre of the patient's internal object world."

Kernberg (1984) has summarized some practical requirements for organizing inpatient treatment for severe personality disorders. The proposed model is a modification of the traditional view of the therapeutic community originally described by Jones (1968). Kernberg's model shares with previous approaches effort to examine openly the total social system within which patients and staff interact in the unit. High priority is given to examining the reality of the patient's life in the unit and its relationship to the task of rehabilitation of the patient. It does not aspire to democratization of treatment processes for its own

sake. It limits the authority vested in the patient/staff community as opposed to that delegated specifically to staff, and is concerned with preventing and correcting role diffusion of staff. If channels of communication among staff and between patients as a group and staff as a group are kept sufficiently open to allow exploration of the interpersonal conflicts generated around each patient, immediate knowledge of each patient's psychopathology may be gained. All of these measures and boundaries are intended to protect the community from manifestations of splitting and other primitive defence mechanisms, and to prevent regressive processes. By analogy with individual psychotherapy, it is important in community treatment, according to Kernberg and his colleagues, to prevent regressive development and processes that weaken ego structures and prevent borderline patients from experiencing themselves and others as coherent, integrated and realistically perceived individuals (Kernberg & Haran, 1984; Kernberg et al., 1989).

Tähkä (1979) shares the view of Kernberg that long-term hospital treatment of borderline patients need to be based on a clear psychological structure and role definitions relating to the whole treatment community. Tähkä also shares Kernberg's view that an open and explorative communication atmosphere has a positive influence on therapeutic processes. However, as compared with Kernberg, Tähkä interprets the curative factors of the psychotherapeutic community very differently: interaction in a therapeutic community should be organized overall to provide patients with adequate models for functionally selective identification. This promotes structuralization of the personality and adoption of more versatile defensive operations. Prerequisites for such development are an empathic atmosphere, tolerable frustrations and adequate models. Instead of the confrontation, clarification and interpretation, often cited as therapeutic measures by Kernberg, Tähkä emphasizes the importance of empathic description as a cornerstone of interaction models in a psychotherapeutic community.

The number of psychodynamically oriented papers on the inpatient treatment of borderline disorders increased considerably throughout the 1970s and 1980s. Apart from the studies mentioned above, papers by e.g. Brown (1980; 1981) McGlashan and Levy (1977) on countertransference reactions in staff have been of interest in developing treatment principles in the ward in which the study reported here was conducted. Among Finnish studies on psychiatric ward treatment, papers by Isohanni, e.g. those published in 1983 and 1987, have been of relevance in organizing the treatment in the ward in which the study reported here was conducted.

3 PREVIOUS OUTCOME STUDIES ON INPATIENT TREATMENT

Studies on clinical courses and outcomes of inpatient treatment of mental health disorders have been performed for several purposes. According to Mirin and Namerow (1991) outcome studies are essential for demonstrating the efficacy of psychiatric treatment, rationalizing clinical decision-making, and encouraging public support for appropriate, cost-effective care. However, Cournos (1987) has stated that a hospital-treatment outcome study should, like psychotherapy studies, answer the questions of what specific therapeutic interventions produce specific changes in specific patients under specific conditions? This is in contrast to the widely accepted belief about hospital treatment of the mentally ill, namely, the less, the better (Cournos, 1987; Kernberg, 1984. This belief is, according to Cournos, an extreme result of excessive emphasis on cost-effectiveness in investigations. According to Cournos (1987), studies on the efficacy of hospital treatment focus only on length of stay, and most give only crude ideas about aims of treatment or what happens during the treatment. Little attention is paid to the needs of small subgroups of patients in treatment programs or study designs.

Studies on psychiatric hospital treatment have traditionally been focused on schizophrenia. Pfeiffer (1990) reviewed 70 outcome studies on psychiatric inpatient treatment published from 1975 to 1988. According to the titles, 34 studies concentrated on schizophrenia, only four on personality disorders. The rest dealt mainly with the more severe psychiatric disorders found in psychotic or institutionalized patients. This is, of course, partly a consequence of the short history of the borderline construct. In addition, studies of a newish clinical concept are almost inevitably descriptive, limits-testing, and retrospective.

3.1 Methodologies in previous outcome studies

Table 2 summarizes some of the more important follow-up studies on the outcomes of hospital treatment of adult borderline and other personality disorders published between 1962 and 1993, and presents basic data about the methodologi-

cal settings reported in the original papers. All of the studies mentioned in Table 2 were conducted in the USA.

Except in the last three studies, the design in the 10 investigations described here was of a retrospective follow-up nature. Diagnosis after the index hospitalization, symptomatology and psychological and/or social functioning of the patient were re-evaluated afterwards, on the basis of documents at hand, mainly on the basis of old case records. Additional information was obtained from relatives or from patients themselves via mailed questionnaires or telephone interviews. In prospective studies, patients were interviewed personally during inpatient treatment and also during follow-up.

A retrospective study design means follow-up periods can be lengthy, and study populations of several hundred patients, as, e.g., in the studies by McGlashan (1984; 1986), Plakun, Burkhardt & Muller (1985), and Stone et al. (1987a; 1987b). The range of retrospective follow-up period in a single study can be very wide. It was, e.g., between 2 and 32 years in the study of McGlashan, 1984 and 1986. This means that at the time of the study the duration of a patient's illness and previous treatments can vary greatly. Such variables were not standardized in relation to analyses.

Hospitals in the studies were usually private, in large cities in the United States. On the basis of the descriptions given by the authors, patients in the studies were representative of a well-educated, white population. Patients included in the studies did not constitute representative samples of BPD patients in a given region, or of BPD patients seeking inpatient treatment (Table 2, sample description). All the studies described were total studies on all patients treated in study hospitals or wards during the time concerned who met criteria for inclusion in the "sample", with regard e.g. to length of treatment or retrospective diagnosis.

The results describe the courses of lives of BPD patients referred and admitted to wards, and who stayed in them. Recognition of needs for inpatient treatment, recommendations regarding treatment, and patients' decisions to seek treatment are lengthy processes, the results of which depend on patient's financial and social situations, and on interpersonal and intrapsychic processes. Patients who ultimately enter a ward as a result of this process form a non-random group in many ways. Patients admitted for inpatient treatment who stay in wards for lengthy periods of time clearly also form a non-random group. The studies referred to scarcely discuss these aspects. Only patients who completed planned treatment and those who stopped it, against medical advice, were compared with each other, in one study (McGlashan & Heinssen, 1988).

No comparison group proper was included in the design of any of the 10 studies described. The authors obviously considered such inclusion inappropriate or impossible. Comparisons were made within samples between borderlines and other diagnostic categories or between long and short treatment periods, for example. Level of personality disorder was included in the latest study in Table 2 (Hull et al., 1993).

Table 2. Methodological settings in follow-up studies on inpatient treatment of borderline disorders published since 1962

Study	Study design	Description of treatment during hospitalization	Follow-up period	Sample description	Diagnostic criteria	Treatment outcome criteria	Sources of data and data collection procedures
Hoch, et al. 1962	Retrospective follow-up comparison between outpts and inpts	Not reported	Five to 20 years, average 9 years	45 outpts and 64 inpts	Rediagnosed or initial "pseudoneurotic schiziohrenia" -dg	Authors' clinical judgment, no quantitative measures	Personal interviews, case histories
Gidro-Frank 1967	Retrospective follow-up	No detailed description, opportunity for psychotherapy	Five years	25 % of all pts admitted in a calendar year five years earlier (n = 25)	No exclusion on the basis of dg, majority schizophrenics	'Mental Status Schedule' (MSS) 'The Prognostic Rating Scale' (PRS)	Personal semistructured interview, case histories
Carpenter, Gunderson 1977	Partly cross-sectional, partly a retrospecive follow-up study, comparison between borderline and schizophrenic pts	Three psychiatric hospitals responsible for the majority of psychiatric treatment in the U.S. county, details of treatment not reported	Two or 5 years, only partial overlap in these samples.	24 borderline and 29 schizophrenic pts matched by age, sex, race and socioeconomic status	Bl.criteria: brief psychotic experiences, which lacked durability, diagnostic uncertainty, absence of nuclear sch. symptoms	Evaluations by the authors on length of rehosp., social contacts, employment record, symptoms etc. and a total outcome score	Mental Status Interview, Psychiatric History Interv., Social and Demographic Information Interview
Pope et al. 1983	Retrospective follow-up. No control group. Comparison between BPD and schizophrenia or other DSM-III diagnostic groups	Not reported	Four to 7 years	33 pts meeting DSM-III criteria for BPD	Retrospective DSM-III diagnosis	Level of social and occupational functioning; scales of global outcome developed for the study	Medical records rerated or several dimensions by the authors, telephone interview
Plakun et al. 1985	Retrospective follow-up No control group. Comparison between BPD and schizophrenia (DSM-III) groups	Psychotherapeutically oriented open-ward hospital treatment for a min. of 2 and average of 16.6 months	Three to 19 years, 14 years on average	A study on all pts (n = 878) treated between 1950 and 1976. 237 or 27% co-operated and 138 gave sufficient information for evaluations	Retrospective DSM-III diagnosis	Retrospective GAS-evaluation	Mailed questionnaire
Mc Glashan 1984, 1986	Retrospective follow-up No control group. Comparison between BPD and other DSM-III diagnostic groups	3.4 months on average	Two to 32 years, 15 years on average	All pts between 16 and 55 years of age, discharged between 1950 and 1975, treated for a min. 20 days (n=619). Follow-up information was obtained in relation to 72% of the sample	Retrospective DSM-III diagnosis	GAS, and several social and psychodynamic outcome scales developed for the study, including rehospitalization, social functioning, active symptomatology etc.	Mailed questionnaire. Telephone or face-to-face interview. Medical records

Study	Study design	Description of treatment during hospitalization	Follow-up period	Sample description	Diagnostic criteria	Treatment outcome criteria	Sources of data and data collection procedures
Stone et al. 1987 (a and b)	Retrospective follow-up comparison between BPD and other DSM-III diagnostic groups	9 to 24 month, 12.7 months on average, including psychoanalytically-oriented psychotherapy	10 to 23 years, 16 years on average	Pts treated for a min. of 3 months between 1963 and 1976 (n = 550), including 299 pts at the borderline level. 464 or 84.4 % of the total sample co-operated	Rediagnosed DSM-III	Suicide rate, GAS, rehospitalization, marriage, work history etc.	Telephone contact with pts or family members, case histories
Tucker et al. 1987	Prospective follow-up comparison between extended (≥ 12 months), intermediate (6-11 months) and short (0-5 months) hospitalization	Long-term program for "borderline conditions" focusing on interpersonal relationships, incl. indiv. psychotherapy and community activities	On admission, discharge and 1 and 2 years after discharge	81 % (n = 50) of the total of 62 pts were interviewed during the first year after discharge and 65% (n = 40) during the second year	"Patients referred for treatment of primary personality disorders" (Axis II, DSM-III)	GAS and postdischarge symptoms, treatment, employment, education and social history	Personal interview at admission. Telephone interview on follow-up
Coyne et al. 1990 and Deering et al. 1991	Prospective follow-up, no comparison group. Comparison between long-term and short-term units	Mean 370 days (long-term pts, n = 103) or 64 days (short-term pts, n = 93), range 29 to 1573 days	At discharge and 1 year later	All pts in the units of index hospital discharged between Nov. 1983 and Febr. 1986 including 50 or 52 % "Personality disorder" pts	DSM-III	GAS, BPRS, ratings of symptoms and therapeutic alliance, pts' reports of satisfaction, rehosp., suicides rates etc.	Personal interview
Hull et al. 1993	Prospective follow-up, no control group, level of identity, interpersonal and affect problems	Long-term treatment on an unit specializing in severe personality disorders; psychodyn. psychotherapy 3 times a week "as described by Kernberg", intensive milieu program	25 weeks of inpatient treatment	40 hospitalized women undergoing long-term treatment	Patients meeting DSM-III-R criteria for BPD on SCID-II	Self-report symptom check-list (SCL-90-R)	Weekly administration of the SCL-90-R

Abbreviations used only in Table 2:

bi	borderline	outpt	outpatient
dg	diagnosis	pt	patient
inpt	inpatient	sch	schizophrenia/ schizophrenic

The diagnostic criteria in the earliest studies (Gidro-Frank, Peretz, Spitzer & Winikus, 1967; Hoch, Cattell, Strahl, & Pennes, 1962; also partly Carpenter & Gunderson, 1977) reflect unfinished work on development of the diagnostic system. The subjects in these earliest studies belonged to patient groups (e.g. pseudoneurotics) which, according to current opinion, would probably be categorized as groups of borderline patients, in the broad sense. Later, diagnostic criteria were based on DSM-III or DSM-III-R and reliability of evaluations was carefully tested (McGlashan 1984, 1986; Plakun et al., 1985; Pope, Jonas, Hudson, Cohen, & Gunderson, 1983; Stone et al., 1987). In the studies referred to, evaluations of patient status at the time of discharge from hospital were re-evaluated on the basis of material available at the follow-up. Only in the three latest studies (Coyne et al. 1990, and Deering et al. 1991; Hull, Clarkin, & Kakuma, 1993; Tucker, Bauer, Wagner, Harlam & Sher, 1987) was the DSM-III-R diagnosis based on direct treatment contact and interviews. As noted above (Kernberg et al. 1989), DSM-III-R is based on externally observable behavioural traits of patients. Diagnosis says little about aetiology, recommended treatment or patients' subjective experience. The latter are, however, of interest to clinical practitioners, particularly psychotherapists. In only one study (Hull et al., 1993) was the level of personality disorder included in the study design. Patients were also categorized according to the three dimensions characteristic of borderline disorders, according to Kernberg's formulations.

As regards treatment descriptions, the retrospective studies referred to provide information about length of hospitalization, in some cases with general descriptions of treatment organization and atmosphere. However, information is only occasionally given about treatment methods, psychotherapeutic, psychotropic or other, or about patients' motivation or involvement in treatment. Individual variation in course of treatment is not recorded. This is almost inevitable in a retrospective study, because the data have largely been collected for other purposes, probably in relation to a quite different treatment and diagnostic culture. Control of intervening variables is difficult, or may be impossible. The longer the interval from hospital treatment, the greater the multiplicity of intervening variables that are laborious or impossible to control. This is true of both retrospective and prospective studies, especially if the follow-up period exceeds 10 to 15 years. Prospective design reduces, e.g. problems involving recollection, but forces investigators to rely solely on variables they know at the onset to be important (Stone, 1993). All of the above-mentioned factors limit the extent to which firm conclusions and generalizations can be drawn.

In the three prospective studies mentioned above (Coyne et al., 1990, and Deering et al., 1991; Hull et al., 1993; Tucker et al., 1987), status and symptoms of patients, and outcome variables were assessed by means of measurements repeated during and after inpatient treatment. Prospective study design allows systematic data collection planned in advance, in relation to therapeutic intervention and course of treatment. However, steps of this kind were taken to very limited extents. Probably because of the many practical difficulties characteristic of clinical studies, study sample sizes were relatively small, much smaller than in the retro-

spective studies. The follow-up period in the prospective studies ranged from 1 to 5 years after hospitalization. Follow-up periods were markedly shorter than in the retrospective studies. In any prospective design, the average duration of the follow-up period is fixed in advance. However, this does not automatically mean equally long histories of sickness or treatment among the patients in the sample. This standardization was not done in the three studies mentioned above.

As regards outcome criteria, earlier studies mainly provided data about variables such as social management, general functioning, significant life-events and needs for mental health services of BPD patients after inpatient treatment. Changes in symptoms were scored using various rating scales, mostly well-known and standardized. Experienced symptoms were charted only in the three latest studies. In other words, most variables describing treatment outcomes were at behavioural, observable level. In only one research project (Coyne et al., 1990) were ratings of interpersonal variables such as therapeutic alliance included in the study design. No study included variables describing defence mechanisms or other intrapsychic events.

Cronbach (1957) differentiated between two major disciplines of scientific psychology, experimental psychology and correlation psychology. In experimental psychology, conditions are systematically changed and consequences observed. In correlation psychology, "correlations presented by Nature" are studied, and "the correlator finds his interest in already existing variation between individuals, social groups, and species" (Cronbach, 1957). According to Beck (1993) the use of questionnaires and inventories to map variations in mental health represents correlational psychology, in which target syndromes are analysed in terms of phenomenology occurring naturally. The two approaches have also been described using the terms confirmatory approach and exploratory (naturalistic) approach (Howard, Orlinsky, & Lueger 1995). In the confirmatory approach, internal validity is emphasized at the expense of generalizability of findings. The aim is to demonstrate how things *could* happen, other things being equal. In the naturalistic approach, external validity is emphasized but there is often failure to eliminate plausible alternative explanations for results. The influence of a large number of potentially confounding variables is recognized. Efforts are made to minimize or explore such influence through use of statistics. Those who adopt the naturalistic approach seek to establish how things *do* happen.

In the studies described above, phenomena concerning mental health were approached from the standpoint of correlational psychology. Such an approach was also taken in the study reported here, which is, therefore, inevitably subject to the limitations of correlational study designs.

3.2 Outcome of treatment

As regards results, the earliest of the studies mentioned in Table 2 focused on clarification of the boundary between BPD and schizophrenia, and were successful in doing so. Subsequent studies reflect refinement of the concept and improved

understanding of causes. They also reflect an increasing necessity for quantitative data on particular needs for treatment of BPD inpatients.

Carpenter and Gunderson (1977) observed that during five years of follow-up 24 BPD patients were able to maintain the quality of their social relationships significantly better than a group of 29 schizophrenic patients matched by age, sex, race and socio-economic status. There were no significant differences between the groups in relation to many other variables, such as general functioning, duration of new inpatient treatments or number of social relationships. The authors point out that a distinction needed to be made between the five-year follow-up period and the first five years of illness. The BPD patients in the sample had suffered from marked symptoms for 3 to 5 years before inpatient treatment.

Investigations by Pope et al. (1983) aimed at validation of the diagnostic categories of DSM-III. Pope et al. examined the phenomenology, family histories, treatment responses, and four-to-seven-year outcomes in 33 BPD patients. Their study was probably the first in which borderline inpatients were diagnosed according to DSM-III. They found that BPD could readily be distinguished from DSM-III schizophrenia, but not from histrionic or antisocial personality disorders. Many BPD patients concomitantly exhibited major affective disorder. More similarities were found in relation to life courses after hospitalization between BPD and schizophrenic patients than between patients with BPD and affective disorders. Pope et al. concluded that their findings, based on data relating to life, and family and treatment histories, supported the view that "borderlines do not appear to lie on the border of anything", but form "a fairly stable form of serious psychopathologic disorder".

Plakun et al. (1985) investigated the general social functioning for 14 years after discharge of 878 patients treated in a psychotherapeutically-oriented open ward between 1950 and 1976. Only 237 (27%) responded to a mailed questionnaire. Patients were rediagnosed in accordance with DSM-III. BPD patients were found to function better than schizophrenic patients both at the end of treatment and during follow-up. However, no marked difference was observed between patients suffering from major affective disorder and those suffering from BPD. A high drop-out rate, and the fact that assessment was based primarily on information obtained via mailed questionnaires limit the conclusions that can be drawn from the results.

McGlashan (1986) studied the functioning of patients treated in a psychiatric hospital between 1950 and 1975, rediagnosed in accordance with DSM-III. Eighty-one patients suffering from BPD functioned as well as 44 patients suffering from unipolar affective disorder, and markedly better than 163 patients with schizophrenia, according to most outcome measures. BPD patients functioned best towards the end of follow-up, in the second decade after inpatient treatment. During follow-up, the status of BPD patients who had left the ward against medical advice was poorer than that of patients who had completed the planned treatment (McGlashan & Heinssen 1988).

Stone et al. (1987a, b) studied the functioning of 550 patients treated in different wards of a psychotherapeutically oriented hospital between 1963 and

1976. Treatment included three weekly psychotherapy sessions. The average duration of treatment was 12.7 months. These patients were rediagnosed in accordance with DSM-III, on the basis of their case histories. Patients and/or their next of kin were interviewed by telephone. According to the authors, the study reached a higher percentage of patients (84%) than any similar previous study. Mortality after inpatient treatment, suicidality, need for repetition of treatment, work and marriage histories, and pregnancies were monitored during the study. The authors observed, among other things, that the suicide rate in BPD patients was greater than expected but lower than in the other main categories compared, namely schizophrenics and schizoaffective patients. Seventy-five per cent of BPD patients had managed without inpatient treatment during the follow-up period. The corresponding percentage in schizophrenic patients was 27. The socio-economic status of BPD patients varied. That of schizophrenics declined, as a general rule. Twenty-eight per cent of BPD patients had been in full-time work throughout follow-up. The corresponding percentages in patients suffering from schizoaffective disorders and schizophrenics were 7 and 2, respectively. BPD patients had worked on more demanding tasks than the other patients. The authors also observed that the relatively good professional functioning of BPD patients only emerged in the long-term. Briefer follow-up would have resulted in a more pessimistic picture. No similar recovery was observed in schizophrenics. Marriage and pregnancy rates were markedly lower than mean values for the population in general. Only 45% percent of BPD patients, 28% of schizoaffective patients, and 14% of schizophrenic patients had ever been married. Percentages of patients who had raised a child of their own were 22%, 15%, and 5% respectively.

Despite the large number of patients followed up, and the low drop-out rate (16%), Stone et al. (1987) were cautious about drawing conclusions. According to the authors, the patients studied had better-than-average social backgrounds and good educational backgrounds. Accordingly, they may have represented a patient population better suited to analytically-oriented psychotherapy than people in general. On the other hand, some patients had been referred to the wards studied after treatment elsewhere had failed. Nevertheless, the authors concluded that the results obtained suggest that psychoanalytically oriented treatment is suitable for BPD patients.

Tucker et al. (1987) reported the results of a two-year prospective follow-up study in a ward specializing in the long-term treatment of BPD. The average duration of treatment was one year. During follow-up, suicidal thoughts of 40 patients decreased, and patient-therapist relationships became less random. Psychotherapy became commoner than before treatment. Patients did not usually change therapists. As far as social relationships were concerned, numbers of those described as close increased. General functioning also improved during the second year of follow-up. There was no statistically significant association between duration of treatment and outcome variables.

Coyne et al. (1990) and Deering et al. (1990) reported treatment results in 103 long-term patients (average duration of treatment 370 days) and 93 short-term patients (average duration of treatment 64 days). Forty-seven per cent of long-term

patients and 25% of short-term patients suffered from personality disorders. Evaluation of a group of emotional factors regarded as important in relation to hospital treatment was included in the study. Outcome was evaluated in terms of therapeutic alliance and satisfaction with treatment. In a retrospective study, evaluation of such variables would be difficult or impossible, the investigators state. During one year of follow-up, rehospitalization and incidence of suicide decreased in long-term patients, and professional functioning improved. The reports of results do not differentiate between diagnostic groups. The patients were treated in different wards. Treatment schedules and approaches are not described.

Hull et al. (1993) examined response in 40 female BPD patients during 25 weeks of inpatient treatment. Response was measured by weekly distribution of the SCL-90-R self-reporting symptom checklist. Data were analysed by means of growth curve analysis, as developed by Potthoff and Roy (1964) and described below. Level of identity and interpersonal problems (identity diffusion, emptiness and boredom, unstable relationships involving idealization and devaluation, and fear of real or imagined abandonment), postulated by Kernberg to be at the centre of a borderline patient's pathology and operationalized in the study design, were found to be powerful predictors of treatment course. Patients with the severest identity and interpersonal problems reported high levels of symptoms throughout treatment and increasing symptom levels over time. The findings were different from those in patients with lowest levels of identity and interpersonal problems. They reported fewer symptoms and decreasing symptom levels during follow-up. Appearance of affect problems were also a predictor of good treatment response. Affect problems primarily occurred during the first weeks of treatment.

The studies summarized above are BPD treatment outcome investigations to which reference is repeatedly made. Some other studies are worth noting.

In a carefully planned, prospective, three-year follow-up study in a day unit specializing in the psychodynamically and psychotherapeutically oriented treatment of personality disorders, Mehlum et al. (1991) studied clinical courses in 97 consecutive patients. During follow-up, BPD patients exhibited moderate symptom reduction and global outcome was fair, as measured by means of several well-established rating scales. Patients with schizotypal personality disorder exhibited similar reductions in symptoms but global functioning remained relatively poor. The overall suicide rate was lower in this study than in other similar studies.

In a series of publications, Isohanni and colleagues (e.g. Isohanni & Nieminen, 1990 and 1992; Isohanni, Nieminen, Moring & Pylkkänen, 1991, Nieminen, 1996) studied aspects of clinical courses in mixed patients admitted between 1977 and 1992 to a closed ward. Patients were rediagnosed according to DSM-III-R. Multivariate statistical methods, including regression analysis was used. Among other things, it was found that a long stay in psychiatric hospital was associated with young age, a psychosis-level diagnosis, and active, motivated participation in individual and milieu therapy (Nieminen, Isohanni, & Winblad, 1994). Moderately active participation in individual psychotherapy as compared to low or very active participation was associated with male sex and young age,

low professional and social background, involuntary admission, unstable treatment policy, treatment time of less than 40 days, and diagnosis of borderline psychosis or typical schizophrenia (Isohanni & Nieminen, 1992). They concluded that although economic reasons and expansion of outpatient care in Finland favour a short-stay policy, some motivated borderline and psychosis patients seem to benefit from individually timed inpatient experiences in therapeutic community settings (Nieminen et al., 1994). Like the study of Mehlum et al. (1991) the studies of Isohanni et al. were based on samples with minimal selectivity as regards socio-economic background factors.

The results of the studies referred to yield much information about the courses of lives of BPD patients after inpatient treatment. However, generalizations from the results are limited by the methodological factors discussed above.

The studies do not answer all of the questions found to be important by Cournos in relation to outcome studies, described earlier in this chapter. Nearly all previous studies describe hospital treatment as an intervention, in general terms, not in terms of specific therapeutic measures and their results. On the other hand, need for and ability to benefit from various treatments depends on the seriousness of the disorder and the prevailing symptoms. The sickest patients get the most treatment (Paris, Brown, & Nowlis, 1987). It would therefore seem difficult to conduct an outcome study in a hospital setting which would differentiate validly between treatments.

On the basis of the results of the studies described above, the clinical course in BPD patients appears to be markedly different from that in schizophrenic patients (Stone, 1993a). Patients with BPD seldom develop schizophrenia, or follow the path of progressive impairment typical of schizophrenia (Mehlum et al., 1991). Differences between BPD patients and patients suffering from affective disorders are less marked (Stone, 1993a). Follow-up needs to be of adequate length in relation to investigation of differences. There are sometimes no differences in the short-term. Long-term results (covering 10 to 20 years of follow-up) are currently available only from retrospective studies. According to Stone (1993a), results of studies so far reported show that borderline patients after 10-25 years of follow-up exhibit a wide range of outcomes, from clinical recovery (50-60%) to suicide (3-9%). According to Mehlum et al. (1991), results of studies show that with time, often in the fourth decade of life, global level of functioning increases in approximately two thirds of the BPD patients. Stone (1993b) has stated that the consensus in relation to results of long-term outcome studies would be that about two-thirds of patients were functioning well when evaluated 10 to 20 years after initial contact. In the studies referred to by Stone, "functioning well" may be equated with e.g. a Global Assessment Score (Endicott, Spitzer, Fleiss, & Cohen, 1967) of 61 or higher at the time of outcome evaluation. Despite these encouraging results, the risk of completed suicide remains high in this patient population, varying from about 3% (McGlashan, 1986) to 9% (Stone et al., 1987).

The study described here was performed in a psychiatric ward for patients suffering from specific psychodynamic problems of ego development. These are, in brief, lack of object constancy and tendency to use the split type of defence mechanisms. In the study ward, treatment in general, especially

psychotherapeutic principles have been continuously developed to meet these psychological problems. This is not presently common in psychiatric hospital treatment in Finland, and perhaps not in other countries either. This was the basis and motivation for the study presented here. It also should give more general significance and interest to the results.

The literature review has given a brief glimpse of viewpoints concerning the inpatient treatment of borderline pathology. In the study presented here, the aspects described below were selected for further investigation.

4 PURPOSE OF STUDY

The purpose of the study reported here was:

(1) to monitor the clinical course and outcome of treatment in a ward specializing in the development of treatment methods appropriate to borderline level disorder, and the durability of the results over three years of follow-up;

(2) to investigate factors predicting successful treatment outcome, and chart the characteristics of patients in relation to benefit from treatment;

(3) to study the possibilities of linking observations to psychodynamic study of the background of borderline level disorder;

(4) to assess, in a more general sense, methods of outcome research of psychiatric inpatient treatment, and the results obtained so far.

5 PATIENTS AND METHODS

5.1 Patients and treatment

The study was carried out in an open psychiatric ward in the Department of Psychiatry, Kuopio University Hospital. Since its opening in 1980, the ward has specialized in treating borderline disorders over 2- to 6-month periods, agreed with the patient.

Most patients are suffering from borderline personality disorders or major depression, if diagnosed in accordance with DSM-III-R. As far as the psychodynamic nature of the problems is concerned, more or less dominant signs of split-type defence mechanisms, identity diffusion, and lowered impulse control or anxiety tolerance are observed during clinical interview, or are evident from patients' life histories. They have not lost capacity for reality testing. These signs are central to the borderline personality organization described by Kernberg (1980, 1984). In the study presented here, evaluation of level of personality disorder was clinical.

At the time of the study, the ward had 20 beds. The staff-patient ratio was about 0.9. As a rule, patients had severe psychosocial problems, such as marital conflict, significant personal loss or social failure, loss of employment or economic crisis, or some other experienced impasse in their lives. In some cases, loss of physical health had provoked a serious crisis in the psychological adaptation process. Regardless of the reasons for them, the problems had exceeded tolerance and coping ability, and undermined psychosocial adaptation. At the symptomatic level, the patients had significant anxiety and depressive symptoms. These were often the immediate cause of seeking or being recommended for hospital treatment.

Members of staff of the ward have tried to develop methods applicable in the psychotherapeutic community treatment of BLD (Lehtonen, 1988; Antikainen, 1989). The aim is to help patients to cope with their overwhelming an-

xiety and depressive symptoms, and to achieve sufficient control over their disorganized or collapsed psychosocial situation by means of psychotherapeutic hospital treatment. Particular attention is paid to treating, in interaction with the community, the so-called split-type defence mechanisms (Kernberg, 1980) or ambivalence (Tähkä, 1993) characteristic of borderline disorders. The psychotherapeutic principles and aims, formulated by Veikko Tähkä have been found suitable for the inpatient treatment of borderline disorders (Tähkä, 1984, 1993). In organizing daily interaction on the ward to meet these psychotherapeutic aims, the concepts of Adler (1977), Kernberg (1984), Kernberg & Haran (1984), and Tähkä (1979) have proved most useful (Chapter 2.4).

At the time of the study presented here the regular treatment schedule on the ward included dynamic psychotherapy for 45 minutes twice a week, by staff members (mental nurses or registered nurses specialized in psychiatric nursing) supervised by a more experienced therapist with formal training to specialist level in accordance with the Finnish standards. The average total of therapy sessions undergone by the study patients was 25 during their stays in hospital. The patients also participated in group therapy sessions twice a week, in one or other of two patient groups formed on the ward. The group therapists were ordinary members of the staff. They, in turn, were supervised by trained group therapists. The daily programme on the ward was planned during meetings and in committees set up by patients and staff members. Art therapy and rehabilitative activities formed part of the normal weekly routine. Family members were seen when necessary. Some patients did not receive psychotropic medication during the treatment at all (Study I, Table 2). In the rest, the daily dosage was very low. These are the general treatment principles followed in the study ward even today. A patient's weekly programme in the study ward is described in Appendix I.

Regular psychotherapeutic contact is a new experience for many of the patients. On discharge, further treatment on an outpatient basis is recommended for almost all patients. One aim of the staff is to motivate patients to take care of themselves. Another is to build confidence in the staff and the therapist as sources of help and support. The patients are usually responsible for contacting the unit which is envisaged as providing further treatment, and are given all necessary information.

5.2 Research procedure and sampling

All 84 patients admitted in 1989 to the study ward formed the original sample. However, only those staying in the ward for a minimum of 3 weeks were included in the research schedule (66 treatments). On the basis of our previous experience, a shorter period is insufficient for building up a significant relationship with the ward community, or for significant change in the patient's overall adaptation. Four treatments represented re-admissions during the study year. These were excluded from the follow-up (n=62 patients). Hospital treatment in the final study sample lasted for an average of 88 days (SD ±56 days) (range 21-296 days). Treatment was

always instituted on the basis of a patient's own decision. The last of the hospitalizations ended in August 1990.

Follow-up interviews were carried out between October 2, 1992 and August 5, 1993, on average 3.4 years (SD ±0.2 years, range 2.9 - 4.2 years) after hospitalization. Patients were sent a letter inviting them to the Outpatient Department of Psychiatry for interview. If the proposed time or date was inappropriate for the patient, his or her wishes were met in this connection as far as possible. If a patient failed to arrive at the agreed time, a further invitation was sent. If this also failed, the researcher contacted the patient by telephone where possible, and attempted to make another appointment for interview. Two of the 62 patients in the sample had died (one in a road accident, the other by suicide). Forty-two of the 60 patients (70%) still alive were interviewed. Two agreed to a telephone interview only.

5.3 Research instruments

5.3.1 Patient interviews and self-rating questionnaires

During the hospitalization, standard information about social background, family history, current relationships and previous treatments was collected from case records and the patients. Most information had been obtained by the ward psychotherapist during the first hours of therapy. The interview variables are shown in Study II, Table 1. The ward therapist was also asked for his or her estimate of treatment outcome, and the importances of various psychotherapeutic activities to the treatment outcome. Estimates were made using several Likert-type scales, described in Study I. Diagnoses were reached in accordance with DSM-III-R by agreement between the resident and senior psychiatrist. Information about psychotropic medication on admission, and about changes in medication during the hospital stay were obtained subsequently, from case records.

A self-rating questionnaire, developed for this study, was used at the beginning and end of treatment to determine incidences of commonest psychiatric symptoms, and patients' subjective assessments of reasons for symptoms, significances of current personal relationships, and factors affecting symptoms. Patients made their assessments using a 4-point ordinal scale. Variables are shown in Study I, Tables 4 and 5, and in Study II, Table 3.

On follow-up, patients were asked to complete a questionnaire charting subjective symptoms and ideas about their possible causes, personal relationships, and outcomes of treatment, using the same tools as at the beginning and end of treatment. Patients were also asked to answer questions relating to past and present life circumstances, use of general and mental-health services, and occupational and family histories, especially during the preceding three years. Patients were then interviewed by a psychiatrist, who assessed their mental state, arrived at a DSM-III-R diagnosis in accordance with the then current situation, and completed information about medication and work and medical histories, using

a semistructured interview technique. All patients were interviewed by the same psychiatrist, who had not known them before[1].

The Finnish version of the Hamilton Depression Rating Scale (HDRS), with 21 items (Hamilton, 1960; 1967), and the Beck Depression Inventory (BDI), with 13 items (Beck & Beck, 1972; Beck, Rial & Rickels, 1974), were used to measure changes in symptom levels during follow-up. These scales were chosen from the limited number of internationally well-established clinical inventories available in Finnish. Standardization work on the Finnish form is still incomplete. This is discussed below. When used simultaneously, they reflect patients' subjective experience of mood and functioning (BDI), and objective assessment of symptoms by the attending physician (HDRS).

In borderline disorders, depressive and anxiety symptoms are often the immediate reason for recommendation for or seeking help via ward treatment. Table 1 above shows the characteristics of BPD shared and not shared with unipolar depression, as described by Gunderson (1994). BPD and major depression represented 68% of admission diagnoses in the study sample. Table 1 clearly shows that depressive affect is common to both disorders. However, it is also apparent that depressive affect has a specific psychodynamic source and phenomenology in both disorders. Whether the HDRS and BDI cover these different aspects of depressive affect to the same degrees in major depression and BPD in an interesting question that remains unanswered.

The HDRS and BDI were and a short sleep disturbance questionnaire were completed at the beginning, middle and end of ward treatment, and during follow up.

5.3.2 Hamilton Depression Rating Scale

The HDRS was originally developed for clinical use to detect clinically depressed patients requiring treatment. Several versions of the Hamilton scale are used worldwide, in research and clinical practice. According to Bech (1993), the original Hamilton scale is rarely used today. The American version, which was never accepted by Hamilton himself, is now most frequently used. The Finnish version (Appendix II) is based on the original version published by Hamilton (1960) and revised in 1967.

The scale contains 17 variables and 21 items. Symptoms are defined in terms of a series of categories of increasing intensity, on five-point or three-point Likert-type items. According to Hamilton (1960) it is used for quantifying the results of an interview, and results are highly dependent on the skill of the interviewer. The item-titles are listed in Appendix IV.

According to Bech (1990) the Hamilton scale, when properly used, has high content and construct validity, both as regards measurement of change in depressive states during treatment and prediction of response to treatment. Paykel (1990) had stated that the items in the Hamilton scale are more consistent in

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[1] The original Finnish semistructured interview form and self-rating questionnaires are available from the author on request.

general practice, where most depressed patients are treated, than in hospital psychiatry. Correspondingly, Bech (1990) has found that in mild to moderate degree of depression the total HDRS is valid.

Several studies on the factorial structure of the HDRS have been accomplished. O'Brien and Glaudin (1988) identified four factors in their study, and labelled them somatic complaints, anorexia, sleep disturbance, and agitation/retardation. Unlike many previous investigators, they found no general factor in the HDRS. According to Bech (1990), the content validity of the HDRS covers six components: (a) mood of depression, (b) mood of anxiety, (c) motor retardation, (d) cognitive symptoms (negative beliefs), (e) social symptoms (introversion and work), and (f) vegetative symptoms (e.g. tiredness, sleep, appetite). The most recent studies (e.g. Fleck, Poirier-Littre, Guelfi, Bourdel, & Loo, 1995) the question about the uni- vs. multidimensionality of the HDRS has remained unanswered.

The following cut-off points of the original, revised scale used by Hamilton (1967) were: 0-11, minor or no depression; 12-18, less than major depression; 19-24, major depression; 25 or more, severe depression.

No relevant studies on the relationship between HDRS scores and treatment outcomes in BPD patients were found in the literature. The HDRS has been used in several Finnish studies. No reports on studies on the psychometric properties of the scale in Finnish samples were found.

In the study reported here, patients were rated by the resident via three measurements during hospitalization. Residents were acquainted with the HDRS by the researchers. During follow-up rating was undertaken by a senior psychiatrist.

5.3.3 Beck Depression Inventory

The BDI is one of the most widely used self-administered depression inventories. Its psychometric properties have been well investigated in adult populations (see e.g., Ambrosini et al., 1991; Haaga, McDermut, & Ahrens, 1993), especially when measuring the antidepressive effect of psychotherapy (Bech, 1990). The 21-item scale was originally derived from clinical observations about attitudes and symptoms frequently exhibited by depressed psychiatric patients, infrequently exhibited by nondepressed psychiatric patients (Beck, Steer, & Garbin, 1988).

The short form of BDI contains 13 items from the original 21-item scale. Each item describes a particular manifestation of depression, and consists of a series of statements with assigned values ranging from 0 to 3 on Likert-type scales. Responses give a total score between 0 and 39. The Finnish version of the 13-item BDI (Appendix III) is based on a translation of the original 13-item scale (Beck & Beck, 1972). Item titles are shown in Appendix V. Respondents are asked to rate themselves currently. In this study, the BDI was presented to the patient at the same time as the other self-rating questionnaires. After instruction, the study leader was available for questions, if needed.

According to Beck, an adequate cut-off score depends on the characteristics of the patients in the sample and the purpose of the study. The cut-off points recommended for the short form in clinical practice are 0-4, none or minimal

depression; 5-7, mild; 8-15, moderate; 16+, severe depression (Beck & Beamesderfer, 1974).

In previous studies on the psychometric properties of BDI, internal consistency (Cronbach's alpha) was 0.86 for psychiatric patients and 0.81 for nonpsychiatric subjects, on average (Beck et al., 1988). Concurrent validities of the BDI with respect to clinical ratings and the HDRS proved also to be high. The BDI also exhibits strong positive relationships with many well-established instruments, for example the MMPI-D scale. BDI scores have been shown to be significantly related to self-reported anxiety (Beck et al., 1988). Mathew, Swihart, & Weinman (1982) concluded that one reason for this positive relationship is that the two syndromes share somatic symptoms.

The relationship between the BDI and HDRS is important because the scales have often been used together for assessing both self-reported and the clinically observed changes in depression (Beck et al., 1988). Edwards et al. (1984) and Lambert, Hatch, Kingston & Edwards (1986) concluded that the BDI is less responsive to changes in depression than the HDRS. According to Bech (1990), scales like the BDI are useful for measuring lack of psychological well-being in a non-disease-specific sense. Bech finds the distinction between clinical depression and lack of well-being conceptually important with regard to its implications for treatment, e.g. prescription of antidepressants. In long-term studies, self-rating scales may have an important function, e.g. as indicators of quality of life.

The psychometric properties of the BDI with 21-items in the Finnish population have been studied by Raitasalo (1977). A sample of 323 patients was assembled to explore e.g. the occurrence of depression of Finns regarding themselves to be ill. These individuals were members of a representative sample of the Finnish population collected for the Finnish national-health survey. The inner consistency of the BDI proved very high. The mean correlation between items was 0.21, the alpha coefficient 0.916. Analysis of the BDI and of other psychological variables suggested that the BDI scale was made up of two factors, one representing the somatic symptoms of depression, the other symptoms occurring in relation to emotional life and self-image. The results were interpreted as indicating that validity was good, i.e. that the scale was a good measure of experienced and expressed depression (Raitasalo, 1977). The recommended cut-off point for depression (13 points) was exceeded by 51% of the persons included in the sample.

Julkunen and Saarinen (1990) used a 14-item version of the BDI, developed from the 21-item Finnish version, in a sample of 243 patients hospitalized because of myocardial infarction. The alpha coefficient for the BDI version used was 0.81. Viinamäki, Niskanen, & Koskela (1995) validated the short form of the BDI against DSM-III-R criteria in unemployed Finnish factory workers. They reported that the cut-off point of 8/9 for the 13-item scale satisfactorily predicted psychiatric morbidity. The sensitivity of the method was 61%, the specificity 78%.

5.3.4 Internal consistencies of the BDI and HDRS scales in this study

Because of the lack of knowledge about the psychometric properties of the Finnish forms, a test of internal reliability was conducted using Cronbach's alpha for the BDI and HDRS scales in this sample. Cronbach's alpha measures the internal consistency or homogeneity of the items of a scale, and is based on item-total correlation (Streiner & Norman, 1989). The reliability coefficients in relation to the four measurements are shown in Table 3.

Table 3 Internal consistencies of HDRS- and BDI-scales in relation to the four measurements of the follow-up study

Measurement	Time months from admission on average	HDRS α	HDRS n^2	BDI α	BDI n^2
1. On admission	0	0.785	60	0.856	58
2. At the middle of treatment	1.5	0.832	38	0.859	47
3. At discharge	3	0.777	30	0.913	38
4. At the follow up	40	0.694	40	0.899	42

The alpha coefficient for the HDRS varied between 0.69 and 0.83, reaching a level (0.70) recommended for tools in their early stages of development (Ferketich 1990). The reason for this was identified by item analysis (Appendix IV). Some items were very inconsistent with regard to the total. Very low, even negative correlations were found. Especially problematic was item 17 (Loss of insight). Its correlation with the total ranged from 0.13 (first measurement) to -0.70 (fourth measurement). This item substantially decreased the internal consistency of the HDRS in the fourth measurement. Excluding this item would have increased the alpha coefficient to 0.78.

The alpha coefficient for the BDI varied between 0.86 and 0.91. This equals or exceeds the mean in previous BDI studies (0.86 for psychiatric patients) described by Beck et al. (1988). It also exceeds the generally recommended level (0.80) for well-established scales (Streiner & Norman, 1989; Ferketich, 1990). Correlations of separate items with sums were also consistent, and relatively high (Appendix V). Only item M (Loss of appetite) correlated with the total, ranging from 0.21 to 0.43. Thus, the internal consistency of the BDI was satisfactory.

The HDRS-ratings relating to individual patients during inpatient treatment were not always made by the same physician. However, all raters were instructed about the use of the measures in the same way. The greatest problems in relation to item 17 also occurred during follow-up interviews (measurement 4), when all patients were evaluated by a single individual. Item analysis was performed separately for patients interviewed at the beginning and end of the fol-

[2] the SPSS/PC+ 5.0-program omits the questionnaire if one or more items are unfilled

low-up period of the study. No differences were observed in mean values or distribution of assessments. Those, systematic scoring error resulting, for example, from false routines during the repetitive interviews in measurement 4 does not seem likely. Reasons for the observed lack of internal consistency are therefore not clear. A putative interpretation is that different internal correlations between HDRS items describe the factorial structure of the HDRS in BLD samples in general. Such an interpretation would strongly suggest a need for further studies on the factorial structure of the HDRS in different Finnish subsamples. In other words, the low level of correlation between the sum and item 17 (Loss of insight) could relate to the special nature of borderline pathology.

The data collected gave no opportunity of calculating other forms of reliability (inter- or intra-observer, or test-retest coefficients).

5.4 Statistical methods

Statistical analyses relating to the original studies (for details see Studies I-III) and this summary were performed using the SPSS/PC+ program, Version 5.0 (Norusis, 1992). In relation to this summary, some results were subjected to Student's t-test. Associations between the treatment-outcome variables (BDI, HDRS) and symptoms experienced as a function of time were analysed using growth-curve analysis (Potthoff & Roy, 1964). Growth-curve analysis is analogous to a standard regression procedure. The goal is to identify independent variables that have the greatest power of predicting a dependent variable (in this case, the BDI and HDRS scores) (Hull et al., 1993). An important difference from standard regression is that the method is specifically designed for use in situations in which multiple measures are used over time in relation to each subject, and that a linear or quadratic interaction between time and the independent variable can be included in the model. The BMDP program, Module 5V (Dynamic Release 7.0) (Dixon, Brown, Engelman, & Jennrich, 1990) was used in carrying out these analyses.

6 RESULTS

6.1 Results of hospital treatment (Study I)

The aim of Study I was to discover measures of and present data on the effects of hospital treatment on patients with psychiatric symptoms of moderate severity (personality disorders, adjustment disorders and major depressions), and to describe sociodemographic background variables and previous treatments in this patient group.

6.1.1 Methods

The research procedure and sampling during the first phase of the study have been described in Chapter 5.2. Results were analysed using the paired sample *t*-test, and the Wilcoxon matched-pairs signed-rank test.

6.1.2 Results

At the time of admission to the study ward the mean age of the patients (n=66) was 31.8 (± 10.8) years (range 15-56 years). Most patients were admitted via the Psychiatric Outpatient Department of Kuopio University Hospital (26%), other psychiatric hospital wards in the area (27%), public mental-health centres, health centres or therapists' private practices (about 10% each). Most were receiving psychiatric hospital care for the first (36%) or second (30%) time. Women accounted for 44%. Fifty-four per cent were single, 30% were married or lived in a stable relationship, and the rest were divorced or widowed.

Borderline (n=13) or other (n=6) personality disorders accounted for 29% of the cases (Study I, Table 1). In addition, 14% of patients were diagnosed as suffering from these disorders as an additional diagnosis. Dysthymia was observed in 14% of patients, major depression in 39% and adjustment disorder in

15%. As far as the psychodynamic quality of their problems was concerned, more or less dominant signs of split-type defence mechanisms, identity diffusion, lowered impulse control or anxiety tolerance were observed during in clinical interviews or from the patient's life-history. They had not lost capacity for reality testing. These are the central signs of the borderline personality organization described by Kernberg (1977, 1980, 1984).

According to their own statements, 40% of the original study population (n=84) had undergone psychotherapy before admission once or twice a week, most in the Public Mental Health Centres or Psychiatric Outpatient Department of the University Hospital. In addition, 12% had had more or less regular contact with some other outpatient organization. Only 13% had had no preceding contact on an outpatient basis. Only a quarter of all personal treatment contacts had lasted for more than six months. Sixty-five per cent of patients had previously been hospitalized.

Before admission, 16 patients in the study sample (n=66) were taking no psychotropic medication. On discharge the number was 12. In nine cases, no medication was received before, during or after treatment. Antidepressant therapy was most often continued throughout treatment. Anxiolytic medication was markedly decreased.

There was a significant change in the main outcome variables, HDRS and BDI, during hospital treatment. The mean HDRS score fell from 19.6 at the beginning of treatment to 11.8 at the end ($p<0.001$). In the case of the BDI, a change from 13.8. to 11.3 took place ($p<0.05$). Symptoms covered by the BDI and HDRS also declined. Patients' self-evaluations of the severity of their symptoms also revealed significant reductions during treatment. However, self-reported sleep disturbances, fearfulness and fear of delusions did not decline statistically significantly.

Changes found in patients' orientation towards current personal objects, or objects connected with their childhood, were slight and not statistically significant, except in relation to the therapist outside the hospital setting. The planned therapist for outpatient treatment became a very significant person in relation to the expectations of the patients during ward treatment. The ward therapist was also felt to be very significant by nearly half of the patients on discharge.

The patients evaluated treatment positively at the time of discharge. They perceived symptom relief and benefit from treatment. Assessments of the patient's state by staff were similar but less marked.

6.1.3 Discussion

The study covered all patients admitted in 1989 to the study ward for a period of treatment of more than three weeks. As assessed clinically, nearly all of the patients met the criteria of BPO or BLD. Clinical practice on the study ward has shown that patients with psychotic-level disorders leave it during the first days or weeks of treatment. It is improbable that patients with a DSM diagnosis of dysthymia admitted to a ward of mental hospital and staying there for at least three weeks, the criteria for inclusion in this study, would be free from split-type

defence mechanisms, although fewer than five of the DSM Axis II criteria were met. Staff were trained within the frame of psychodynamic orientation, over several years, to acknowledge and manage the special problems brought to the ward by these types of patients. They were approached with an active psychotherapeutic attitude, supported by use of antidepressive and anxiolytic drugs. Treatment was always optional for the patient, and was initiated only when mutual agreement about its necessity was reached, and was continued after the alleviation of acute symptoms. The study ward therefore used treatments which have become uncommon in Finland, partly because of the economic depression.

In this study, the general nature and aims of therapeutic intervention, especially those of psychotherapeutic intervention can be described with reference to the work of Tähkä (e.g. 1993) and Kernberg (e.g. 1984). Variables describing the motivation experienced by patients in relation to treatment and their expectations of it were incorporated in the study design. Patients were expected to follow the weekly programme for as long as they stayed in the ward. Variables describing patients' participation in treatment were not included in the study design, although this would have been useful in the analysis. It is probable that participation in treatments in the study ward was more active and regular than in the ward treating psychotic patients and/or patients without their consent.

The patients had had numerous preceding treatment contacts, but most were unestablished and short-lived. Willingness to seek help in a crisis situation, and tendency to refuse regularity and stability in the subsequent contact are characteristic of borderline personalities (Hartocollis, 1980). In all cases, the help offered had been insufficient, and the patient sought help via ward treatment.

As regards to outcome variables, the most marked change was in HDRS scores, where a change from major depression to minor depression took place, according to the cut-off points suggested by Hamilton (1967). In relation to the BDI the change was less marked, but still statistically significant; and took place within the range of moderate depression, according to the cut-off points suggested by Beck and Beamesderfer (1974). Several independent measures, including staff's and patients' assessments, gave consistent results, but the improvement was assessed more reservedly by staff than by patients. It was concluded that the symptomatic improvement most likely included some change in patients' adaptive capacities. The regression, often severe, was replaced, to various extents, by a reality-adapted orientation.

On the basis of these first-phase results the conclusion that seems justified is that it seems unlikely that the outcome of treatment resulted only from temporary suppression of one or more symptoms by means of available substitutes. Contrariwise, the multidimensional shift in the symptomatic picture would tell in favour of significant involvement in the treatment process on the part of the patients. This is in line with a previous finding (Antikainen, 1990) in another patient sample from the same ward, showing a change from primitive to more developed defensive manoeuvres during the hospital stay, as measured using the Lerner Defence Scale (Lerner & Lerner, 1980).

It was also noted that the treatment outcome, or at least some aspects of it, could be assessed relatively simply using standardized rating scales and ques-

tionnaires designed to depict the psychiatric states of the patient groups. This observation supported the view that it is possible to assess effects of psychotherapeutic activity reliably, even in a hospital ward.

In summary, it was concluded that a relatively good treatment outcome can be achieved in patients with borderline and other personality disorders during a period of active hospital treatment of 2-4 months, in situations in which outpatient treatment has proved insufficient.

6.2 Factors predicting outcome of inpatient treatment (Study II)

Nearly all scores in Study I showed a reduction in anxiety, depression and other subjective symptoms during hospital treatment. These changes were in line with staff assessments. Use of psychotropic medication, notably benzodiazepines, decreased. However, the sample included both patients who benefited from treatment and those who did not: in some cases occurrence and/or intensity of symptoms increased. The aim of Study II was to identify factors related to patients' backgrounds, symptoms and attitudes that predicted the outcome of inpatient treatment, i.e. factors differentiating those who benefited from treatment from those who did not.

6.2.1 Methods

Success of treatment was defined as a change in the BDI and HDRS scores. When used simultaneously, the scales reflect patients' subjective experiences of their mood and functioning (BDI), and objective assessment of observed symptoms by the attending physician (HDRS). Factors possibly explaining changes were studied using discriminant and regression analysis. For discriminant analysis, patients were divided into two groups, in terms of treatment outcome. One group consisted of 20 patients who benefited from treatment according to both scales (change in BDI and HDRS scores above median). The other group consisted of 18 patients who benefited little from treatment (score-change below median on both scales). In the regression analysis, both a stepwise backwards and a forced method were used. In relation to previous treatment, diagnostic group and medication, analysis was supplemented by use of a two-tailed t-test.

Fifty independent variables reflecting patients' backgrounds, previous treatments and attitudes were assessed. For discriminant and regression analyses, the independent variables were divided into categories of 5 to 7 variables. These categories are shown in Study II, Tables 1 and 3.

6.2.2 Results

A statistically significant association was found between 14 variables and the outcome of treatment. A good outcome was predicted by subjective symptoms such as tension and suicidal tendencies at the beginning of treatment, and a poor

outcome by fear of delusions. Experienced depression, insomnia, anxiety or fearfulness had no predictive values. Patients who thought their symptoms were caused by unemployment or society were more likely to benefit from treatment than the others. Causes of symptoms attributed to the patient himself or to the patient's parents, work circumstances, or financial problems had no predictive values. An active, positive attitude towards symptoms and treatment (e.g. positive expectations of effects of medication) also predicted a good outcome. The more passive or projective the attitudes toward treatment expressed by the patient (e.g. suspicions about harmful effects of the medication, desire for the beneficial effects of rest), the less likely the patient was to benefit from treatment.

Standard background variables, such as age, sex, marital status, working capacity before admission, and previous psychiatric treatment or psychotherapy experiences did not differentiate between good and poor outcomes. The only difference detected was that patients who had had no previous experience of psychiatric hospital treatment had better outcomes according to the BDI change than patients who had previously been subjected to hospitalization without their consent. The medical diagnosis did not differentiate between those who benefited from treatment and those who did not. Medication during treatment, use of benzodiazepines in particular, was usually associated with a good outcome.

6.2.3 Discussion

About 50 variables reflecting the backgrounds and subjective attitudes of 62 inpatients with BLD were assessed. A statistically significant association was found between 14 variables and the outcome of hospital treatment. The sample was relatively small and comparisons were made within the sample. This increases the probability of type I (α-type) and type II (β-type) errors (Streiner, 1990). Some variables reflecting background, disease or treatment history might be found to be significant in a larger sample.

Variables statistically significantly predicting treatment outcome were related to subjective symptoms, and to patient's attitudes towards symptoms and treatment. A good outcome was associated with suicidality and tension expressed by the patient on admission. A poor outcome was associated with expressed fear of delusions. Delusions reported by patients with borderline disorders probably referred to fear of losing control or to experiences of depersonalization. Expectations relating to efficacy of the medication (symptom relief) were associated with a good outcome, whereas expectations relating to the beneficial effects of rest were associated with a poorer outcome. Patients entering psychiatric hospital treatment often have vague ideas about treatments. Medication is probably seen as good. The idea of rest is probably associated with a wish to withdraw into a passive existence.

A tendency to see reasons for symptoms as lying outside the self, e.g. in society or unemployment, predicted a good treatment outcome. This is probably a way of avoiding deeper depression. Ideas about drug therapy were evident in this connection, too: ideas that drugs caused symptoms predicted a poor treatment outcome. Scepticism of this kind was found more in patients with the most severe

disorders. This also suggests that treatment was most successful in patients with relatively mild disorders.

According to the BDI changes, treatment outcome was slightly better in patients in whom medication was started or increased during hospital treatment. Medication thus seemed to support other treatments used in the ward, via pharmacological actions, and through interactional factors connected to the physician-patient relationship. HDRS changes, reflecting the physician's assessment, did not exhibit similar differences.

Treatment was most beneficial in patients in whom benzodiazepine medication was considered necessary. This finding is similar to that obtained via discriminant analysis: treatment outcome was good in patients who had expressed subjective tension on admission. It is possible that patients on benzodiazepine medication had somewhat less severe disorders than the others, and that their ability to benefit from the treatment was in general better than that of the others.

The patients included in the study were already a fairly selected group of non-psychotic patients: both the patients themselves and the referring physician had considered psychiatric hospital treatment necessary. As a result, the patients had been able to undergo treatment in the ward community for relatively long periods of time. The results were interpreted as supporting the view that in crisis situations non-psychotically symptomatic patients may benefit from psychiatric hospital treatment lasting longer than that required for the alleviation of acute symptoms. Treatment should be tailored according to the problems of individual patients to ensure greater commitment to psychotherapeutic treatment. This conclusion would seem to be in accordance with an observation by Isohanni and Nieminen (1992), who reported that patients with personality disorders exhibited a poor commitment to therapeutic relationships in a closed ward treating patients with a range of disorders.

On the basis of results of the study reported here, attention should be paid to patients' attitudes and expectations when they are being selected for community-type inpatient treatment. According to the results of the study described here, neither sociodemographic factors nor previous treatment provide clear criteria for patient selection. On the other hand, in psychotic patients, schizophrenic patients in particular, such factors have often proved significant in relation to prognosis (McGlashan 1985).

In summary, it was concluded that the best results in the study ward were obtained in patients with mild disorders. The findings are also in accordance with the statement by Stone (1993) that the treatment outcome in all personality disorders is related to willingness to accept responsibility for contributing to creation of interpersonal difficulties.

The results gave hints as to how study settings might be constructed in future. Instead of relying on conventional diagnostic criteria, attention should be paid to assessing defence mechanisms used by patients and changes in them. More accurate tools should be developed for assessing expectations and motives associated with treatment. The quality of psychotherapeutic relationships developing during psychiatric hospital treatment is likely to vary, and specific tools need to be developed for measuring it.

6.3 Three years later: results of the follow-up study (Study III)

The aim of Study III was to assess the durability of outcome of inpatient treatment in the study sample, and to monitor changes in life situations and use of mental health services three years after termination of hospitalization.

6.3.1 Methods

Follow-up interviews took place on average 3.4 years after hospitalization in 1992 and 1993. The nature of the follow-up interview and measurements are described in Chapter 5.2 and 5.3. Forty-two (70%) of the 60 patients still alive were interviewed.

The 18 drop-outs were younger than the patients who came for the interview. They had experienced initial psychiatric treatment younger. They were more rarely committed to stable relationships and more rarely in need of sick leave at the end of treatment. In terms of other sociodemographic variables they did not differ statistically significantly from the follow-up group. The drop-outs had been slightly less satisfied with the outcome of treatment at its end. However, assessments during inpatient treatment revealed no differences between the groups as regards crucial outcome variables, that is the BDI and HDRS scores.

Borderline personality organization is often associated with lack of commitment to object relations, and a mobile lifestyle (e.g. Hull et al., 1993). The number of patients who consented to, and turned up for, follow-up interview can therefore be considered satisfactory. The nature of the patients' problems was reflected in reasons for dropping out. Five patients expressed ambivalence through behaviour, by promising to come for interview but failing to show up.

Drop-out was analysed by means of Student's *t*-test. The significances of changes that occurred during follow-up were determined using a paired, two-tailed *t*-test and the Wilcoxon test. The χ^2 test was used as necessary.

6.3.2 Results

At the time of follow-up the mean age of those who co-operated was 39.8 ($\pm$ 9.9) years (range 20.3 - 59.7 years). Forty per cent of patients were women. During follow-up, only 1/3 of the patients reported that they were married or cohabiting. One fifth of patients reported a steady relationship with someone. No major changes occurred in marital status during follow-up.

All patients who came for follow-up interview could still be given psychiatric diagnosis. Neurotic disorder was observed in 24%, personality disorder in 29%, and major depression in 40%. In addition, an additional diagnosis of personality disorder was reached in relation to six patients (14%). The diagnosis on follow-up was the same as at the end of inpatient treatment in relation to about 60% of patients. Forty-five per cent of the patients diagnosed as severely depressed

at the end of hospitalization no longer met the diagnostic criteria for depression during follow-up.

Immediately before inpatient treatment, 55% of patients had been capable of work or on sick leave for only a few weeks. Nineteen per cent of the sample had been incapable of work for over a year. At the end of hospitalization, 50% were considered capable of work, or were prescribed sick leave for four weeks at most. During follow-up, 33% of patients were capable of work or only temporarily on sick leave (less than 2 months). Sixty-four per cent had been on sick leave for over a year. The sample could therefore be clearly differentiated into two groups: those continually capable of work and those chronically incapable of work. Only two of the 19 patients incapable of work at the beginning of treatment had become capable of work during follow-up period.

At the end of hospitalization, all patients were considered to need further treatment. Roughly 30% of patients were not attending for outpatient treatment at the time of the follow-up interview. Only 5% of patients reported during follow-up interview that they had not sought further treatment after hospitalization.

At the end of hospitalization, private psychotherapy had been recommended to 43% of patients. During follow-up interview it was found that only 24% were seeing a private therapist. A public mental-health centre had been recommended for 24%. It was found during follow-up interview that 31% followed this recommendation. A general hospital psychiatric outpatient department or day ward had been recommended for 21% of the patients. Ten per cent were found during follow-up interview to have accepted the recommendation.

At the time of the follow-up interview, 12% of patients were attending therapy twice a week, 26% once a week. Thirty-one per cent had had regular but infrequent, or irregular, contact with an outpatient unit. The rest (31%) reported during follow-up interview that they were not at the time receiving therapy.

Fifty per cent of patients in the sample had had a regular outpatient treatment contact before inpatient treatment. These patients continued outpatient treatment at the follow-up on a regular basis more often than those who had not had a regular treatment contact before inpatient treatment. Otherwise, regularity of outpatient treatment correlated positively consistently, but not statistically significantly, with variables reflecting greater need for therapy, such as numbers of hospitalizations, numbers of suicide attempts, and incapacity for work. Those who managed well were more prone to end outpatient treatment contacts than those who managed poorly.

Fifty-five per cent of patients had managed without further inpatient treatment throughout the follow-up period. Fourteen per cent had needed one period of inpatient treatment, 14% two periods. In about 25% of patients, the hospitalization at the start of the study period had been their only psychiatric inpatient treatment ever.

During the follow-up period, 12 of the 42 patients in the sample attempted suicide, 3 at least once, 9 at least twice. There were, in all, at least 21 attempts during the 3.4-year follow-up period. The figures are based on information given by patient to the interviewing psychiatrist, and on case records. The figures give a fre-

quency of 8,400 candidates per 100,000 members of the population per year, and a frequency of 14,700 attempted suicides per 100,000 members of the population per year. One of the 62 subjects in the sample in fact committed suicide. This would result in an expected suicide frequency of 470 per 100,000 members of the population per year.

During follow-up interview, 2/3 of patients reported taking anxiolytics. The percentage of patients on anxiolytic medication increased markedly after termination of inpatient treatment. No changes occurred in the percentages of patients taking neuroleptics or antidepressants during the follow-up period.

Both HDRS and BDI scores decreased statistically significantly (i.e. symptoms declined) during inpatient treatment, as previously mentioned. Alleviation of symptoms was greatest during the first half of the inpatient treatment period. At the time of follow-up interview, symptoms of depression, anxiety and sleep disturbance were at the same levels as at the end of treatment, as assessed by HDRS, BDI (Figure 1).

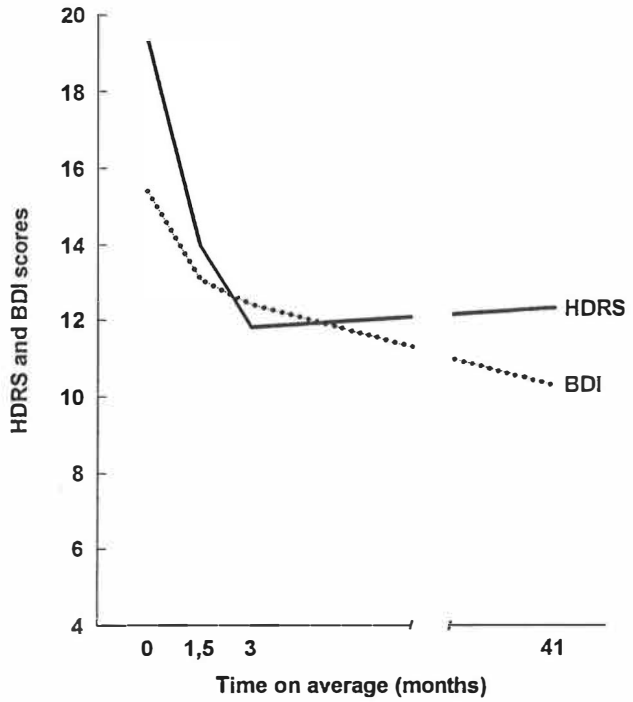

Figure 1 Changes in symptoms during treatment and three years later, according to HDRS and BDI scores

A statistically significant percentage of patients felt that their depression, insomnia, anxiety, malaise and tension had decreased during inpatient treatment. During the follow-up period, subjective experiences of symptoms remained primarily at alleviated levels. The only statistically significant change was that self-

destructive thoughts became commoner. Other changes in symptoms varied, and were not statistically significant.

Significant personal relationships were assessed three times. At the end of inpatient treatment, the relationship with the primary nurse/therapist was considered very significant, as was the relationship with the outpatient therapist. The importance of the ward therapist diminished during the three-year follow-up period. That of the outpatient therapist remained at the level experienced by patients during inpatient treatment. Other changes were not statistically significant. However, patients tended to find relationships inquired about more significant during follow-up than at the end of inpatient treatment.

Patients' overall assessments of benefits of inpatient treatment and symptom decline during treatment did not change during follow-up.

6.3.3 Discussion

The sociodemographic background data of the patients are similar to those described in the literature: compared with psychotic patients, non-psychotic patients admitted for inpatient psychiatric treatment are more often middle-aged and, compared with the normal population, their life and personal relationships are more often characterized by separateness. Only 1/3 of our patients were living in a stable relationship.

The severity of the crisis that had led to inpatient treatment is reflected in the fact that some of the patients were found during inpatient treatment, or soon after, to be chronically incapable of work. Even ward treatment accordingly failed to offer sufficient rehabilitative support to some patients.

Similarly, the suicidal tendencies observed during the follow-up period reflected the severity of the patients' problems and the threat they posed to continuity of life. The frequency of suicides and attempted suicides in the material was remarkably high: for suicide it was over 10 times that in the population of the area covered by the Finnish Department concerned (Itsemurhat Kuopion läänissä 1987, 1989). For attempted suicide, the risk was over 40 times that in the Finnish population as a whole (Platt et al., 1989). The frequency of attempted suicide (14,700/100,000) corresponded to frequencies observed during 2 - 5 years follow-up after day-hospital treatment of BPD patients (Mehlum et al., 1994) and in patients seeking outpatient psychiatric treatment (Asnis et al., 1993). The risk of suicide during follow-up in the study described here was 470/100,000/ year, close to the risk (500/100,000/ year) calculated by Stone (1993b) in relation to a sample of 196 BPD inpatients in the USA, a little higher than that found in Norway by Mehlum et al. (1991) in 97 day-unit patients suffering from personality disorder, and lower than that described in the literature after psychiatric hospital treatment (Goldacre, Seagrott, & Hawton, 1993). However, no firm conclusions can be drawn because of the small numbers of patients. It would therefore seem that, in comparison with the normal population, BPD patients admitted to inpatient treatment are many times more likely than normal individuals to exhibit marked suicidal tendencies. Continuing suicidal behaviour has also been associated with a poor outcome in BPD patients (Mehlum et al., 1994).

The frequency of psychotherapy contacts in the sample decreased during follow-up. The study data do not allow conclusions to be drawn about the reasons for termination of such contacts. Over 40% of patients were referred for private psychotherapy. At the time of the follow-up study, only 24% of these patients were receiving private therapy. The percentage of patients receiving further treatment in the public sector had increased slightly. One reason for this difference may be that patients who started psychotherapy in the private sector had used up the financial support granted by the Finnish Social Insurance Institution for rehabilitation for a maximum of three years during the 3.4-year follow-up period. They may have been unable or unwilling to pay the costs out of their own purse. In the public health-care sector in Finland, psychiatric outpatient treatment is free.

Over one third of the patients had received regular psychotherapy and were seeing a therapist at least once a week at the time of the follow-up interview. More patients would probably have benefited from psychotherapeutic relationships. The results indicate that patients sought regular outpatient treatment when problems increased. Those who suffered from mild disorders and had well-established life situations tried to cope without psychiatric support.

The increase in number of patients using anxiolytics during follow-up reflects a shift from psychotherapy-oriented treatment at the end of inpatient treatment to management of symptoms with the help of medication.

The results of assessment of significant personal relationships indicate that the therapist became a significant object in the patient's eyes during inpatient treatment. During the three-year follow-up period, significance shifted to the outpatient therapist, while the importance of the inpatient therapist naturally faded. The patients' kindled object relations are reflected in the finding that everyday personal relationships were more significant at the time of the follow-up interview than at the end of inpatient treatment.

Also positive is the fact that patients' experience of total outcome of inpatient treatment remained unchanged throughout the follow-up period. Presumably drop-outs would have expressed negative views more often than patients interviewed. However, a significant percentage (70) of our patients maintained a positive image of the ward. Most of the rest reported indifference.

In conclusion, preservation of a good representation of the ward community, the therapist and the staff seemed to be one precondition for a good outcome. If a patient could experience him- or herself as a good patient who received good treatment from good staff, he or she appeared most likely to overcome the crisis underlying the need for inpatient treatment.

Otherwise, almost all of the instruments used (BDI, HDRS, symptom questionnaire) indicated that the symptomatologies of patients remained at levels observed at the end of inpatient treatment. According to the cut-off points suggested (Hamilton 1967, Beck & Beamesderfer 1974) severity of depression at the time of the follow-up interview could be described as 'less than major' or 'moderate'. The results suggest that inpatient treatment, and subsequent outpatient treatment, had helped patients to gain control of the multiple symptomatology experienced before treatment. Only some patients had required further inpatient treatment because of a new crisis.

Depression and suicidal tendencies were the most important problems in our patients. The initial inpatient treatment and subsequent treatments could offer only limited help in these connections. This is a permanent challenge in the treatment of personality disorders and major depressions.

6.4 Association between concomitant somatic illness and treatment outcome (Study IV)

There is much evidence that psychic comorbidity affects the course and treatment outcome in various physical disorders (Saravay, 1995). In contrast, only a few reports have been published on the effects of somatic comorbidity on the treatment and outcome of psychiatric in- and outpatients. Koranyi (1979) found that 19% of psychiatric outpatients had physical illness undiagnosed by the referring source. Nonpsychiatric physicians missed the presence of one-third and psychiatrists missed the presence of one-half of major medical illness in these patients. Hall, Popkin, Devault, Faillace and Stickney (1978) found that 9.1% of 658 consecutive psychiatric outpatients had medical disorders that produced psychiatric symptoms. Many of these patients also suffered from physical illness, unknown to them or their physicians. Schubert, Yokley, Sloan and Gottesman (1995) found that length of stay (LOS) in relation to depressed patients in a general hospital psychiatric ward was significantly longer in those with any physical final diagnosis than in depressed patients with no physical diagnosis. The study results indicated that physical illness was associated with increased LOS in relation to depressed psychiatric patients but not in other diagnostic groups. No other reports were found on the association between physical illness and course or outcome of psychiatric inpatient treatment. Saravay's recent statement (1995) that psychiatric hospitals are an understudied area in relation to comorbidity would seem justified.

Problems relating to BPO or BLD reach levels necessitating ward treatment at a markedly later age, on average, than problems relating to psychotic disorders, i.e. is at ages when physical disorders become commoner year by year. This, and clinical experience on the study ward suggested that medical assessment of a patient's physical health status should be included in the three-year follow-up interview.

The purpose of Study IV was to investigate relationships between depressive and anxiety symptoms and concomitant physical illness in patients with borderline personality organization during ward treatment, and after the three-year follow-up period, and the connection between physical illness and use of psychiatric services before and after ward treatment.

6.4.1 Methods

In connection with the follow-up interview described in Chapter 5.2 the 42 patients were divided into three groups, according to physical health status at the time, (a.) no physical complaints, (b.) occasional or non-life-threatening illness

(minor complaints) and (c.) potentially life-threatening acute or chronic physical illness (serious complaints). Data were collected from medical records of the University Hospital and supplemented by patients themselves during the follow-up interviews. All patients were grouped by the same interviewing psychiatrist.

Occasional and non-life-threatening illnesses (Group (b)) included, e.g., chronic sinusitis (male, 31 years), asthma causing mild symptoms (female, 58 years), fibromyalgia and asthma (female, 45 years) and tension and pain in the neck and shoulder area (female, 35 years). This group also included a 50-year-old man suffering from allergic rhinitis and abdominal problems who underwent surgery for goitre, back surgery and surgery for hiatus hernia during the follow-up period.

Group (c.) (life-threatening, serious illness) included the following patients:

1. A 44-year-old man suffering from juvenile diabetes that had caused physical complications. He was treated with peritoneal dialysis and underwent kidney transplantation during follow-up. 2. A 42-year-old man with ischaemic heart disease who had undergone coronary bypass surgery in the year before inpatient treatment. 3. A 54-year-old man with extensive arteriosclerosis who had suffered myocardial infarction during the year preceding inpatient treatment. Eligibility for bypass surgery had been assessed but no surgery had been undertaken. During the follow-up period he rehabilitated himself determinedly, with the help of diet and physical exercise. 4. A 59-year-old male patient who had previously undergone bypass surgery and had received an aortic prosthesis during the follow-up period. 5. A 47-year-old male patient who had experienced right-side hemiplegia of vascular origin during the follow-up period and was recovering from motor and speech disorders still observable at the time of interview. 6. A 48-year-old male patient with empty-sella syndrome, diagnosed shortly after the end of inpatient treatment. He was on hormone replacement therapy during the follow-up period, and, during the follow-up interview, expressed frustration that the disorder had not been detected during inpatient treatment. 7. A young woman who had been diagnosed HIV-positive a few months prior to the follow-up interview.

Some patients felt that their symptoms were of physical origin although the medical basis remained unclear. For example, a 48-year-old woman stated that she suffered from phlebitis in the lower limbs and "had seen several doctors and they had prescribed Pacinol" (fluphenazine hydrochloride). A 36-year-old man also emphasized physical complaints, which he attributed to "having frozen in the summer job". These patients were placed in Group (a.).

Treatment outcome in the three somatic-status categories was examined by means of the HDRS, BDI and symptom check-list.

Results relating to each group were compared using Student's two-tailed *t*-test, paired- sample *t*-test and the χ^2 test.

6.4.2 Results

Twenty per cent of patients (n=9) had no physical complaints, 62% (n=26) suffered from occasional or less serious complaints, and 17% (n=7) had a life-threatening acute or chronic illness. At the time of admission, the mean ages of patients who were physically completely healthy, suffered from mild complaints or were seriously ill were 33.0, 35.3 and 41.9 years, respectively. Durations of hospitalization were 86.1, 95.8 and 76.7 days, respectively. The differences were not statistically significant.

In spite of their higher mean ages, patients with serious complaints had briefer histories of previous outpatient treatment, and fewer psychotherapeutic contacts, and the contacts had been less regular than in the other groups. With regard to subsequent outpatient treatment and rehospitalization after discharge, no similar trends were detectable.

During the follow-up interview, 69% of patients said they considered their general health to be poorer than that of other people of the same age. Twenty-six per cent said they considered their health to be similar. Only 5% considered their health to be better than that of other people of the same age, in general. No distinction was made between physical and mental health in relation to this question.

During inpatient treatment, differences in the course of depression, as assessed by the HDRS, between groups were negligible, and not statistically significant (Figure 2). Depression was alleviated in all patients during inpatient treatment. However, after inpatient treatment, physical health status allowed differentiation between groups. There was no significant difference between patients suffering from mild complaints and those suffering from serious physical complaints. In such patients, depression remained at levels observed after inpatient treatment. In patients without physical symptoms depression alleviated further during follow-up, and was significantly milder than in patients with mild physical complaints during follow-up.

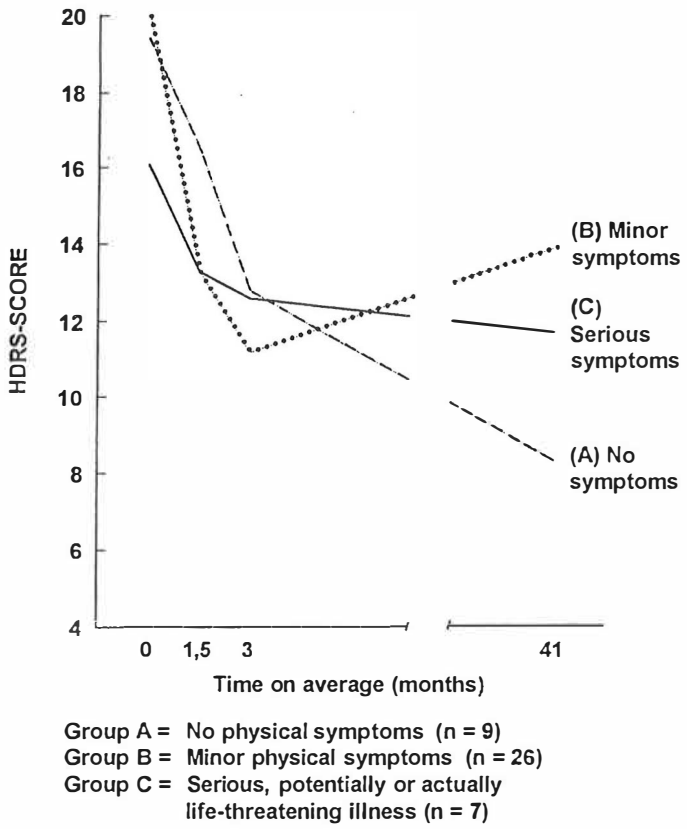

Figure 2 Depression (HDRS) in patients with no physical symptoms, with minor symptoms, and with serious illness during follow-up

The BDI, measuring anxiety and depression experienced by patients, allowed differentiation between patients even during inpatient treatment (Figure 3). At the beginning of inpatient treatment, patients with serious physical illness experienced significantly milder anxiety and depression than patients without physical symptoms or with mild symptoms. During inpatient treatment, anxiety and depression decreased in patients with minor physical symptoms or no symptoms, but increased in patients with serious physical illness. By the end of inpatient treatment, the difference between groups was not significant. During three years of follow-up, BDI scores in patients with less serious symptoms remained at the alleviated level observed after inpatient treatment but BDI scores of symptomless patients and patients suffering from serious illnesses decreased. By the end of follow-up, BDI scores in symptomfree and seriously ill patients were significantly lower than in patients with minor complaints.

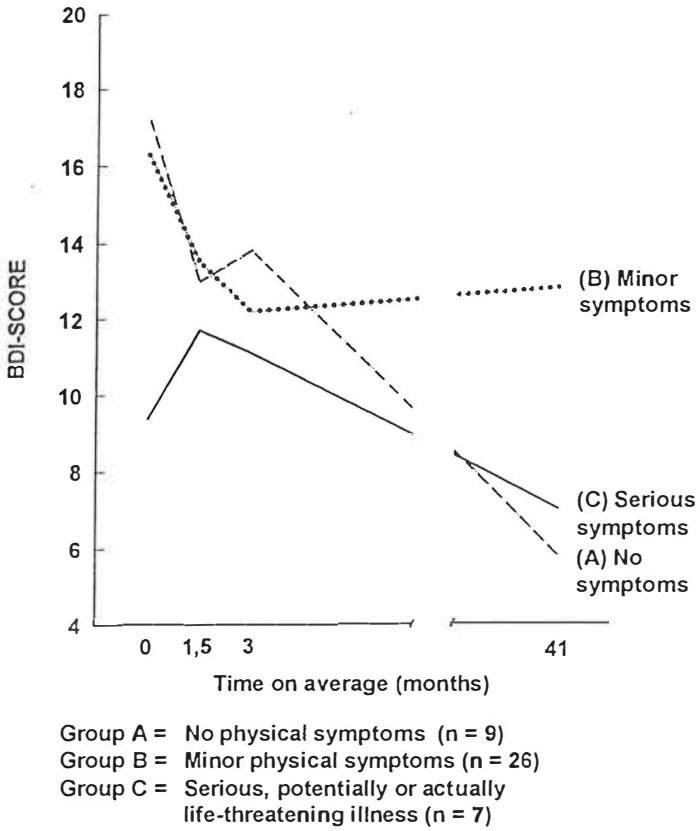

Figure 3 Experienced depression (BDI) in patients with no physical symptoms,with minor symptoms, and with serious illness during follow-up

Alleviation of symptoms of anxiety and depression was most marked in patients without physical symptoms during the entire study period, as measured by both the HDRS and BDI.

The significance of physical illness in relation to patients' subjective psychic symptoms was further assessed by comparing seriously ill patients (n=7) with other patients (n=35) (healthy or with minor symptoms). At the beginning of treatment, patients who were seriously ill reported subjective depression, anxiety and tension significantly less frequently than other patients, via the symptom check-list. They also reported other subjective symptoms less frequently than the other patients but differences were not statistically significant. In subsequent measurements, differences in subjective symptoms between groups disappeared. During inpatient treatment patients with physical illness felt significantly more often than the other patients that their capacity for work had deteriorated.

6.5 Other aspects of general management during follow-up

Some of the results reported in relation to Study III, especially relating to the high incidence of suicidality and problems of regaining capacity for work, were analysed further.

The results described next have not been presented elsewhere.

6.5.1 Capacity for work

In Study III it was found that the sample could be differentiated into two groups: those who continued to be capable of work, and those chronically incapable of working.

At the time of admission for inpatient treatment, 16 of the 42 patients included in the follow-up sample were in principle capable of work, as defined by the Finnish Social Insurance Institution, that is to say they were not in receipt of sickness benefit or a disability pension. No estimates of capability of work before inpatient treatment are available. Some had been referred for inpatient treatment to allow their capability for work to be assessed. Seven patients had been only briefly on sick leave (for less than 2 months). According to information obtained by the interviewing psychiatrist, 12 of the above-mentioned 23 patients were still not capable of work, and 11 were incapable of work at the time of the follow-up interview. Ten of the latter had been incapable of work for over a year. The groups were compared, to obtain a more accurate picture of factors helping to maintain or diminishing capability for work.

The 12 patients who remained capable of work throughout the study period did not differ from the 11 patients who became incapable of work, as regards age, sex distribution or length of inpatient treatment. Most of those incapable of work at the time of follow-up evaluation had been assessed as incapable of work at the end of inpatient treatment ($p<0.01$). Patients who had ceased to be capable of work used psychiatric services at the time of the follow-up interview slightly more often than the other patients, but there was no difference in number of hospitalizations. They more often preferred being alone to being with other people ($p<0.05$) than the comparison group. In the opinion of the interviewing psychiatrist, their ability to cope with problems had decreased after inpatient treatment more often than in the comparison group ($p<0.05$).

There were few statistically significant differences between the groups as regards mental symptoms. Patients no longer capable of work reported sleep disturbances more often than patients who were capable of work during all phases of treatment ($p<0.05$). During the three-year follow-up period they experienced more anxiety and depressive symptoms, as assessed using the HDRS ($p<0.05$) and BDI ($p<0.05$). The groups did not differ as regards previous HDRS and BDI measurements. There was no difference between the groups as regards mental symptoms reported by patients via the symptom check-list at the beginning and end of inpatient treatment. However, during follow-up, patients incapable of work reported insomnia ($p<0.05$), anxiety ($p<0.05$) and tension ($p<0.01$) more often than

patients capable of work. There were similar differences in relation to most other symptoms experienced by the patients but none was statistically significant. In summary, patients who were incapable of work experienced mental symptoms more often than patients capable of work.

At the end of treatment, staff estimated that patients who had maintained their capacity for work had benefited more from psychotherapy ($p<0.05$) and group psychotherapy ($p<0.05$) during inpatient treatment than those incapable of work. The former were assessed as having needed further inpatient treatment less frequently but the difference was not statistically significant. Diagnoses at the end of inpatient treatment and during the follow-up interview did not differ between groups.

In the follow-up sample of 42 patients, the 28 patients incapable of work experienced significantly ($p<0.01$) more subjective somatic complaints than the 14 patients capable of work. In addition to subjective complaints, physical health was also assessed by a physician. Serious physical illness was diagnosed in seven of the 42 patients (Study IV). In six of these patients, the illness had probably started before inpatient treatment. They were incapable of work before treatment. In the patients included in the sample, permanent incapacity for work was therefore often associated with serious physical illness.

6.5.2 Suicidality

In Studies I and III it was found that symptoms in patients in the sample decreased during inpatient treatment and remained at this alleviated level during follow-up. The patients also stated they had benefited from treatment, and were satisfied with it. However, incidences of suicide and attempted suicide were high during follow-up, as they are generally in patients who have undergone psychiatric inpatient treatment. Despite subjective (BDI, symptom check-list) and objective (HDRS) alleviation of symptoms of anxiety and depression, inpatient treatment therefore did not significantly decrease suicidality in the patients. The analysis was extended by comparing patients who attempted suicide during follow-up with other patients in the sample, with respect to background data and symptom variables.

Equal numbers of men and women attempted suicide during follow-up. Differences between these 12 individuals and the rest of the sample ($n=30$) were statistically significant in respect of only a few variables. They had experienced 2.5 hospitalizations, on average, during follow-up, the others 0.5 hospitalizations ($p<0.01$). At the time of follow-up, they were receiving psychiatric treatment and using the services of a public mental-health centre more often ($p<0.05$ in both cases) than the non-suicidal patients. Current outpatient treatment had lasted less long (1.9 years on average) than in non-suicidal patients (4.4 years) ($p<0.05$). Compared with the other patients in the sample, the patients who had attempted suicide were younger, lived less frequently in a stable relationship, used more often other health services during follow-up, were more often unemployed, drank more alcohol and preferred being alone but none of these differences were statistically significant.

Patients who had attempted suicide suffered from slightly more anxiety and depressive symptoms, as measured by the HDRS and BDI, during both inpatient treatment and follow-up than the other patients but differences were not statistically significant. Differences in most other variables describing previous mental status were also not statistically significant, but certain systematic trends were observed.

At the beginning of inpatient treatment, patients who subsequently attempted suicide reported more often than the other patients that they had suffered from the eight mental symptoms included in the symptom check-list, including depression and self-destructive thoughts, only "a little" or "not at all". At the end of inpatient treatment this was no longer the case. During the follow-up evaluation, patients who had attempted suicide reported suffering from self-destructive thoughts more frequently than the other patients. They also felt less frequently that they had benefited from inpatient treatment. At the time of follow-up interview, patients who had attempted suicide during the previous three years stated more often than the other patients that they had suffered from the eight mental symptoms about which enquiry was made, including depression and self-destructive thoughts, "much" or "moderately". None of the patients diagnosed as neurotic at the end of inpatient treatment had attempted suicide. Other diagnostic groups did not differ from each other in terms of incidence of attempted suicide.

Several studies have shown that not only patients but also health-care staff recognize inadequately or sometimes fail to recognize suicidal motivation in patients (see, e.g., Saarinen 1995). In the HDRS questionnaire, the person who completes the questionnaire (in this case a resident physician) is requested to assess a patient's suicidality on a five-step scale (0=no suicidal impulse, 5=attempts at suicide). In this material, estimates of the probability of self-destructive behaviour in item 3 of the HDRS predicted attempted suicide well ($p<0.05$). Eighty-six per cent of patients not considered suicidal did not attempt suicide during follow-up, in other words 14% attempted suicide, contrary to expectation. Fifty-six per cent of patients estimated to have suicidal thoughts actually committed self-destructive acts. Forty-four per cent did not.

6.5.3 Treatment outcome as a function of time: results of growth curve analysis

Pfeiffer (1991) has recommended incorporation of less traditional research designs in outcome studies, giving time-series designs as an example. These allow investigation of nonlinear changes related to time. In the study reported here, the aim was to investigate how relationships between mental symptoms experienced by patients and outcomes of treatment (HDRS scores) changed with time. Growth curve analysis (Potthoff & Roy, 1964) was employed. Growth curve analysis requires simultaneous measurements of all variables in a model. As far as subjective mental symptoms are concerned, measurements were available in relation to the beginning and end of inpatient treatment, and during follow-up. HDRS scores were chosen as the outcome variable, because they were based on a

physician's estimate and thus measured an aspect of treatment outcome other than the symptoms as experienced by patients, or changes in such symptoms.

Analyses were conducted separately for each subjective symptom (depression, insomnia, anxiety, malaise, tension, self-destructive thoughts, fear and delusions). Growth curve analysis can indicate, for example, how a relationship between depression as recorded by a patient, and anxiety and depression as assessed by a physician (HDRS) vary with time during follow-up. Results of such analysis must be considered only as indicative, because the three measurements give only limited pictures of nonlinear changes during follow-up over more than three years.

The strongest connection with time was found between anxiety as assessed by the HDRS and subjective malaise. The results are shown in Figure 4. The vertical axis represents HDRS values. The higher the HDRS score the greater the depression and anxiety. The higher the scores on the horizontal axes the greater the subjective malaise. The second horizontal axis describes months since admission.

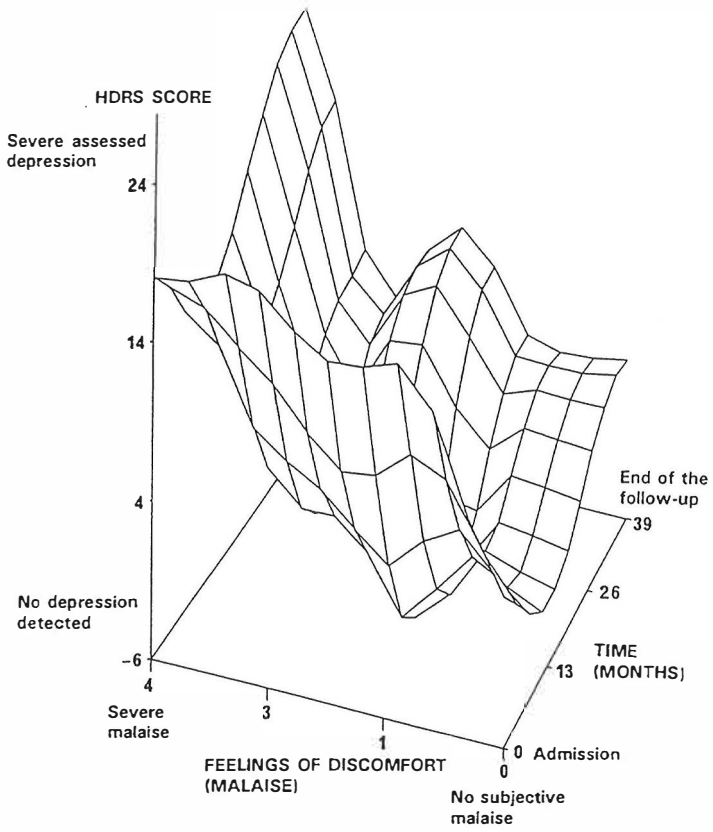

Figure 4 Feelings of discomfort and HDRS scores as functions of time during follow-up

At the beginning of treatment, in patients who experienced little malaise the assessed depression (HDRS) was also mild (Figure 4). HDRS scores were highest in patients who experienced much or moderate malaise, but scores differed little among such patients. In summary, subjective intense malaise was associated with severe depression, as described by the HDRS at the beginning of treatment. Figure 4 also shows marked reductions in HDRS scores during first months of follow-up, that is, during inpatient treatment.

During the total follow-up period following differentiation in the sample was seen. Alleviation of depression was most marked and the outcome most lasting in patients who experienced least malaise at the beginning of treatment. In patients who experienced severe malaise at the beginning of treatment, anxiety as assessed by the physician (HDRS) was alleviated least during treatment. By the time of the follow-up interview, anxiety had increased almost to levels corresponding to the situation at the beginning of treatment. In patients who experienced moderate malaise at the beginning of treatment, the curve representing the outcome of treatment, as measured by the HDRS, was closest to U-shaped. In summary, the most positive total outcome was associated with a combination of low assessed depression and mild subjective malaise at the beginning of treatment.

Changes in subjective depression and HDRS score as a function of time were different (Figure 5). There was a nonlinear connection between subjective depression and HDRS scores at the beginning of treatment. During follow-up, patients who reported mildest depression at the beginning of treatment experienced pronounced relief of symptoms at the beginning of follow-up, and the outcome remained fairly good. On the other hand, in patients moderately depressed at the beginning of treatment, HDRS values remained fairly close throughout follow-up to those at the beginning of treatment. In patients who exhibited severe depression at the beginning of treatment, symptoms were initially markedly alleviated but soon returned to pretreatment levels.

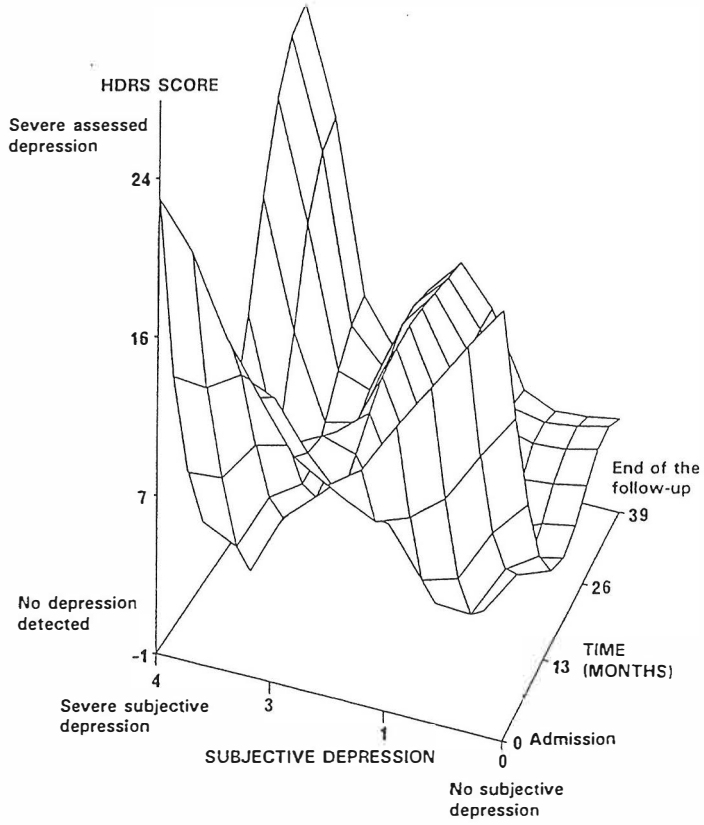

Figure 5 Subjective depression and HDRS scores as functions of time during follow-up

On investigation of another important variable in terms of clinical outcome, that is suicidal thoughts (Figure 6), other relationships were observed. At the beginning of treatment, there was a linear relationship between subjective self-destructiveness and anxiety as assessed by the physician. In other words, degree of self-destructiveness did not allow differentiation between patients in relation to HDRS values. During follow-up, however, there was a marked difference in development between patients who reported suicidal thoughts and patients who were strongly self-destructive. In mildly self-destructive patients, HDRS scores decreased markedly at the beginning of treatment and subsequently increased, to below baseline levels. In strongly self-destructive patients depression increased at the beginning of treatment and remained at this increased level.

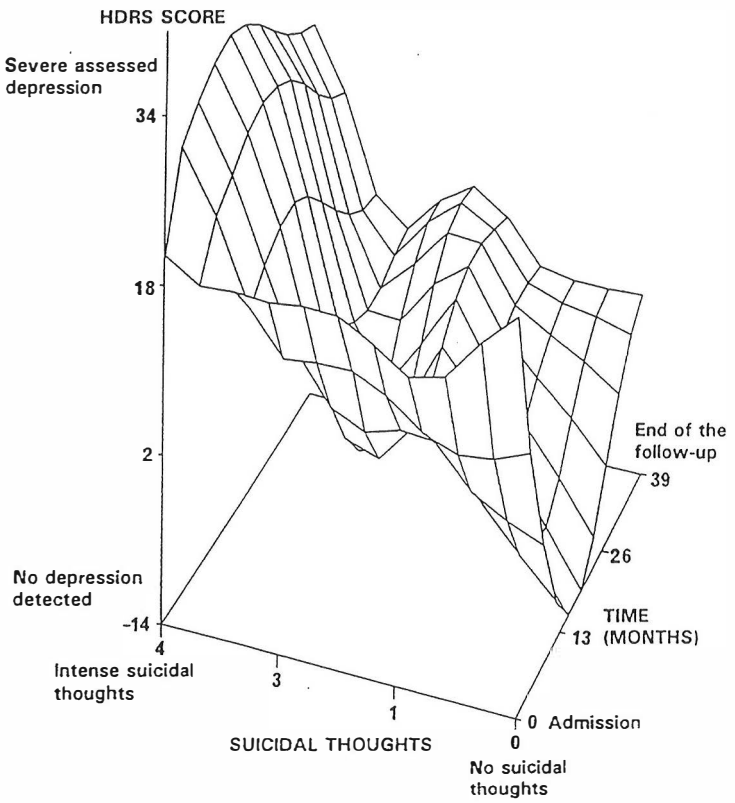

Figure 6 Suicidal thoughts and HDRS scores as functions of time during follow-up

6.5.4 Discussion (of Study IV and some aspects of general management)

The results in Study III prompted examination of various topics in greater detail. These topics included effects of somatic comorbidity on treatment outcome, the decrease in percentage of patients capable of for work during follow-up, and factors underlying suicidality.

In the study ward, 79% of patients were found to suffer concomitantly from mental and physical illness, 17% from serious physical illness. The ages of the patients varied between 20 and 59 years (mean 40 years, median 41 years). It is obvious, even without accurate statistics of overall physical morbidity in relation to this age group, that the incidence of serious illness threatening vitality was greater than in the general population. Physical illness was markedly commoner in men than in women.

In the study sample, symptoms in those with less serious physical illness were of kinds often considered psychosomatic (e.g. chronic infection, pain, fibromyalgia, asthma). Hartocollis (1977) and Kernberg et al. (1989) have commented that somatization in the borderline patient is often an equivalent of acting out. Intolerance of psychic conflict and pain may take the form of elimination of such conflict through action (acting out), or symbolic transfer of the conflict into the realm of the physical and biological (Green, 1986). Most patients with ego weakness, that is those with borderline conditions, quickly transform mental conflict into acting out or somatization (Kernberg, et al. 1989).

It is possible that in patients with minor physical complaints physical symptoms, as one form of psychic resistance, after initial alleviation started to bind the anxiety associated with mental conflict. Mental processing of the conflict, and consequent alleviation of anxiety and depressive symptoms, were not therefore achieved, or remained incomplete after an acute phase. In the light of the results, physical comorbidity, exhibited as psychosomatic symptoms or somatization associated with borderline disorder, may be problematic in borderline patients as regards psychiatric treatment outcome. The significance of the problem is highlighted by the high prevalence of mild somatic illness observed in this sample.

Patients with serious physical illnesses were less depressed and anxious on admission than the other patients. The difference was particularly marked as regards subjective symptoms (BDI). These increased at the beginning of inpatient treatment and subsequently returned to pretreatment levels. In these patients the overall change during the study period was less than in the other groups. Results were similar in connection with the symptom check-list. Patients suffering from serious physical illness reported subjective mental symptoms less frequently than other patients at the beginning of treatment but differences subsequently disappeared. Such patients were less satisfied with treatment outcomes than other patients.

In patients with serious, life-threatening illness, pain and the threat of death could be expected to be sources of constant anxiety. However, at baseline, degree of anxiety, as assessed using the BDI and HDRS, was lower in such patients than in other patients. They also had had fewer preceding contacts with psychiatric treatment organizations than patients in other groups. The new situation experienced in the ward community increased subjective anxiety and depression. There was little change in symptoms throughout the whole study period. It is possible that physical illness, in the service of resistance, bound subjective anxiety in these patients. However, it is more likely that the serious illness tied down much psychic energy, leaving insufficient energy for psychic work and healing, and that alleviation of symptoms was therefore less in such patients than in others. Nevertheless, they undoubtedly need help, because of the additional burden imposed by their physical illness.

The results of the study by Schubert et al. (1995), described above, indicate that physical illness was associated with increased LOS in depressed psychiatric patients but not in patients in other specific diagnostic groups. The authors suggested that this observation could relate (1) to depressive physical symptoms masking physical pathology; (2) to decreased patient ability to report because of

depressive preoccupation; (3) to decreased patient motivation towards treatment compliance, because of feelings of hopelessness; and (4) to decreased use of therapeutic support services. Similarly, in the study reported here, it was not possible to draw conclusions about causal relationships, or the influence of intervening variables on correlations. Standardization for possible intervening variables, such as age or psychiatric diagnosis, would have been needed. It was not possible because of the small sizes of the groups compared. Similarly, certain trends observed, such as systematic differences in the use on psychiatric outpatient and hospital services, remain to be established in future studies.

The courses and outcomes of treatment in borderline level patients with physical symptoms seeking ward treatment differed from those in physically healthy patients. This result suggests that studies on the courses of lives of adult borderline patients should also cover illness diagnosed by a physician and subjective somatic symptoms. Severity of physical illness should be assessed and data concerning treatment collected in follow-up studies, otherwise the picture of borderline inpatients, often middle-aged and suffering from multiple symptoms, and of changes in their life situations, is likely to be unduly limited.

The need to investigate specific problems of borderline patients exhibiting physical symptoms does not seem to be transient. In 1995, the mean age of patients treated in the study ward was, during certain periods, roughly 10 years higher than during the study year 1989 -1990. In 1995, the incidences of physical illnesses, accidents and postoperative complications among the patients were markedly higher than during the year of follow-up

Although symptoms of anxiety and depression decreased, on the basis of the measures used in the study, the susceptibility of patients to self-destructive behaviour remained high. It is known that incidences of suicide and attempted suicide are high in borderline patients, as they are in all psychiatric inpatients. It was not possible to estimate the incidence of attempted suicide before inpatient treatment in the study sample. The effect of inpatient treatment on patients' abilities to control suicidal impulses could not therefore be assessed. It is possible that the incidence of suicide attempts would have been higher without inpatient treatment. However, the results allow the following conclusions to be drawn.

In the study reported here, patients who attempted suicide were lonelier, and tended to consume more alcohol, than non-suicidal fellow patients. They were more often rehospitalized, partly because of attempted suicide, than non-suicidal fellow patients, and used psychiatric and other health services more often than non-suicidal fellow patients. In these patients, symptoms of anxiety and depression remained marked despite treatment. Their outpatient treatment was less consistent and less regular than the treatment of non-suicidal patients. On the whole, suicidal patients were more difficult to reach, during and after inpatient treatment, than the fellow-patients. Many of these observations correspond to those reported in the literature regarding psychosocial factors predisposing to suicidality (see e.g. Saarinen 1995).

In the study reported here, patients who had attempted suicide reported suffering from depression and suicidal thoughts at the beginning of inpatient treatment less frequently than non-suicidal patients. However, by the end of

treatment, and during follow-up, they reported suffering from self-destructive thoughts more often than the other patients. In addition to reflecting an increase in subjective depression, this could reflect a greater ability to perceive personal moods and impulses. However, the patients concerned reported less often than other patients that they had benefited from treatment. This could also reflect, in a more general sense, the internal conflict of borderline patients seeking help for their symptoms and problems, including control of their self-destructive impulses.

The borderline patient, like a child during normal development before object-constancy, experiences a functional object's services as self-evident and, when they fail, the subject's immediate response is one of narcissistic rage or panic (Tähkä 1993). According to Kernberg (e.g. 1975) and Tähkä (1993) it is a characteristic of borderline patients that preservation of self-experience depends on the retained omnipotence of the self-image. The earlier the developmental arrest, the more pronounced the patient's primitive ambivalence and low frustration tolerance in relation to the therapist (Tähkä 1993), and to the staff or treatment organization in general (Kernberg 1975). Frequent suicide attempts, or employment of threats of suicide may be an effort to control the environment, including the therapist (Kernberg 1975).

This ambivalence, involving fluctuation between a need for help and omnipotence, was also characteristic of the behaviour of self-destructive patients in the study reported here. The consequences can be described, in simplified fashion, as follows. Patients who attempted suicide during the follow-up period often attended for treatment because of psychosocial chaos, not fully aware of their depression. They had difficulty in adjusting to treatment, and to a psychotherapeutic relationship, probably because of their striving for omnipotence and control. During treatment, awareness of depressed aspects of self increased but they were dissatisfied with their situation and treatment, and tended to continue to live somewhat lonely and socially unstable lives.

The ability of health care professionals to identify self-destructive patients, which is sometimes insufficient, has recently been discussed (see e.g. Saarinen 1995). In the study reported here, self-destructive patients were identified fairly well when the suicidality item of the HDRS was used as a criterion. However, awareness by ward staff of a patient's suicidality did not protect patients from realization of their impulses. The study reported here does not include information about readiness to identify self-destructiveness in those who provided treatment to patients after inpatient treatment.

The relationship between certain subjective symptoms reported by patients and depression as assessed by the physician, as a function of time, was examined using growth-curve analysis. Sample size and infrequency of measurements make it difficult to generalize from the results. However, as far as suicidality is concerned, the results confirm the accuracy of the picture of the life situation of a borderline patient outlined above. Patients with the most severe suicidal tendencies experienced least relief of anxiety symptoms throughout the follow-up. If suicidality in borderline patients is associated with attempts at omnipotence, and control of psychotherapy and the therapist, as suggested by Kernberg, the results of the growth-curve analysis become understandable from

a psychodynamic point of view. Because of the perceived omnipotence characteristic of borderline disorders, the patients suffering from the most severe symptoms and, probably, from the most severe personality structure disorders, found it most difficult to seek and accept help.

Growth-curve analysis results showed clearly that changes in the sample were not linear as a function of time. There were marked variations. Identification of such variations is particularly important in clinical work. It helps treatment teams identify patient groups requiring special attention. In the study reported here, the results of growth-curve analysis demonstrated that the most positive total outcome was associated with a combination of mild subjective symptoms and depression assessed as mild at the beginning of treatment. The results also demonstrated the challenge posed by treatment of suicidal patients.

On the basis of experience gained in this study, use of methods such as time-series analysis of results is to be recommended. In addition to mean values and linear correlations, information about individual variations helps bridge the gap generally perceptible between studies aiming to accumulate quantitative results and clinical decision-making in relation to individual patients.

7 SUMMARY AND CONCLUSIONS

7.1 Study milieu

Over the past two decades in Finland, treatment of mental disorders has consistently moved towards outpatient methods. The number of beds in mental hospitals reached a peak of more than 19,000 in the early 1970s (Achté, Ollikainen, Rantanen, & Sihvo, 1973). In a country of about 5 million inhabitants, this represents a very high hospitalization rate for mental disorders. A change in the dominant role of hospital treatment was, with good reason, one of the main goals of changes in legislation (Mielenterveyslaki, 1990) and other measures taken by the authorities in the 1980s. Direct goals included lower hospitalization rates, shorter treatment periods, a decrease in the number of hospitalizations without the patient's consent, and a more effective outpatient treatment organization. This resulted, e.g. in a decrease of number of hospital beds, to about 6,000, in the middle of the 1990s.

Everyone welcomes most of the changes accomplished during past 20 years, including the decreased hospitalization rates and treatment periods, better staff/patient ratios in hospitals, psychotherapeutically- oriented approaches with better knowledge of methods, etc. Especially welcome is the rapid disappearance of some undesirable phenomena, e.g. very long, in some cases life-long, hospital stays, resulting in loss of social contacts and abilities needed for those contacts, in short care resulting in institutionalization of the patient. Reductions in resources and psychiatric-hospital costs were followed by transfer of some resources to outpatient treatment. However, the adequacy of these transfers has been questioned (Salokangas, 1994).

The development described is analogous to but behind that in the USA, as described by Kernberg (1984). In the USA the number of resident patients in state mental hospitals decreased from a high of 559,000 in 1955 to 193,000 in 1976. The trend was reinforced by the rise of community mental-health centres throughout the country. Another reason for this development, according to Kernberg

(1984), was that in many cases mental-health commissioners enthusiastically adopted the philosophy of dehospitalization because it meant a significant decrease in their system's inpatient population and, therefore in their financial burden. Kernberg calls the result "a strange alliance" of economy-minded administrators and idealistic community-minded mental-health professionals. Similarities as regards reasons for developments in Finland can be observed.

Although there is a general trend to outpatient treatment, long-term hospitalization will be indicated for two groups of patients in future (Kernberg, 1984). These are patients with chronic regression and frequent and prolonged psychotic episodes, and patients with severe character pathology and borderline conditions. For the latter group, therapeutic community models are particularly indicated. In the USA, reductions in psychiatric-hospital costs have also not led to any increase in outpatient treatment.

These are some characteristics of the milieu in which the ward described here so far has functioned as a psychotherapeutically oriented community for borderline level inpatients. Inpatient treatment of personality disorders is acknowledged worldwide to be a very demanding and still understudied subject. These factors motivated conduct of the study described here.

7.2 Methods

According to Cournos (1987) a hospital treatment outcome study should, like psychotherapy studies, seek to provide answers to the questions of what specific therapeutic interventions produce specific changes in specific patients under specific conditions? With regard to borderline disorders, answers to these questions have been sought within two methodological traditions. One is a psychodynamic, qualitatively oriented clinical tradition aiming at subtle understanding of individual patients and development of psychotherapeutic strategies appropriate in relation to the patient group concerned. Therapeutic principles, e.g. relating to ward treatment, are deduced from this understanding. The other tradition is of process and outcome research relying on observable, quantifiable variables and minimal theoretical assumptions. Knowledge about, e.g., the clinical course of treatment and about resources needed for it are the result. Both traditions have been described above.

Regardless of their frames of reference, studies of the outcome of treatment of mental disorder need to address two questions relevant to all investigations of the results of treatment, namely, to what extent can observations made during clinical work be generalized, and can clinically significant observations be made during investigations that meet requirements relating to reproducibility and measurability? In the case of psychotherapeutically-oriented treatment of mental disorders, the multifaceted nature of psychotherapeutic interactions leads to many

difficult methodological problems[3]. The situation has been formulated by Spence (1994) as follows: "The research findings we have every reason to believe (because they come from studies whose methodology is flawless) unfortunately tend to be unrelated to issues of deep clinical significance." Investigators relying on clinical experience may, to quote Spence, end up in a situation like that faced by astronomers in the middle ages. Observations made daily with the naked eye confirmed the Ptolemaic system. Observations not supporting this theory were ignored, or explained away.

The challenges of constructing a methodologically-valid outcome study on the basis of quantified measures are hard to meet. Pfeiffer (1990), in a review of 70 follow-up studies of adult inpatient psychiatric treatment published since 1975, reported substantial methodological shortcomings. Aware of inevitable limitations on efforts to create an ideal study design, Pfeiffer offered suggestions for future investigations. He felt that a good outcome study on inpatient treatment should be organized in accordance with the recommendations listed below:

1. *Detailed description of the patient population.* To allow generalization from the results of a single investigation, reports are needed on patient histories, demographic characteristics, type and severity of problems that led to hospitalization, and levels of intrapsychic and psychosocial functioning.

2. *Description of treatment.* Like Cournos, Pfeiffer emphasizes that there is no need for more outcome studies that simply validate in broad fashion the general efficacy of psychiatric hospitalization. It is investigations that examine the essential components of change and patient-treatment interactions that are needed.

3. *Research design.* Although it is often impractical to identify or incorporate a true control group, studies of treatment outcome may benefit from adoption of alternative, less traditional research designs, e.g. involving time-series.

4. *An array of predictor and outcome measures.* A wide range of predictor and outcome variables should be used. Infrequently investigated variables should be incorporated. Investigators should incorporate state-of-the-art, previously published and tested instruments in their studies, rather than using only scales developed in-house.

5. *A valid methodology in general.* Sample sizes should be adequate. There should be at least four measurements of outcome variables, three during treatment and one during follow-up. The reliability and validity of outcome variables should be analysed. Assessments should be made "blind". Effects of drop-outs should be defined and analysed.

Review of previous outcome studies of BPD inpatient treatment (Chapter 3) reveals that in such studies it has been possible to take account of only a limited

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[3] Freud believed in observation but did not consider experimental verification necessary: "28.2.1934. ... My dear Sir, I have examined your experimental studies for verification of psychoanalytic propositions with interest. I cannot put much value on such confirmation because the abundance of reliable observations on which these propositions rest makes them independent of experimental verification. Still, it cannot do harm. Sincerely yours, Freud."
A letter from Sigmund Freud responding to Dr. Saul Rosenzweig, Cambridge, Mass., USA, who had sent him several reprints of experimental investigations of psychoanalytic propositions (Talley, Strupp, & Buttler, 1994, p. XIX).

number of optimum methodological starting points. Investigators had to make compromises dictated by the emphasis of the study and the nature of the problems studied. Virtually no realistic choice can be wholly satisfactory.

In the previous studies referred to in Chapter 3, outcomes of treatment of borderline inpatients were described primarily in the light of external symptoms and variables reflecting psychosocial situations. The study designs did not take account of psychological defence mechanisms, internal object representations or any similar psychodynamic variable. In only one study (Hull et al., 1993) were the aims different in this respect. In the latter study, operational measures were developed for the three structural criteria of borderline personality organization described by Kernberg. Descriptions of general principles of the treatment and individual treatment programmes were limited. The studies described in Chapter 3 provide little information about patient motivation, frames of reference or training of therapists, pharmacological treatment or subjective experiences of patients. They therefore give few clues about planning of treatment, in particular, its psychotherapeutic element. Only if the nature of the therapeutic intervention is taken into account in an empirical study design can there be disengagement from the tendency to consider all psychiatric inpatient treatment as similar, which was described by Cournos (1987) and Pfeiffer (1990).

The aim of the study reported here was to monitor the clinical course, longitudinal outcomes of treatment, and factors associated with good outcomes in a psychiatric ward in Finland specializing in the psychodynamically oriented treatment of borderline patients. With regard to the optimal methodology suggested by Pfeiffer (1991) the following remarks concerning the study reported here may be made.

The results of the study reported here are based on prospective follow-up of borderline patients admitted to and remaining in a single ward. Reflecting Finnish health- care policy, the financial situations and social backgrounds of patients had little effect on the hospitalization of patients. In this respect, the sample in the present study is more representative in relation to the local population, and the results give a more representative picture of the course of treatment of the average borderline patient, than results of previous studies in the USA, which were performed mainly in private psychiatric hospitals. The milieu of the present study is more like that described by Mehlum et al. (1991) in Norway.

In the study reported here, the psychological nature of the problems characteristic of the patients could be described in terms of disorders of ego development, namely lack of object constancy and a tendency to use split-type defence mechanisms. In the study ward, treatment in general but especially the psychotherapeutic approach were developed to meet the specific problems. It was therefore possible to describe the general principles and nature of the therapeutic intervention in the study ward, but no measures relating to its patient-specific variation were included in the study design.

Key approaches in the study ward were and still are individual psychotherapy, group psychotherapy and community therapy. The frame of reference of treatment is preponderantly psychodynamic. A weekly programme based on psy-

chotherapeutic treatment methods is central to the activities of the study ward. All patients are expected to agree to follow the weekly programme, and to participate in related treatments for as long as they continue therapy. The staff of the study ward expects the outcome of treatment to be reflected not only in psychosocial functioning but also in factors maintaining the internal mental balance of the patient. Further points worth mentioning are that treatment periods are agreed with patients, there is an intention to continue or start psychotherapeutic treatment after a decrease in acute symptoms, and staff are systematically trained how to acknowledge and deal with phenomena related to split-type of defence mechanisms. Treatment based on such principles is not common in at present Finland.

The study did not include a comparison group. The patients served as their own controls, as in most previous studies.

The nature of mental disorder was assessed on the basis of the DSM-III-R classification. Assessments were made by the attending physician and a senior psychiatrist during inpatient treatment, and by an interviewing psychiatrist during follow-up. Arrangements for verification of reliability of diagnosis were more limited than in some previous outcome studies, in which it was possible to assess inter-rater reliability.

As mentioned above, a description of the psychodynamic natures of problems of patients included in the study was given. The level of intrapsychic functioning of patients is important with regard to the aims and methods of treatment used in the study ward. Unfortunately, no operational Finnish measures of patient-specific variations in level of intrapsychic functioning were available.

In the study reported here, changes in anxiety and depressive symptoms were assessed three to four times. Effects of drop-outs were assessed in connection with follow-up measurements. Generally applied outcome measures (HDRS, BDI) were used, employing scales developed for this study. The HDRS is known to be applicable to measurement of changes in depressive states during treatment, and for prediction of response to treatment (O'Brien & Glaudin, 1988). The six components of depression covered by the Scale (Bech, 1990) reflect main symptoms in a typical patient in the study ward. Unfortunately, data about Finnish norms and cut-off points is not plentiful. In the study reported here, Cronbach's alpha coefficient, describing the internal consistency of the HDRS, varied considerably in relation to different measurements. Item analysis showed that one of the Finnish HDRS items in particular did not work consistently. Poor functioning of one item in a 21-item scale in unlikely to have affected the results of the study to any great degree. However, the result shows that attention must always be paid to the psychometric properties of even well-known scales when the latter are used in relation to selected populations or to other cultures. The results suggest that attention also need to be paid to factorial structures of rating scales in different diagnostic categories or levels of psychopathology. Most Finnish clinical reports have been published without evaluation of internal consistency, or other forms of reliability of the scales used, e.g. of inter-observer reliability. Although possible inter-observer reliability was not controlled in the study reported here, no factors resulting in systematic bias were detected.

Changes in subjects in the study reported here were analysed not only using conventional statistical methods but by means of growth-curve analysis. The results suggest that statistical methods that take account of nonlinear changes are applicable to treatment-outcome studies. Such methods give information about the individual variation of a kind needed by clinical practitioners but often lacking in analyses based on correlations. To enable use of such statistical procedures, it is important to pay attention to the properties of the measures used. Only measures with adequate scaling and psychometric properties allow simultaneous observation of variations in relation to time with specific statistical procedures.

To summarize, the strengths of the present study are its prospective follow-up design, its group of patients unselected as regards socio-economic background variables, the homogeneity of the psychological problems of the patients admitted to the study ward, the uniformity and specificity of the treatment principles adopted, and the fact that the therapeutic intervention was planned to meet the psychological natures of the patients treated. A shortcoming is a lack of a comparison group, rare in this kind of study, and its lack of variables describing the participation of patients in treatment, or individual variation in personality structures of the patients.

7.3 Results

In the study reported here, it was found that the patients had had numerous treatment contacts before admission to the study ward but most had been irregular and short-lived. Willingness to seek help in a crisis situation but a tendency to refuse regularity and stability in relation to subsequent contact are characteristic of borderline personalities (see e.g. Hartocollis, 1980). In all cases, the help offered had been insufficient, and patients had sought help via ward treatment.

Symptoms were alleviated during inpatient treatment, on the basis of almost all measures. The most marked change was perceived in HDRS scores, where a change from major depression to minor depression took place, according to the cut-off points suggested by Hamilton (1967). The change in BDI was less marked but nevertheless statistically significant, and took place within the range of moderate depression, according to the limits suggested by Beck and Beamesderfer (1974). Several independent measures, including assessments of staff and patients, gave consistent results, but improvement was assessed more modestly by staff than by patients. Changes found in patients' orientation towards current personal objects, or object representations connected with their childhoods, were small, and not statistically significant, except as regards the therapist outside the hospital setting. The planned therapist for outpatient treatment became very significant in relation to expectations of the patients during ward treatment.

The changes in HDRS and BDI scores reflect, to some extent, changes in affect dysregulation. According to Gunderson (1994), this is one of the typical predispositions, along with impulse dysregulation, in the borderline syndrome. The decreasing scores during inpatient treatment reflect better emotional

regulation after ward treatment, probably resulting in better general social adaptation. The significance given to the therapists by the patients was a desired observation, in relation to the aims of treatment in the study word. One of the aims is to give a positive, in many cases first experience of a psychotherapeutic relationship to the patient No other signs of more profound changes in object representation could be demonstrated using the methods used in the study reported here, as previously indicated. Such a result would have been very favourable, having regard to the relatively short average treatment period.

During inpatient treatment some patients benefited more from treatment than others. A good outcome was associated with suicidality, and tension expressed by the patient. An active and positive attitude towards symptoms and treatment (e.g. positive expectations about effects of medication) predicted a good outcome. The more passive or projective attitudes towards treatment expressed by a patient (e.g. suspicions about harmful effects of medication, desire for the beneficial effects of rest), the less likely he or she was to benefit from treatment. Standard background variables, such as age, sex, marital status, medical diagnosis, capability for work before admission, and previous psychiatric treatment or psychotherapeutic experience did not differentiate between good and poor outcomes in this population. Treatment was most beneficial in patients in whom benzodiazepine medication was considered necessary. This result is similar to that obtained using discriminant analysis: treatment outcome was good in patients who expressed subjective tension on admission. It may be that the patients on benzodiazepine medication were suffering from somewhat less severe disorders than the others, and that their abilities to benefit from treatment were in general better than those of the others.

The findings in the study reported here are consistent with the statement by Stone (1993) that the treatment outcome in all personality disorders depends in part on the balance between maladaptive and adaptive traits. Candour and introspectiveness are examples of positive traits. Related to introspectiveness is willingness to accept responsibility for contributing to creation of interpersonal difficulties. The opposite trait is externalization, where all blame is put on individuals other than oneself (Stone 1993). Stone's work provides a psychodynamic explanation of the observations described here, which at first sight would seem paradoxical.

In addition, preservation of a good representation of the ward community, therapist and staff seemed to be a preconditions for a good outcome. If it was possible to the patient to experience himself as a good patient receiving good treatment from good staff, he or she was likely to overcome the crisis underlying the need for inpatient treatment. Hope for help coming from outside, from reliable, constant, good objects, gave the most effective psychological support to patients in building up their collapsed psychosocial situations. The results give at least indirect support to the psychotherapeutic principles suggested by Tähkä (1993). Preserving a good representation of an object is a prerequisite for further structuralization of the borderline patient.

In summary, in the first phase of the study, it was concluded that the best immediate results on the study ward were obtained in patients with mild dis-

orders, and that in crisis situations, non-psychotic patients might also benefit from psychiatric hospital treatment. A precondition is that the treatment is tailored to meet the special problems of the patient population admitted to such a ward.

At the end of hospitalization, further psychotherapeutic treatment on an outpatient basis was recommended for all discharged patients who, as a rule, expressed their agreement. On follow-up three years later, about two thirds of patients were found to have had some kind of therapeutic contact. A regular psychotherapeutic contact had been established by about one third of the former inpatients. Those who had had regular outpatient treatment contact before inpatient treatment continued outpatient treatment on a regular basis more often than those who had not had a regular treatment contact before inpatient treatment. Positive correlations were observed between regularity of outpatient treatment and variables reflecting greater need for therapy, such as numbers of repeated hospitalizations, numbers of suicide attempts, and incapacity for work. Those who managed well seemed somewhat more prone to end outpatient treatment contacts than those who managed poorly.

The discrepancy between subjective need for help and short-lived motivation to seek such help, characteristic of patients suffering from personality disorders, probably explains partly the relatively low rate of patients in regular psychotherapeutic relationship at the follow-up. Another important explanation for the discrepancy between planned and on-going treatments may be found in lack of resources. This means lack of financial resources as well as lack of trained personnel for outpatient treatment. Unfortunately this kind of frustrations were not charted in the study reported here.

At the time of the follow-up interview, symptoms of depression, anxiety and sleep disturbance were at the same level as at the end of treatment, as assessed using the HDRS and BDI.

The results of the follow-up study showed that although there were on average positive and permanent changes in symptoms, some patients suffered continually from serious problems, of which suicidality was the most marked. Self-destructive patients formed a group that could be helped only to a limited extent, first in the ward, subsequently via the psychiatric-outpatient care system. The difficulty in helping such patients can be attributed to their typical ambivalence, their self-perceived omnipotence and their low frustration tolerance. The abilities of patients with borderline personality organization to become conscious of a need for help are limited. Becoming aware of such need can easily arouse a fear of dependence and, as a result, attempts at omnipotent independence. In wards treating such severely disturbed, depressed and suicidal patients, special attention needs to be paid to development of the interactive skills described by Tähkä (1993) as "empathic description".

During follow-up, some new variables affecting the outcome of treatment were identified. Patients incapable of work seemed to form a group at risk of social marginalization, in consequence of their mental and social problems, in this sample. Physical illness was also common in borderline patients who sought inpatient treatment. Physical health status was also found to differentiate between patients as regards development of symptoms. Patients with physical complaints

benefited less from inpatient treatment than other patients. This was attributed to the psychodynamic contents of borderline disorder. There have been suggestions in the literature that the background to physical symptoms is intolerance of experiencing psychic conflict, and a striving to eliminate such conflict through acting out, or symbolic transfer into the physical and biological realms. Physical symptoms need to be taken into account in selecting variables in future studies. Borderline patients referred for and willing to receive inpatient treatment are often middle-aged. In this age group, physical illness is also common in the normal population.

In summary, the results during follow-up show that the better affect regulation achieved during inpatient treatment was permanent, on average. Changes in general functioning or object relations were not detectable, or were minimal, at least using the tools employed in the study reported here. On the other hand, no signs of continuous regression or interrupts in social lives of the patients, due to hospitalization, could be detected. Some differentiation between patient groups could be made, as regards treatment outcome.

The follow-up period, after the ward treatment, was only 3.4 years on average. Previous studies (McGlashan, 1984; 1987; Stone et al., 1987a; b) show that follow-up periods of 10 to 20 years can result in valuable observations about the lives of borderline patients after hospital treatment. However, drop-out rates, among other factors, limit the opportunities for use of such prospective designs. This may also prove to be the case with this sample.

In Finland, virtually all psychiatric hospital treatment is organized in the public sector. The challenge of treating psychiatric inpatients as a heterogeneous groups with heterogeneous needs, claimed by Kernberg (1984) and Cournos (1987) and described above, must therefore also be met in the public sector. Patients suffering from borderline disorders are one of those patient groups with specific needs, requiring specialized psychotherapeutic skills and resources for the treatment to be successful.

Projects with the aim of developing new methods for the treatment of serious mental disorders in Finland were undertaken in the 1980s and 1990s. Some (e.g. Alanen et al. 1986; 1991) have resulted in changes in modes of intervention and structures of organizations, others in deeper psychodynamic understanding of psychotherapeutic relationships with schizophrenic patients (Aaltonen & Räkköläinen, 1994). Health-care organizations in Finland should also offer facilities for inpatient treatment of borderline disorders, training in special skills needed, and development of new therapeutic strategies.

8 YHTEENVETO: RAJATILAPOTILAIDEN OSASTOHOIDON TULOKSELLISUUS KOLMEN VUODEN SEURANTATUTKIMUKSESSA KYS:N PSYKIATRIAN KLINIKASSA

Rajatilahäiriöt ja sitä lähellä olevat persoonallisuushäiriöt muodostavat potilasryhmän, jotka jossakin elämän vaiheessa saattavat tarvita psykiatrista sairaalahoitoa. Akuutti osastohoidon tarve esiintyy yleensä tilanteessa, jossa potilas kokee voimakasta ahdistusta, paniikkia tai tyhjyyden tunnetta, on päätynyt itsemurhayritykseen tai hänen toimintansa uhkaa johtaa hänet yhä kasvaviin vaikeuksiin sosiaalisessa yhteisössään. Oireet saattaa laukaista esimerkiksi perhe- tai työelämään tai somaattiseen terveyteen liittyvä kriisi tai myös hitaasti kasvavien vaikeuksien kierre. Usein taustalla on koettu tai todellinen menetys tai menetyksen uhka. Oireiden lievityksen ohella osastohoidolla voi olla myös pitkäjänteisempiä tavoitteita. Osalle rajatilapotilaista vain osastohoito voi tarjoa riittävän järjestetyt ja turvalliset puitteet psykoterapiasuhteen aloittamiselle. Osastoyhteisö muodostaa sopivan kentän potilaan interpersoonallisten vaikeuksien ilmitulolle, tunnistamiselle ja siten niiden käsittelylle.

Rajatilatasoisesta persoonallisuuden häiriöstä kärsivien potilaiden sairaalahoidossa pidetään soveltuvana mallia, jossa hoito perustuu osaston toiminnan selkeälle psykologiselle rakenteelle sekä selkeälle roolirakenteelle. Hoitohenkilökunnan tulee olla tottunut tunnistamaan yhteisön vuorovaikutustilanteissa ns. splitin sukuisten puolustusmekanismien esiintyminen sekä kykenevä korjaamaan tai ehkäisemään siitä seuraavia häiriöitä yhteisön jäsenten vuorovaikutuksessa ja mielikuvissa. Splitin sukuisia puolustusmekanismeja (primitiivinen idealisointi ja mitätöinti, kieltäminen ja projektio) pidetään identiteettihäiriön ja realiteettitestauksen säilymisen ohella persoonallisuuden rajatilaorganisaation (Kernberg et al., 1994) keskeisinä tunnusmerkkeinä.

Avoin ja tutkiva ilmapiiri edistää hoitoa rajatilapotilaita hoitavassa yhteisössä. Kaikessa osastolla tapahtuvassa vuorovaikutuksessa tulee pitää tavoitteena hoidollisia päämääriä. Yhteisön selkeän psykologisen rakenteen sekä henkilökunnan tavan toimia ja ratkaista konfliktitilanteita tulisi tarjota potilaille mahdollisuus valikoiviin samaistuksiin. Tällaisen prosessin edellytyksenä on, että ilmapiiri on riittävän empaattinen ja turvallinen samaistusten syntymiselle (Tähkä, 1979; 1993). Toistuessaan tämä voi johtaa persoonallisuuden keskeneräisiksi jääneiden rakenteiden lujittumiseen ja kehittyneempien psyykkisten puolustusmekanismien käyttöön. Toisaalta on korostettu splitin ilmentymien ehkäisemisen merkitystä niin psykoterapiasuhteessa kuin osastoyhteisön vuorovaikutuksessa, koska ne voivat sinällään johtaa regressiiviseen kehitykseen, egon rakenteiden sekä integroituneiden ja realiteettiin pohjautuvien itse- ja objektimielikuvien heikkenemiseen (Kernberg, 1984).

Kuopion yliopistollisen sairaalan (Kys) Psykiatrian klinikan avo-osasto on vuodesta 1980 alkaen pyrkinyt kehittämään rajatilapotilaiden osastohoitoon soveltuvia menetelmiä yllä kuvattujen periaatteiden mukaisesti. Hoito osastolla perustuu aina potilaan kanssa tehtävään sopimukseen. Potilaita voidaan ottaa hoitoon koko Yliopistosairaalan vastuualueelta.

Tässä kuvatun tutkimuksen tavoitteena oli tutkia osastohoidon vaikutusta potilaiden ahdistus- ja masennusoireisiin sekä näiden muutosten pysyvyyttä, selvittää hyvään hoitotulokseen liittyviä tekijöitä sekä tarkastella yleisemmin hoidon tulostutkimuksen menetelmiin liittyä ongelmia.

Kaikki vuonna 1989 hoitonsa tutkimusosastolla aloittaneet 84 potilasta muodostivat tutkimuksen perusaineiston. Lopulliseen aineistoon otettiin kuitenkin vain yli kolme viikkoa kestäneet hoidot, joita oli yhteensä 66. Potilaista koottiin taustatiedot sekä arvioitiin heidän oireistoaan osastohoidon alussa, keskivaiheilla ja päättyessä käyttäen useita arviointiasteikoita, mm. Hamiltonin masennusasteikkoa sekä Beckin masennusasteikkoa. Samat arvioinnit toistettiin seurantatutkimuksessa kolme vuotta myöhemmin, jolloin potilaita pyydettiin kirjeellä saapumaan tutkimukseen Kys:n psykiatrian poliklinikalle, jossa psykiatrian erikoislääkäri haastatteli heitä. Edellä mainitut 66 hoitoa kohdistuivat 62 potilaaseen. Näistä kaksi oli keskimäärin 3,4 vuoden mittaisen seurantajakson aikana kuollut, yksi tapaturmaisesti ja yksi oli tehnyt itsemurhan. Kuudestakymmenestä elossa olleesta potilaasta 42 (70%) tavoitettiin ja suostui seurantatutkimukseen.

Potilaiden ahdistus- ja masennusoireet lievittyivät osastohoidon aikana tilastollisesti merkitsevällä tavalla lähes kaikkien käytettyjen mittareiden mukaan arvioituna. Selkein muutos tapahtui Hamiltonin asteikon perusteella arvioituna. Sen mukaan masennus lievittyi keskimäärin kliinisesti vakavasta lieväasteiseksi. Muilla asteikoilla muutos oli tilastollisesti merkitsevä mutta ei kliinisesti yhtä selkeä. Potilaiden ihmissuhteissa ja niihin liittyvissä mielikuvissa tapahtui niukasti muutoksia, paitsi että avohoidon terapeutin merkitys korostui potilaiden mielessä hoidon loppupuolella.

Potilaan osastohoidon alussa ilmaisema aktiivinen ja myönteinen asenne oireiden lievittymistä ja hoitoa kohtaan ennakoi hyvää hoitotulosta, passiivinen ja projektiivinen asenne huonoa tulosta. Esimerkkejä jälkimmäisestä olivat mm.

pelko lääkehoidon vahingollisesta vaikutuksesta sekä toive levon parantavasta vaikutuksesta. Jännitysoireita valittaneet potilaat ja itsetuhoisat ajatuksensa paljastavat potilaat hyötyivät hoidosta muita enemmän. Tavanomaiset taustamuuttujat tai diagnoosi eivät ennustaneet osastohoidon tulosta.

Osastohoidon välittömien tulosten perusteella oli pääteltävissä, että otoksen potilaista hoidosta hyötyivät eniten keskimääräistä lievemmin häiriintyneet potilaat, joiden hoito jatkui pitempään kuin oireiston lievittyminen olisi välttämättä vaatinut. Muutokset Hamiltonin ja Beckin asteikolla kuvastavat osittain muutoksia affektien hallinnassa, ja tulosten perusteella arvioituna potilaat saavuttivat osastohoidon aikana aiempaa paremman psyykkisen tasapainon tässä suhteessa. Hoidosta hyötyivät enemmän potilaat, jotka ilmaisivat muita vähemmän projektiivisia asenteita ja muita useammin aktiivista otetta omaan hoitoonsa nähden. Tämä tulos on yhdensuuntainen kirjallisuudessa aiemmin esitetyn havainnon (Stone, 1993b) kanssa, jonka mukaan persoonallisuushäiriöpotilaiden psykoterapeuttisessa hoidossa avoimuus, suoruus ja kyky oman toiminnan ja mielen tarkasteluun, introspektioon, ovat positiivisia seikkoja. Samoin kyky nähdä ja hyväksyä oma osuus hoitoon johtaneen tilanteen kehittymisessä. Näiden vastakohta on taipumus sijoittaa itseä kohtaavien tapahtumien syyt itsen ulkopuolelle, siis taipumus eksternalisaatioon.

Osastohoidon päättyessä kaikille potilaille suositeltiin hoidon jatkamista avohoidossa. Kolme vuotta myöhemmin voitiin todeta että kahdella kolmasosalla oli seuranta-aikana ollut jonkinlainen hoitokontakti, mutta säännölliseksi arvioitava psykoterapeuttinen hoitosuhde oli vain kolmasosalla potilaista. Potilaiden ahdistus- ja masennusoireet olivat keskimäärin samalla tasolla kuin osastohoidon päättyessä käytettyjen asteikoiden, mm. Hamiltonin ja Beckin asteikoiden mukaan, eli hoitotulos oli tältä osin säilynynyt seurannan ajan. Myös potilaiden kokemat muut psyykkiset oireet olivat säilyneet keskimäärin uloskirjoitusvaiheen tasolla, lukuunottamatta itsetuhoisia ajatuksia. Näistä potilaat kertoivat seurantahaastattelussa kärsivänsä useamman kuin osastohoidon päättyessä. Osaston potilailla oli myös koko väestöön verrattuna runsaasti itsemurhayrityksiä. Seurannan aikana otos jakautui kahteen ryhmään: jatkuvasti työhön kykeneviin sekä pysyväisluonteisesti työkyvyttömiin. Pysyväisluonteisesti työkyvyttömät kärsivät sosiaalisen syrjäytymisen uhasta. Potilaat jotka mielenterveyden häiriön ohella kärsivät myös samanaikaisesta somaattisesta sairaudesta, hyötyivät keskimäärin muita vähemmän hoidosta, ainakin tämän tutkimuksen tulosmuuttujien osalta

Seurantavaiheessa saavutetun hoitotuloksen voitiin todeta säilyneen keskimäärin siis kohtalaisen hyvin. Kuitenkin osa potilaista kärsi jatkuvasti vakavista ongelmista, joista itsetuhoisat mielikuvat sekä seuranta-aikana tapahtuneet itsemurhayritykset sekä yksi itsemurha olivat ilmeisin merkki. Osastohoidon päättyessä jatkoa avohoidossa suositeltiin kaikille uloskirjoitetuille, mutta seurannan aikaan vain yhdellä kolmasosalla oli säännölliseksi arvioitava hoitosuhde avohoidossa. Suunnitellun, todennäköisesti tarpeellisen ja meneillään olevan hoidon välillä vallitsi siis epätasapaino. Tämän arvioitiin osittain voivan liittyä rajatilapotilaille ominaiseen taipumukseen ilmaista subjektiivinen avun tarve kriisin hetkellä voimakkaasti mutta luopua avun hakemisesta akuutin

oireilun ja hädän lievittyessä. Avun ja tuen tarpeesta tietoiseksi tuleminen merkitsee mm. riippuvaisuuden, toisten ihmisten, esimerkiksi terapeutin tarpeellisuuden tunnustamista. Tämä on kaikkivoipaisuuden mielikuviin, omnipotenssiin, taipuvaisille rajatilapotilaille usein hoitoon hakeutumisen ja siinä pysymisen kannalta vaikeasti ylitettävä kynnys.

Toinen mahdollinen selitys havaitulle epätasapainolle suunnitellun ja toteutuvan hoidon välillä saattaa liittyä hoitomahdollisuuksiin. Tutkimus ei anna tietoa siitä, kuinka moni potilaista oli jättänyt hakeutumatta hoitoon tai joutunut luopumaan siitä hoidon tarjonnan riittämättömyyden tai omien taloudellisten resurssiensa riittämättömyyden takia.

Seurantajakso oli keskimäärin 3,4 vuoden mittainen. Aiempien tutkimusten valossa tätä on pidettävän suhteellisen lyhyenä tarkastelujaksona, sillä monet merkittävät rajatilapotilaiden elämänkulkuun liittyvät mielenkiintoiset tekijät tulevat esille usein vasta 10 - 20 vuoden seurannoissa. Tällaisia seurantoja on toistaiseksi tehty vain ns. retrospektiivisten aineistojen puitteissa.

Kirjallisuudessa (esim. Kernberg, 1984; Cournos 1987) esitettyjen näkemysten mukaan yhteiskunnassa on vuosikymmenestä toiseen ollut havaittavissa taipumus kohdella mielenterveyspotilaita tasa-aineksisena ryhmänä ja tarjota kaikille samanlaisia palveluita ongelmien sisällöstä riippumatta, mitoittaen hoito lähinnä havaittavan oireilun perusteella. Suomessa käytännöllisesti katsoen kaikki mielenterveyden häiriöiden sairaalahoito on järjestetty julkisen sektorin puitteissa. Julkisten mielenterveyspalveluiden verkkoon tulisi myös tulevaisuudessa kuulua osastoyksiköitä, jotka erikoistuvat toiminnassaan ulkoisten oireilun taustalla olevan persoonallisuuden häiriön ja häiriölle ominaisten ratkaisuyritysten perusteella. Rajatilapotilaat ovat tulevaisuudessakin ryhmä, jotka osastohoitoon tullessaan tuovat osastolle välittömästi joukon tälle potilasryhmälle ominaisia tarpeita, toiveita ja konfliktin mahdollisuuksia, jotka ovat laadultaan täysin toisenlaisia kuin akuutisti psykoottisia tai skitsofreniapotilaita hoidettaessa esille nousevat ongelmat. Näiden tilanteiden tunnistaminen hallinta ja hoidollinen hyväksikäyttö (niiden tukahduttumisen tai sivuutuspyrkimysten sijasta) ovat onnistuneen rajatilapotilaan hoidon välttämättömiä edellytyksiä, johon parhaiten pystyy kokemuksen ja koulutuksen kautta erikoistunut työryhmä.

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APPENDIX I

Example of a patient's weekly program at the study ward

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
8-10					Keep-fit exercise		
10-12		Group psychotherapy	Art therapy	Psychotherapy hour	Community meeting	Planned weekend break (about 50% of patients) If not, e.g. family therapy hour possible Billiard-room open for the ward's patients Sports hall open	See Saturday
12-14	Community meeting				Planned weekend breaks begin		
14-16	Psychotherapy hour	Keep-fit exercise in sports hall		Group psychotherapy			
16-18							
18-20			Ward committee meeting				Planned weekend breaks end
20-24	Night shift begins at 9 p.m., that is,	one nurse present in the ward. Free social intercourse if fellow-patients not disturbed.	Tv and music room open till the end of Finnish programmes. Sky channel	watching not allowed at night			

APPENDIX II

Hamilton Depression Rating Scale with 21 items. Finnish version

Hamilton depressio asteikko

Hamilton depression scale

HAM

TUTKIMUS-	PÄIVÄMÄÄRÄ	POTILAAN
Numero [ ] Koodi [ ]	v kk pv [ ] [ ] [ ]	Nimi-kirjaimet [ ] Numero [ ]

Rasti aina se numero, joka parhaiten luonnehtii potilasta.

1. DEPRESSIO (surullinen, toivoton, avuton, mitätön) — 0 1 2 3 4
- 0 = Ei ole
- 1 = Kertoo olevansa kun kysytään
- 2 = Kertoo oma-aloitteisesti
- 3 = Käy ilmi ei-verbaalisesti (kasvonilmeet, asento, ääni, itkee helposti)
- 4 = Vain tämä mieliala käy ilmi spontaanissa verbaalisessa ja ei-verbaalisessa kommunikaatiossa

2. SYYLLISYYDENTUNNE — 0 1 2 3 4
- 0 = Ei ole
- 1 = Syyttää itseään, on pettänyt muita
- 2 = Syyllisyydentunne, pohtii virheitään ja syntisiä tekojaan
- 3 = Nykyinen sairaus on rangaistus. Harhaluuloja syyllisyydestä
- 4 = Kuulee syyttäviä ja tuomitsevia ääniä. Uhkaavia visuaalisia hallusinaatioita

3. ITSEMURHA — 0 1 2 3 4
- 0 = Ei halua
- 1 = Ei hyödytä elää
- 2 = Haluaisi olla kuollut tai ajattelee kuolemaansa
- 3 = Itsemurhasuunnitelmia tai liikkeitä
- 4 = Yrittää itsemurhaa (Vakavat yritykset: merkittävä AINA 4)

4. ILTAYÖN LEVOTTOMUUS — 0 1 2
- 0 = Helppo saada unta
- 1 = Joskus vaikea saada unta (vie yli 1/2 tuntia)
- 2 = Jokapäivästä unettomuutta

5. KESKIYÖN UNETTOMUUS — 0 1 2
- 0 = Ei ole
- 1 = Levoton ja rauhaton olo
- 2 = Herää öisin (Jos nousee vuoteestaan yöllä, paitsi WC-käyntiä varten: merkittävä AINA 2)

6. AAMUYÖN UNETTOMUUS — 0 1 2
- 0 = Ei ole
- 1 = Herää aamuyöstä, mutta menee takaisin nukkumaan
- 2 = Ei saa unta jos nousee vuoteesta

7. TYÖNTEKO YM. TOIMINTA — 0 1 2 3 4
- 0 = Ei vaikeutta
- 1 = Tuntee olevansa kykenemätön, väsynyt ja heikko työnteossaan ja harrastuksissaan
- 2 = Minkään tekeminen ei huvita. Kertoo itse tai ilmenee epäsuorasti: rauhattomuutta, kykenemättömyyttä tehdä päätöksiä, epäröintiä. Pitää pakottautua tekemään
- 3 = Ei tee paljon mitään tai ei saa aikaan paljon. Sairaalapotilas: merkitse 3 jos potilas viettää työn tms parissa alle 3 tuntia (työ = tehtävät tai harrastukset sairaalassa, lukuunottamatta rutiinitoimintoja)
- 4 = Lopetti työnsä sairauden vuoksi. Sairaalapotilas: merkitse 4, jos hän ei tee mitään, paitsi rutiinitehtäviä, tai jos ei suoriudu niistäkään yksin

8. RETARDAATIO (puheen ja ajatuksenjuoksun hitaus; heikentynyt keskittymiskyky; vähentynyt motorinen aktiviteetti) — 0 1 2 3 4
- 0 = Normaali
- 1 = Lievää hitautta keskustelussa
- 2 = Selvää hitautta
- 3 = Vaikea haastatella
- 4 = Täysin sulkeutunut

9. LIIKEHDINTÄ — 0 1 2
- 0 = Ei ole
- 1 = Leikkii käsillään ja hiuksillaan
- 2 = Vääntelee käsiään, puree huuliaan ja kynsiään, nyhtää hiuksiaan

10. PSYYKKINEN LEVOTTUMUUS — 0 1 2 3 4
- 0 = Ei ole
- 1 = Subjekt. jännittynyt ja ärtynyt
- 2 = Murehtii pikkuasioita
- 3 = Olemuksessa pelokkuutta
- 4 = Pelkotilat käyvät ilmi tarvitsematta niistä kysellä

11. SOMAATTINEN LEVOTTOMUUS — 0 1 2 3 4
- 0 = Ei ole
- 1 = Lievää
- 2 = Keskinkertaista
- 3 = Vaikeaa
- 4 = Invalidisoivaa

(Somaattisen levottomuuden fysiologisia oireita:
GI: kuiva suu, ilmavaivat, ripuli, kouristukset, röyhtäily, närästys
Kardiovaskulaariset: palpitaatio, päänsärky
~~Respiratoriset: hyperventilaatio~~, huokaukset
~~Virtsatiet: tihentynyt virtsaamistarve~~, hikoilu)

12. SOMAATTISET OIREET (GI) [0 1 2]
- 0 = Ei ole
- 1 = Ei ruokahalua, mutta syö käskemättä. Täyttävä tunne vatsassa
- 2 = Ei syö, ellei henkilökunta maanittele. Pyytää tai vaatii laksatiiveja tai lääkettä GI-oireisiin

13. SOMAATTISET OIREET (yleiset) [0 1 2]
- 0 = Ei ole
- 1 = Raskas tunne raajoissa, selässä ja päässä. Selkä-, pään- ja lihassärkyä. Heikotusta ja väsymystä
- 2 = Kaikki selvät oireet

14. GENITAALIOIREET (esim: vähentynyt libido, kuukautishäiriöt) [0 1 2 3]
- 0 = Ei ole
- 1 = Lieviä
- 2 = Vaikeita
- 3 = Ei selvyyttä

15. HYPOKONDRIA [0 1 2 3 4]
- 0 = Ei ole
- 1 = Keskittyy itseensä ja vointiinsa
- 2 = Huolissaan terveydestään
- 3 = Valittelee vaivojaan, pyytää auttamaan jne...
- 4 = Luulotautisia harhoja

16. LAIHTUMINEN (rasti joko A tai B) [0 1 2]

A. Esitietojen pohjalta:
- 0 = Ei ole laihtunut
- 1 = Laihtunut ehkä sairauden takia
- 2 = Laihtunut selvästi (omien sanojensa mukaan)

B. Osastonlääkärin viikoittaisen arvion ja ja punnituksen perusteella: [0 1 2]
- 0 = Laihtunut alle 1/2 kg/viikko
- 1 = " yli 1/2 kg/ "
- 2 = " yli 1 kg/ "

17. POTILAAN OMA KÄSITYS [0 1 2]
- 0 = Myöntää olevansa sairas ja masentunut
- 1 = Myöntää sairautensa, mutta syyttää siitä huonoa ravintoa, ilmastoa, ylityötä, virusta, levontarvetta jne.
- 2 = Kieltää olevansa sairas

18. VUOROKAUTISET VAIHTELUT [0 1 2]

A. Aamupäivä
- 0 = Ei ole
- 1 = Lieviä
- 2 = Suuria

B. Iltapäivä [0 1 2]
- 0 = Ei ole
- 1 = Lieviä
- 2 = Suuria

19. DEPERSONALISAATIO JA DEREALISAATIO [0 1 2 3 4]
(esim. epätodellisuudentunne, nihilistiset ajatukset)
- 0 = Ei ole
- 1 = Lievää
- 2 = Keskinkertaista
- 3 = Vaikeaa
- 4 = Invalidisoivaa

20. PARANOIDISET REAKTIOT [0 1 2 3 4]
- 0 = Ei ole
- 1 = Epäluuloinen
- 2
- 3 = Kohdistamisajatuksia
- 4 = Kohdistamis- ja vainoharhoja

21. PAKKOMIELTEET [0 1 2]
- 0 = Ei ole
- 1 = Jonkin verran
- 2 = Paljon

TUTKIJAN ALLEKIRJOITUS .....

APPENDIX III

Beck Depression Inventory with 13 items. Finnish version

Potilas _____ Päivämäärä _____

Lyhennetty Beck Depression Inventory (BDI) -kaavake

Käyttöohje: Tämä on kyselykaavake, jossa on 13 ryhmää (A–M) ja jokaisessa ryhmässä neljä vaihtoehtoa. Tutustukaa näihin neljään vaihtoehtoon kaikissa ryhmissä. Valitkaa jokaisesta ryhmästä se vaihtoehto, joka parhaiten kuvaa sitä, millaiseksi tunnette itsenne tänään, siis *juuri nyt!* Rengastakaa valitsemanne vaihtoehdon vieressä oleva numero. Mikäli useampi vaihtoehto ryhmässä tuntuu sopivalta, rengastakaa ne.

Tutustukaa huolellisesti kaikkiin neljään vaihtoehtoon jokaisessa ryhmässä ennen kuin suoritatte valintanne.

A Mieliala
3 Olen niin surullinen ja onneton, että en enää kestä.
2 Olen aina alakuloinen tai surullinen enkä pääse eroon tästä mielialasta.
1 Olen alakuloinen tai surullinen.
0 En ole surullinen.

B Pessimismi
3 Tunnen, että tulevaisuus on toivoton eivätkä asiat voi muuttua paremmiksi.
2 Tunnen, että tulevaisuudella ei ole minulle mitään tarjottavana.
1 Tulevaisuus pelottaa minua.
0 Tulevaisuus ei erikoisemmin masenna eikä pelota minua.

C Epäonnistumisen tunne
3 Tunnen olevani täysin epäonnistunut (isänä, äitinä, aviomiehenä, aviovaimona).
2 Menneisyydessäni näen vain sarjan epäonnistumisia.
1 Uskon epäonnistuneeni useammin kuin ihmiset keskimäärin.
0 En tunne epäonnistuneeni.

D Tyytymättömyys
3 Olen tyytymätön kaikkeen.
2 Mikään ei enää tuota minulle tyydytystä.
1 En enää osaa nauttia niinkuin ennen.
0 En ole erikoisen tyytymätön.

E Syyllisyyden tunne
3 Tunnen olevani erittäin huono ja arvoton.
2 Tunnen melkoista syyllisyyttä.
1 Varsin usein tunnen itseni huonoksi ja kelvottomaksi.
0 Minulla ei ole erikoisia syyllisyyden tunteita.

F Itsensävihaaminen
3 Vihaan itseäni.
2 Inhoan itseäni.
1 Olen pettynyt itseeni.
0 En ole pettynyt itseeni.

G Itsensävahingoittaminen
3 Tappaisin itseni, jos minulla olisi siihen mahdollisuus.
2 Minulla on selvät itsemurhasuunnitelmat.
1 Tunnen, että olisi parempi olla kuollut.
0 En ole ajatellut tehdä pahaa itselleni.

H Sosiaalinen syrjäänvetäytyneisyys
3 Olen kadottanut kaiken mielenkiintoni muihin ihmisiin enkä välitä heistä lainkaan.
2 Kiinnostukseni ja tunteeni muita ihmisiä kohtaan ovat miltei kadonneet.
1 Muut ihmiset kiinnostavat minua vähemmän kuin aikaisemmin.
0 En ole kadottanut mielenkiintoani muihin ihmisiin.

I Päättämättömyys
3 En enää osaa tehdä mitään päätöksiä.
2 Minun on hyvin vaikea tehdä päätöksiä.
1 Koetan lykätä päätösten tekoa.
0 Olen yhtä valmis tekemään päätöksiä kuin ennen.

J Käsitys omasta ulkonäöstä
3 Tunnen olevani ruma tai vastenmielisen näköinen.
2 Tunnen, että ulkonäössäni on tapahtunut pysyviä muutoksia, ja niistä johtuen näytän vähemmän viehättävältä.
1 Pelkään, että näytän vanhalta tai rumalta.
0 Mielestäni ulkonäköni ei ole muuttunut.

K Työtehon estyneisyys
3 En lainkaan kykene tekemään työtä.
2 Voidakseni tehdä jotakin minun on suorastaan pakotettava itseni siihen.
1 Ryhtyminen johonkin merkitsee minulle ylimääräistä ponnistusta.
0 Kykenen tekemään työtä yhtä hyvin kuin ennenkin.

L Väsyminen
3 Väsyn liikaa voidakseni tehdä mitään.
2 Jo vähäisinkin ponnistelu väsyttää minua.
1 Väsyn nopeammin kuin tavallisesti.
0 En väsy nopeammin kuin tavallisesti.

M Ruokahaluttomuus
3 Minulla ei ole nykyään lainkaan ruokahalua.
2 Ruokahaluni on nyt paljon huonompi kuin tavallisesti.
1 Ruokahaluni ei ole yhtä hyvä kuin tavallisesti.
0 Ruokahaluni ei ole huonompi kuin tavallisesti.

Beck, A. T., Beck, R. W.: Postgraduate Medicine, December 1972.

WANDER

1000×50-11.73 Pr.

APPENDIX IV

Internal consistency of the Hamilton Depression Rating Scale in relation to the four measurements

Table IV-a: Measurement 1

Item-total statistics

HDRS-Item	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Alpha if item deleted
Depression	17,4333	47,8768	,5874	,7594
Guilt	18,0500	50,6585	,5001	,7682
Suicide	17,8500	47,3161	,3825	,7777
Insomnia (initial)	18,3167	53,3726	,2454	,7816
Insomnia (middle)	18,5500	50,4551	,5420	,7663
Insomnia (delayed)	18,3000	53,1288	,2740	,7802
Work and interest	17,3500	50,3331	,3778	,7743
Retardation	18,2000	52,6373	,2863	,7796
Agitation	18,5333	54,0497	,2075	,7832
Anxiety (psychic symptoms)	17,5167	47,1014	,6433	,7551
Anxiety (somatic symptoms)	17,6833	47,7116	,5311	,7626
Gastro-intestinal symptoms	18,8000	53,3153	,3527	,7774
General somatic symptoms	18,3500	51,6890	,4704	,7712
Loss of libido	18,0500	49,9466	,4101	,7720
Hypochondriasis	18,1833	51,7794	,2548	,7831
Loss of weight	18,6833	56,1184	-,0285	,7955
Loss of insight	19,0000	55,4915	,1349	,7852
Diurnal variation (morning)	18,3167	55,6099	,0123	,7943
Diurnal variation (afternoon)	18,3000	55,2305	,0620	,7904
Derealization and depersonalization	18,3667	51,5243	,3507	,7760
Paranoid symptoms	18,6667	52,9379	,3328	,7776
Obsessional symptoms	18,6000	52,4136	,4120	,7742

N of cases = 60 N of items = 22

Alpha = .79

Table IV-b: Measurement 2

Item-total statistics

HDRS-item	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Alpha if item deleted
Depression	14,2105	48,6572	,5598	,8158
Guilt	14,7105	51,1842	,5722	,8165
Suicide	14,6842	51,8976	,3406	,8292
Insomnia (initial)	15,0000	55,1351	,2722	,8293
Insomnia (middle)	15,1053	53,8805	,4174	,8242
Insomnia (delayed)	15,1579	54,1366	,4339	,8240
Work and interest	14,1579	50,5690	,5002	,8193
Retardation	15,0263	53,2155	,4553	,8225
Agitation	14,8947	56,2589	,1524	,8333
Anxiety (psychic symptoms)	13,9211	46,8314	,7397	,8044
Anxiety (somatic symptoms)	14,3158	48,9246	,5374	,8173
Gastro-intestinal symptoms	15,3684	56,4552	,2236	,8306
General somatic symptoms	14,8158	52,8030	,5030	,8206
Loss of libido	14,6316	52,1849	,4526	,8219
Hypochondriasis	14,8158	55,1273	,1518	,8375
Loss of weight	15,3947	56,4616	,1646	,8323
Loss of insight	15,2895	59,8329	-,2578	,8457
Diurnal variation (morning)	14,9211	55,9125	,1706	,8331
Diurnal variation (afternoon)	14,8947	53,2319	,4355	,8231
Derealization and depersonalization	14,9211	49,6963	,6875	,8106
Paranoid symptoms	15,2105	53,9545	,5301	,8220
Obsessional symptoms	15,1579	54,1906	,4269	,8243

N of cases = 38 N of items = 22

Alpha = .83

Table IV-c: Measurement 3

Item-total statistics

HDRS-Item	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Alpha if item deleted
Depression	11,3000	36,4241	,3612	,7669
Guilt	11,6333	38,0333	,2000	,7783
Suicide	12,1000	40,5069	-,0268	,7876
Insomnia (initial)	11,8000	38,1655	,2796	,7718
Insomnia (middle)	12,1000	38,2310	,3162	,7701
Insomnia (delayed)	12,1333	38,6713	,3069	,7711
Work and interest	11,3000	35,3207	,6028	,7519
Retardation	12,1000	36,6448	,5627	,7580
Agitation	12,1000	40,4379	,0000	,7836
Anxiety (psychic symptoms)	11,3000	34,7000	,5487	,7529
Anxiety (somatic symptoms)	11,3333	33,7471	,5131	,7544
Gastro-intestinal symptoms	12,3667	40,0333	,1776	,7765
General somatic symptoms	11,9333	35,3747	,6537	,7504
Loss of libido	11,6000	34,5241	,4258	,7626
Hypochondriasis	11,7000	35,5966	,3337	,7709
Loss of weight	12,2667	39,1678	,2230	,7745
Loss of insight	12,1667	40,4885	-,0217	,7868
Diurnal variation (morning)	11,9000	38,9207	,1993	,7758
Diurnal variation (afternoon)	11,8333	37,7989	,2634	,7731
Derealization and depersonalization	11,9000	37,1276	,3704	,7664
Paranoid symptoms	12,0667	35,0299	,5206	,7551
Obsessional symptoms	12,1667	38,9023	,2786	,7723

N of cases = 30 N of items = 22

Alpha = .78

Table IV-d: Measurement 4

Item-total statistics

HDRS-Item	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Alpha if item deleted
Depression	11,1750	28,1994	,6186	,6317
Guilt	11,4000	31,8872	,5879	,6509
Suicide	11,7500	31,1667	,5699	,6484
Insomnia (initial)	11,6250	35,3173	,2513	,6847
Insomnia (middle)	11,7500	33,6282	,4972	,6650
Insomnia (delayed)	11,9250	33,5071	,4094	,6694
Work and interest	11,1500	32,4897	,3053	,6807
Retardation	11,9750	35,8712	,1861	,6899
Agitation	12,0750	36,3788	,2108	,6885
Anxiety (psychic symptoms)	11,8750	36,5737	,1112	,6954
Anxiety (somatic symptoms)	12,2250	35,9224	,3060	,6833
Gastro-intestinal symptoms	12,2500	35,5256	,4723	,6773
General somatic symptoms	12,0500	34,2026	,5924	,6657
Loss of libido	11,5000	34,3590	,1258	,7093
Hypochondriasis	11,8750	32,5737	,5208	,6585
Loss of weight	12,3250	37,2506	,1341	,6929
Loss of insight	11,7750	45,9737	-,7022	,7791
Diurnal variation (morning)	11,9500	32,9205	,5367	,6594
Diurnal variation (afternoon)	11,9750	37,5122	-,0102	,7043
Derealization and depersonalization	12,1000	35,1179	,3531	,6783
Paranoid symptoms	12,0000	37,3333	-,0056	,7068
Obsessional symptoms	12,2000	35,8564	,3564	,6816

N of cases = 40 N of items = 22

Alpha = .69

Appendix V

Internal consistency of the Beck Depression Inventory in relation to the four measurements

Table V-a: Measurement 1

Item-total statistics

BDI-Item	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Alpha if item deleted
A-Sadness	14,1724	44,8820	,5586	,8438
B-Pessimism	14,1207	40,7747	,7068	,8319
C-Sense of failure	13,6724	44,2592	,4456	,8504
D-Dissatisfaction	14,2069	42,8687	,6065	,8396
E-Quilt	13,9138	41,3433	,6749	,8344
F-Self-dislike	14,3276	44,6101	,5388	,8444
G-Self-harm	14,7414	45,9495	,5476	,8456
H-Social withdrawal	14,2931	43,0529	,6044	,8398
I-Indecisiveness	13,8966	42,7260	,5983	,8400
J-Self-image change	14,5517	45,6903	,3218	,8590
K-Work difficulty	13,6379	45,3578	,4142	,8517
L-Fatigability	13,9655	43,7532	,5137	,8457
M-Anorexia	14,8448	48,0983	,2171	,8617

N of cases = 58 N of items = 13

Alpha = .86

Table V-b: Measurement 2

Item-total statistics

BDI-Item	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Alpha if Item deleted
A-Sadness	12,5957	39,3765	,6592	,8402
B-Pessimism	12,5319	40,8631	,6122	,8441
C-Sense of failure	12,1277	41,6355	,4818	,8519
D-Dissatisfaction	12,5957	40,8113	,6825	,8409
E-Quilt	12,5319	39,3414	,6173	,8430
F-Self-dislike	12,5532	41,2960	,6292	,8438
G-Self-harm	12,9787	43,1952	,4936	,8516
H-Social withdrawal	12,7021	40,0398	,6799	,8398
I-Indecisiveness	12,2340	39,7919	,6447	,8414
J-Self-image change	12,8085	41,0278	,4103	,8593
K-Work difficulty	11,9149	42,9926	,3188	,8633
L-Fatigability	12,1915	42,4625	,4260	,8552
M-Anorexia	13,1277	45,9399	,2090	,8640

N of cases = 47 N of items = 13

Alpha = .86

Table V-c: Measurement 3

Item-total statistics

BDI-Item	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Alpha if item deleted
A-Sadness	11,4737	50,3642	,7190	,9027
B-Pessimism	11,4737	51,6615	,6314	,9063
C-Sense of failure	11,2105	50,0626	,6553	,9054
D-Dissatisfaction	11,4474	49,4431	,7853	,8999
E-Quilt	11,5000	47,6081	,7997	,8986
F-Self-dislike	11,5000	51,9865	,7379	,9034
G-Self-harm	12,0000	52,4324	,7264	,9042
H-Social withdrawal	11,7105	50,1572	,7393	,9019
I-Indecisiveness	11,1842	51,3435	,6457	,9057
J-Self-image change	11,7895	50,8193	,5293	,9119
K-Work difficulty	10,7895	51,9545	,5396	,9102
L-Fatigability	11,1316	51,7390	,5963	,9077
M-Anorexia	11,8421	55,4339	,2832	,9196

N of cases = 38 N of items = 13

Alpha = .91

Table V-d: Measurement 4

Item-total statistics

BDI-Item	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Alpha if item deleted
A-Sadness	9,5000	43,9634	,7695	,8845
B-Pessimism	9,5238	44,1092	,6280	,8904
C-Sense of failure	9,0714	44,2143	,5600	,8943
D-Dissatisfaction	9,6667	43,8862	,7510	,8851
E-Quilt	9,4762	43,8165	,6986	,8871
F-Self-dislike	9,6190	44,0465	,7847	,8842
G-Self-harm	9,9286	48,4094	,4374	,8982
H-Social withdrawal	9,7143	45,8188	,6035	,8918
I-Indecisiveness	9,5476	44,7904	,6321	,8903
J-Self-image change	9,4048	41,4663	,6712	,8894
K-Work difficulty	9,2857	44,8432	,4926	,8981
L-Fatigability	9,2857	46,5505	,4741	,8972
M-Anorexia	9,9762	48,5604	,4269	,8985

N of cases = 42 N of items = 13

Alpha = .90