# The Zurich Study—
# A Prospective Epidemiological Study of Depressive, Neurotic and Psychosomatic Syndromes

## IV. Recurrent and Nonrecurrent Brief Depression

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**Summary.** How common and how significant are brief depressive episodes (BDE) lasting less than 2 weeks? The authors propose splitting the BDE into two groups: one occurring monthly over 1 year of observation, termed 'recurrent brief depression' (RBD), and those occurring less frequently, labeled 'nonrecurrent brief depression' (NRBD). From a medical point of view, the RBD are a relevant group. Different thresholds of definition are tested, the narrowest of which (including occupational impairment and predetermined minimum number of symptoms) is accepted for 'case'-definition. The such defined RBD (SYM) group differs from major depression only by length and frequency of episodes. In a young cohort, its 1-year prevalence rate was found to be 4.4% (males 3.9%, females 4.9%). One-third of these cases needed treatment, a fourth suffered from pronounced subjective and social impairment as well as from persistent suicidal ideation. The self-reporting of subjective impairment, assessed with the SCL-90 symptom inventory and an analog-rating, yields high scores which are in no way inferior to major depression diagnosed with RDC, DSM-III or EDE (SYM) criteria. The RBD (SYM) demonstrate less hypomania than the major depressive disorders. On the other hand, a family history of depression is equally frequent across all groups. The validity of the RBD (SYM) group has yet to be confirmed by a follow-up study, and further research is needed to delineate it from secondary depression.

The findings largely support the hypothesis of a continuum from mild and short to more severe, longer lasting depressive syndromes, but they do not exclude heterogeneity of RBD (Angst and Dobler-Mikola 1984b).

The diagnostic concept of the RBD and the 'dysthymic disorders' of DSM-III are discussed. The similarity between RBD (SYM) and major depression questions the validity of the 2-week duration criterion.

**Key words:** Brief depressive episodes – Dysthymic disorders – Prevalence rates – Validity

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## 1. Introduction

As early as 1913, Kraepelin had already included mild forms, fluently transitive to norm, in his rubric 'manic-depressive insanity' and in 1921, Kretschmer coined the term 'cycloid personality'. In substantial studies, Hoffmann (1921) searched for mild depressive disorders and personality variations (pertaining to the manic-depressive context) among the relatives of manic-depressed patients. Our own studies of unipolar patients' familial characteristics indicate that mild 'reactive' or 'neurotic' depression prevails in the same kins in which a high occurrence of affective psychoses is also found (Angst et al. 1980). No demarcation of depressive or cycloid personality traits from mild or early manifestations of depressive or manic-depressive disorders has yet been reached. Kraepelin explicitly raised the hypothesis that this so-called 'premorbid personality' may be an initial manifestation of illness, an opinion which has been raised again by recent investigations (von Zerssen 1977; Hirschfeld and Klerman 1979; Akiskal et al. 1979; Akiskal 1983).

'Residual' depressive disorders which do not satisfy the diagnostic criteria are yielded as a by-product as more severe depressive disorders are operationalized. They may, for instance, be too short, too poor in symptoms, or without social consequences. On the other hand, quite an important part of these mild depressive syndromes may appear to be socially relevant, because they keep recurring. They have therefore been labeled as 'chronic minor', 'intermittent' (Spitzer et al. 1978), 'neurotic' , 'characterologic' (Akiskal et al. 1978; Klerman et al. 1979) and more recently as 'dysthymic' or 'atypical' disorders (DSM-III 1980). Akiskal and associates (1978) are correct in stressing that the 'dysthymic disorders' are a heterogeneous group of depressive states. In his latest paper (1983), Akiskal suggests dividing such chronic depressions into three groups: (1) primary depressions with residual chronicity, (2) chronic secondary dysphorias following non-affective disorders, and (3) characterologic depressions. The last mentioned group represents a potential mild type of unipolar or bipolar illness. Akiskal emphasizes that classic depressive episodes can conjoin, and in this context speaks of a 'chronic subsyndromal' and 'chronic intermittent' course. The subsequent occurrence of minor and major depression has recently been called 'double depression' (Keller et al. 1983).

In the frame of our prospective study of young adults we wish to abstain from differentiating between personality disorders and minor depression, to favor descriptive operationalized definition and to test the validity of thus defined groups as to certain symptoms and illness behavior. We also avoid preexisting terms, because many of them are not clearly defined.

## 2. Methodology

The pertinent methodology has been described in a previous paper (Angst et al. 1984d; additional information in Angst and Dobler-Mikola 1984b and c). To briefly summarize: the results were obtained from a longitudinal study of 591 men and women who had been investigated initially at the age of 19–20, and for a fourth time at the age of 23–24. The data given in the present publication refer to this fourth investigation, a protracted semistructured interview (SPIKE) and self-reporting by means of the SCL-90 (Derogatis 1977).

Depressive mood was assessed with the following seven symptoms: joyless, depressive, sad, sick of life, loss of interest, loss of efficiency, feelings of inferiority.

To define a minor or major depressive 'case' we used different thresholds of definition (Table 1): the mildest considering social impairment (SOC), a more severe one (WORK) taking into account subjective and/or objective work impairment, and the most rigorous one considering simultaneous presence of a predetermined minimum number of criteria symptoms (SYM). The same criteria are applied for classifying longer lasting 'extensive depressive episodes' (EDE), too (Angst and Dobler-Mikola 1984c).

'Social impairment' stands for role dysfunction (work, interpersonal relations, pastime activities), 'work impairment' implies subjectively perceived loss of efficiency, conflicts resulting therefrom, absence from work, loss of job. As criteria symptoms for defining depression, those 8 listed in the DSM-III and the RDC served; however, in contrast to North American practice, we used 3 of the 8 symptoms as a threshold of case-definition for males, and 5 out of 8 symptoms for females.

Independent of the assessment of psychopathology, a 1-h sociological interview (Angst et al. 1984d) was used to elicit detailed information on sociodemographic characteristics, social adjustment, coping resources (mastery and self-esteem) and distressing life events.

Categorial variables were computed by $\chi^2$ statistics, whereas continuous variables (e.g. SCL-90 scale scores) were dealt with by one-way analysis of variance. For all tests, a uniform level of significance was used ($*P \le 0.05$, $**P \le 0.01$, $***P \le 0.001$).

## 3. Recurrent and Nonrecurrent Brief Depressive Episodes

We term depressive manifestations lasting less than 2 weeks 'brief depressive episodes' (BDE). They reoccur frequently, and we have therefore tried to compute their cumulative duration over 1 year (Angst and Dobler-Mikola 1984b). This approach turned out to be somewhat problematic, because the computations are complicated and the indications provided by the probands about the duration of recurrent episodes are not very reliable. In addition, the results of our analysis of familial characteristics lead to the presumption that the cumulative duration of depressive manifestations over 1 year is not of

diagnostic importance, but rather their recurrent course. We have therefore divided the BDE into two groups: (1) manifestations having occurred monthly over the past year, which we term 'recurrent brief depression' (RBD), and (2), the less frequent manifestations or 'nonrecurrent brief depression' (NRBD). We deem this dichotomy to be feasible in practice. Of the BDE 83% last only 1 to 3 days, and the distribution of these very brief spells is equal among the RBD (86%) and the NRBD (80%).

## 4. Prevalence Rates

Table 1 gives the 1-year prevalence rates of the two BDE subgroups versus those of the EDE (minimum duration 2 weeks). Of the 22 to 23-year-old population 31.7% indicate an occurrence of BDE in the course of 1 year. The majority—60%—belong to the NRBD, whose prevalence of 18.8% is quite high but who are not, in aggregate, socially impaired by their depressive mood. Accordingly, the prevalence rates for NRBD with social impairment (3.4%), with work impairment (2.5%), and with pertinent symptoms (1.1%) are quite low.

On the other hand, the recurrent subtype, representing 40% of the BDE, is more frequently seen to have social consequences. The 1-year prevalence is 11% for social impairment, 7.6% for work impairment, and 4.4% for the presence of diagnostically required symptomatology.

The male/female ratio is not as marked in the BDE prevalence rates (Table 2) as might have been expected from studies of major depression. The nonrecurrent manifestations are however found to be more common in men and the recurrent ones in women. RBD are seen in 7.4% of the men and in 9.8% of the women, representing a sex ratio of 1:1.3, which is clearly below the usual one of 1:2 in major depression. An analogous sex ratio is also found in the RBD (SYM) group. This is however due to the application of different thresholds for the minimum number of symptoms required in men and women respectively; otherwise, the ratio would shift to the usual 1:2.

Earlier evidence of men's underreporting of depressive mood, and especially of specific symptoms (Angst and Dobler-Mikola 1984a) was based on the following:

— men state significantly fewer depressive episodes that date back more than 3 months;
— on average, men report two symptoms less than women do, despite equal social impairment.

**Table 1.** One-year prevalence rates (%) of RBD, NRBD and EDE

| Criteria of case definition | | | |
|---|---|---|---|
| Length | BDE | | EDE |
| | 31.7 | | 12.4 |
| Recurrence | NRBD 18.8 | RBD 12.9 | |
| Social impairment | NRBD (SOC) 3.4 | RBD (SOC) 11.0 | EDE (SOC) 11.5 |
| Work impairment | NRBD (WORK) 2.5 | RBD (WORK) 7.6 | EDE (WORK) 7.8 |
| Criterial symptoms | NRBD (SYM) 1.1 | RBD (SYM) 4.4 | EDE (SYM) 4.4 |

**Table 2.** Prevalence of minor depression (percent)

|  | BDE | NRBD | RBD | RBD(WORK) | RBD(SYM) |
|---|---|---|---|---|---|
| *One-year prevalence* |  |  |  |  |  |
| Males | 31.2 | 22.2 | 11.2 | 7.4 | 3.9 |
| Females | 32.1 | 15.7 | 16.3 | 9.8 | 4.9 |
| M + F | 31.6 | 18.8 | 12.9 | 7.6 | 4.4 |
| *Three-month prevalence* |  |  |  |  |  |
| Males | 22.8 | 15.3 | 7.5 | 5.3 | 3.9 |
| Females | 27.0 | 13.0 | 13.9 | 7.2 | 4.7 |
| M + F | 25.0 | 14.1 | 10.1 | 6.3 | 4.3 |
| *Four-week prevalence* |  |  |  |  |  |
| Males | 11.7 | 4.8 | 6.9 | 4.7 | 3.6 |
| Females | 16.9 | 4.5 | 12.4 | 7.0 | 4.6 |
| M + F | 14.5 | 4.7 | 9.8 | 5.9 | 4.1 |

Critical comment: All RBD categories should—by definition—have identical prevalence rates over all 3 time spans. The slight differences originate from the interviewing method and the unprecise answers.

We consider the data here presented with the hypothesis of an equal frequency of BDE and the two BDE subgroups of recurrent and nonrecurrent manifestations in men and women as most probable. The equally high prevalence rate of the BDE, 31.2% for men and 32.1% for women, which largely supports our hypothesis is very impressive.

The RBD(SYM) groups differs from the EDE(SYM) only in the shorter duration of depressive episodes. The 1-year prevalence happens to be the same (4.4%) for both groups, and very similar results are obtained on the threshold of work and social impairment. We can deduce therefore that among the corresponding age group of the general population, recurrent short (less than 2 weeks) lasting disturbances are as frequent as longer lasting depressive episodes. To be more informative, and to facilitate comparisons with other studies, Table 2 also contains the 3-month and 4-week prevalence rates.

## 5. Clinical Characteristics of the RBD

Following the operational definition of RBD with a 1-year prevalence rate of 4.4%, the question of course ensues as to what their clinical relevance and further characteristics may be. What exactly are they, minor depression—somewhere on a continuum between physiological disturbances and major depression? Personality disorders? Or are they mainly precipitated by external factors, or caused by distressing life events? A further paper will examine the question of a possible heterogeneity of the entire RBD group. Presently, we wish to focus on the more detailed specification of the RBD, based on the clinical and the extensive sociological interview.

### 5.1 Age of Onset, Positive Family History, and Bipolarity

The age of onset is a very useful criterion to establish whether the RBD, as a subtype of minor depression, are on a continuum to major depression. If the age of onset is the same at both ends this will support the theory of a continuum. If on the other hand it differs, this will rather point to heterogeneity, in that a concentration of under 15-year-olds among the early onset group would be traced to personality disorders or neurotic development. A family history of depression and/or occurrence of bipolarity (i.e. hypomanic episodes of at least 2 weeks duration) on the other hand would rather be presumed to be affiliated with major affective disorders. The respective findings are presented in Table 3.

About 42%–47% of the RBD evidence an *age of onset* under 15 years, as compared to major depression (EDE and EDE(SYM)) with 29%–32%. The various groups do not differ significantly, with the exception of the NRBD group with an inferior share of age at onset under 15.

All of the diagnostic groups show significantly more *positive family histories* than the control group, but there is no difference between the individual depressive subgroups. There is also a tendency for the RBD to have a higher frequency than the EDE. The family history was evaluated asking the proband about the occurrence of a depressive syndrome among parents and siblings.

*Hypomania,* on the other hand, is underrepresented in the RBD as compared to the EDE cases. The cells are however too small for statistical computations. The underrepresentation could be a consequence of definition. The defining criterion for a hypomanic case was a minimum duration of 2 weeks. Considering the fact that the RBD are characterized by short depressive mood swings in particular, it might well be that in this group the hypomanic episodes are also generally shorter than 2 weeks and thus do not reach the threshold of definition, although their frequency may be equal to that in the EDE cases. However, our findings do not confirm this presumption.

**Table 3.** Different groups of depression—Age of onset under 15, positive family history, hypomania

|  |  | 1)<br>Controls<br>202 | 2)<br>NRBD<br>91 | 3)<br>RBD<br>88 | 4)<br>RBD (SYM)<br>35 | 5)<br>EDE<br>68 |
|---|---|---|---|---|---|---|
| Age of onset <15 years | $N^a$ | — | 21/84 | 34/80 | 15/32 | 20/62 |
|  | % | — | 25 | 42 | 47 | 32 |
| Positive family history | $N$ | 35 | 25 | 36 | 14 | 20 |
|  | % | 17 | 27 | 41 | 40 | 29 |
| Hypomania | $N$ | — | — | 2 | 1 | 7 |
|  | % | — | — | 2 | 3 | 10 |

[a] $N$ in some cases smaller because of missing data

*Significant differences ($\chi^2$):*

| | | | | | |
|---|---|---|---|---|---|
| Age of onset | 2 vs 3 | | * $P \leq 0.05$ | | 3 vs 5  N.S. |
| Positive family history | 1 vs 2 | | * $P \leq 0.05$ | | 3 vs 5  N.S. |
| | 1 vs 3 | | *** $P \leq 0.001$ | | |
| | 1 vs 4 | | ** $P \leq 0.01$ | | |

**Table 4.** Symptoms

| | RBD 88 % | EDE 68 % | Cramer's V. | Significance |
|---|---|---|---|---|
| Lack of appetite | 39 | 48 | 0.10 | N.S. |
| Sleeping too little or too much | 49 | 59 | 0.10 | N.S. |
| Loss of energy, fatigue | 85 | 76 | 0.11 | N.S. |
| Slowness in movement or in speech, being restless | 52 | 48 | 0.04 | N.S. |
| Loss of interest and friends, diminished sexual desire | 62 | 43 | 0.20 | * |
| Feeling of inferiority, guilt | 60 | 48 | 0.12 | N.S. |
| Life is not worth living | 37 | 44 | 0.07 | N.S. |
| Trouble with concentration | 89 | 84 | 0.07 | N.S. |
| Number of symptoms, mean | 4.4 | 4.2 | | |

**Table 5.** Syndromes—Controls vs depressive groups (NRBD, RBD, RBD(SYM))

| | Controls 202 % | NRBD 91 % | RBD 88 % | RBD(SYM) 35 % |
|---|---|---|---|---|
| Stomach | 20 | 20 | 32* | 40* |
| Intestines | 12 | 21 | 31*** | 43*** |
| Respiration | 5 | 9 | 16** | 20** |
| Heart | 12 | 11 | 24** | 37*** |
| Back | 29 | 34 | 41 | 40 |
| Motoric | 5 | 9 | 8 | 6 |
| Allergies | 38 | 37 | 33 | 29 |
| Anxiety | 8 | 13 | 50*** | 71 *** |
| Phobias/situational anxiety | 11 | 10 | 25** | 23 |
| Compulsions | 4 | 3 | 12** | 14* |
| Worry about health | 5 | 1 | 8 | 14 |
| Circulatory system | 18 | 18 | 34** | 34* |
| Exhaustion/weakness | 11 | 14 | 42*** | 49*** |
| Sleep | 18 | 23 | 45*** | 57*** |
| Appetite | 7 | 19** | 27*** | 29*** |
| Swallowing | 3 | 7 | 3 | 6 |
| Headache | 38 | 32 | 45 | 37 |
| Sexual impairment | 6 | 16** | 24*** | 23** |
| Alcohol (daily) | 10 | 4 | 10 | 11 |
| Suicidal ideation/ suicide attempt | 1.5 | 8** | 18*** | 24*** |
| Premenstrual and menstrual symptoms | 37 | 26 | 46 | 50 |

**Table 6.** Syndromes—RBD vs. EDE

| | RBD 88 % | EDE 68 % |
|---|---|---|
| Stomach | 32 | 34 |
| Intestines | 31 | 21 |
| Respiration | 16 | 16 |
| Heart | 24 | 19 |
| Back | 41 | 41 |
| Motoric | 8 | 9 |
| Allergies | 33 | 46 |
| Anxiety | 50 | 29** |
| Phobias/situational anxiety | 25 | 22 |
| Compulsions | 12 | 9 |
| Worry about health | 8 | 9 |
| Circulatory system | 34 | 40 |
| Exhaustion/weakness | 42 | 50 |
| Sleep | 45 | 44 |
| Appetite | 27 | 23 |
| Swallowing | 3 | 12* |
| Headache | 45 | 41 |
| Sexual impairment | 24 | 22 |
| Alcohol (daily) | 10 | 16 |
| Suicidal ideation/suicide attempt | 18 | 16 |
| Premenstrual and menstrual symptoms | 46 | 27* |

## 5.2 Symptoms and Syndromes

*Criterial Symptoms of Depression.* The eight DSM-III symptoms for the definition of major depression have likewise been adopted for the minor depressive group. The mean values are given in Table 4. There is practically no difference between the EDE and RBD groups, which means that the short-lasting depressive manifestations have the same number of classical symptoms as the longer-lasting ones. Hence, the hypothesis of a higher symptom frequency among major depression (EDE) is not confirmed. Indeed, one out of eight symptoms, 'loss of interest', is significantly more frequent in RBD cases.

*Functional Syndromes.* The comparison of the various depressive groups among each other and with the control group respectively regarding the presence of other functional syn-

dromes is of great interest (Table 5) as it detected marked differences. The NRBD differ significantly from the control group only in reduced appetite and sexual symptoms, while the RBD evidence significantly more functional auxiliaries: as many as 13 out of 21 functional syndromes are significantly more frequent in the RBD than in the control group. 'Intestinal troubles' head the somatic syndromes, and anxiety, exhaustion, sleep disturbances the neurotic and vegetative syndromes. Out of 21 functional syndromes, 2 (anxiety states and premenstrual symptoms) have higher frequency in group RBD than in group EDE (Table 6).

## 5.3 Self-Assessment of Symptoms

The self-assessment by means of the SCL-90 symptom inventory yields several findings that could be expected (Table 7). The control group has the lowest scale values, the NRBD lies between the controls and the RBD. Here again, we observe no significant difference between the RBD and the EDE (Table 8).

**Table 7.** SCL-90 Scales—Controls vs depressive groups (NRBD, RBD, RBD (SYM))

| | Controls 196 | | NRBD 89 | | RBD 88 | | RBD (SYM) 35 | |
|---|---|---|---|---|---|---|---|---|
| | mean | s | mean | s | mean | s | mean | s |
| Somatization | 1.3 | 0.30 | 1.5 | 0.51** | 1.6 | 0.44*** | 1.7 | 0.46*** |
| Obsessive-compulsive | 1.4 | 0.42 | 1.7 | 0.56*** | 2.0 | 0.74*** | 2.3 | 0.66*** |
| Interpersonal sensitivity | 1.5 | 0.47 | 1.8 | 0.61*** | 2.2 | 0.81*** | 2.4 | 0.88*** |
| Depression | 1.4 | 0.38 | 1.8 | 0.58*** | 2.3 | 0.80*** | 2.5 | 0.87*** |
| Anxiety | 1.4 | 0.37 | 1.6 | 0.58*** | 2.0 | 0.75*** | 2.3 | 0.78** |
| Anger/hostility | 1.4 | 0.42 | 1.7 | 0.63*** | 1.9 | 0.77*** | 2.1 | 0.80*** |
| Phobic anxiety | 1.2 | 0.26 | 1.3 | 0.39*** | 1.5 | 0.52*** | 1.7 | 0.62*** |
| Paranoid ideation | 1.5 | 0.51 | 1.8 | 0.67*** | 2.0 | 0.73*** | 2.2 | 0.72*** |
| Psychoticism | 1.2 | 0.31 | 1.4 | 0.43*** | 1.6 | 0.53*** | 1.8 | 0.61*** |
| Total score | 1.4 | 0.28 | 1.6 | 0.45*** | 1.9 | 0.56*** | 2.1 | 0.58*** |

**Table 8.** SCL-90 Scales—RBD vs EDE

| | RBD 88 | | EDE 68 | |
|---|---|---|---|---|
| | mean | s | mean | s |
| Somatization | 1.6 | 0.44 | 1.5 | 0.55 |
| Obsessive-compulsive | 2.0 | 0.74 | 1.8 | 0.63 |
| Interpersonal sensitivity | 2.2 | 0.81 | 2.0 | 0.81 |
| Depression | 2.3 | 0.80 | 2.0 | 0.69* |
| Anxiety | 2.0 | 0.75 | 1.8 | 0.59 |
| Anger/hostility | 1.9 | 0.77 | 1.7 | 0.69 |
| Phobic anxiety | 1.5 | 0.52 | 1.4 | 0.51 |
| Paranoid ideation | 2.0 | 0.73 | 2.0 | 0.66 |
| Psychoticism | 1.6 | 0.53 | 1.6 | 0.58 |
| Total score | 1.9 | 0.56 | 1.8 | 0.51 |

**Table 9.** Illness behavior

| | | RBD 88 | RBD (SYM) 35 | EDE 68 | EDE (SYM) 25 |
|---|---|---|---|---|---|
| Males | N | 32 | 15 | 24 | 9 |
| | % | 36 | 43 | 35 | 36 |
| Treatment | N | 16 | 11 | 15 | 8 |
| | % | 18 | 35 | 22 | 32 |
| Self-medication | N | 6 | 4 | 4 | 1 |
| | % | 7 | 11 | 6 | 4 |
| Discussion of depression | N | 75 | 30 | 62 | 15 |
| | % | 85 | 86 | 91 | 60 |
| Subjective worrying (THERMO, range 0–100) | $\bar{x}$ | 66 | 75 | 65 | 75 |

No differences significant

A quantitative and qualitative parallel of symptomatology in both RBD and EDE appears. The mid-position of the NRBD is in line and compatible with the hypothesis of a continuum.

## 5.4 Illness Behavior

Illness behavior is studied under the following angles:

— Seeking professional treatment of depression
— Self-medication
— Discussing one's depression with close persons
— Extent of subjective worrying about one's depression

Naturally, these criteria do not apply to the controls. And to economize time, these questions were not investigated within the NRBD group below a certain threshold value. We therefore restrict the analysis to the comparison of the systematically investigated groups RBD and EDE (Table 9).

In the course of the past 12 months, one-fifth to one-third of the probands who had been classified as depressives sought *professional care* because of their depressive syndromes. It is interesting to note that the treatment frequency of recurrent short depression and that of longer-lasting depression differ in no way. One-third of each the RBD (SYM) and the EDE (SYM) groups—i.e., under the more stringent case-definition—have been treated. *Self-medication* is very similar: it lies between 4% and 11%, and there are also no differences between the groups.

Surprisingly, the majority of the probands *discussed their depressive states with close persons*. No differences were found between the groups.

The same can be said of the extent to which *one worries about one's depression* and which was assessed with an analog-scale ranging from 1 to 100 (THERMO). Subjects with short-lasting depression suffer from these manifestations to an equal extent as those having longer-lasting depressive episodes.

Consequently, measured by illness behavior, RBD and EDE engender equal impairment and treatment quota.

## 5.5 Environmental Factors and Onset of Depression

Environmental factors that might be involved in triggering off depression were assessed on different levels within the frame of our interviews:

— *Precipitation.* Persons who had suffered any depressive manifestations in the course of the past 12 months were asked directly whether they knew of any specific cause of their sad mood.
— *Life events* were assessed with a life-event-inventory based on Tennant and Andrews (1976). Following the data obtained by a Swiss normative study, we made up a 'life-stress-scale' (Bischofberger and Thomaier 1982).
— *Social adjustment.* A modified version (Angst et al. 1984d) of the SAS (Weissman and Paykel 1974) was applied. To assess distress and conflict experienced in interpersonal relationships during the last 3 months we established two

**Table 10.** Precipitation, distress and conflicts—Controls vs. depressive groups (NRBD, RBD, RBD (SYM))

| | | Controls 202 % | NRBD 91 % | RBD 88 % | RBD (SYM) 35 % |
|---|---|---|---|---|---|
| Precipitation | | — | 38 | 44 | 30 |
| Distressing life event score | High | 20 | 22 | 26 | 40 |
| (Percentiles 25–50–75) | ↓ | 23 | 25 | 30 | 20 |
| | | 27 | 30 | 20 | 23 |
| | Low | 29 | 23 | 24 | 17 |
| Distress in interpersonal relations | Much | 41 | 29 | 51 | 63 |
| (Percentiles 33.3–66.6) | ↓ | 36 | 42 | 37 | 29 |
| | Little | 24 | 30 | 11*** | 9*** |
| Conflicts in interpersonal relations | Many | 19 | 26 | 47 | 60 |
| (Percentiles 33.3–66.6) | ↓ | 35 | 37 | 27 | 23 |
| | Few | 46 | 36 | 26*** | 17*** |

**Table 11.** Precipitation, distress and conflicts—RBD vs. EDE

| | | RBD 88 % | EDE 68 % |
|---|---|---|---|
| Precipitation | | 44 | 65* |
| Distressing life event score | High | 26 | 40 |
| (Percentiles 25–50–75) | ↓ | 30 | 25 |
| | | 20 | 21 |
| | Low | 24 | 15 |
| Distress in interpersonal relations | Much | 51 | 53 |
| (Percentiles 33.3–66.6) | ↓ | 37 | 23 |
| | Little | 11 | 23 |
| Conflicts in interpersonal relations | Many | 47 | 32 |
| (Percentiles 33.3–66.6) | ↓ | 27 | 40 |
| | Few | 26 | 28 |

specific indices. The resulting scores were trichotomized and then included in the analysis as indicators of distress.

*Precipitation.* It is interesting to note that persons with longer-lasting depressive episodes (EDE groups) (65% and 57%) indicate a specific reason for a depressive manifestation significantly more often than persons of the RBD (44% and 33%) or NRBD (38%) groups (Tables 10 and 11). It therefore appears that the shorter-lasting depressive manifestations which keep recurring throughout a year are subjectively much less felt as having been induced by environmental factors.

*Life Events.* Distressing life events are distributed equally across all depressive groups, and—surprisingly—none of the latter differ from the control group. Hence, distressing life events cannot be considered as a trigger to depressive manifestations. This is quite startling, because both life events and depressive manifestations fall within the same span of 12 months. A higher global life event score is therefore not only no significant trigger of BDE, but also does not occur simultaneously with the latter.

*Social Integration.* Table 10 indicates the extent to which the probands of the RBD groups are exposed to *chronic distress and conflict* in their interpersonal relationships. The RBD and RBD (SYM) cases judge their interpersonal relationships significantly more often to be pregnant with distress and conflict than the control probands. On the other hand, the NRBD do not differ significantly from the control group. Here again,

we have no difference between the RBD and EDE groups: people with longer (more than 2 weeks) lasting depressive episodes do not report more conflict and distress in their interpersonal relationships than those having RBD episodes (Table 11).

The fact that persons having depression often experience conflict and distress in their everyday life leads to the question whether and what differences can be found in the various social roles. Table 12 shows the association of depression with conflict and distress in the social role areas 'family', 'friends', 'work' and 'partners'.

It appears that the associations in the two RBD groups are generally stronger than those in the EDE groups, even though the differences between short and longer-lasting depressions are not significant. The RBD and RBD (SYM) probands seem to experience intimate close relationships as often being distressing. Conflict and distress in relationships with parents, siblings or partners are particularly associated with RBD. Further analyses will have to examine whether this presence of conflict and distress in RBD is synonymous with personality disorder, and whether this group therefore could be heterogeneous, for instance consisting of a 'neurotic' *conflictual depression* and primary depression.

### 5.6 Coping Resources

The accumulation of interpersonal conflict and distress in depressive people might originate from a lack of coping resources. Persons with poor coping resources seem more prone to depression. Our interview assessed two dimensions of coping—*mastery* and *self-esteem* (Pearlin and Schooler 1978). Table 13 gives the distribution over the quartiles of the two scales for the control and the depressive groups.

The RBD and RBD (SYM) subjects have markedly fewer coping resources than the controls on both dimensions 'mastery' and 'self-esteem'. As compared to the controls the NRBD group scores lower in 'mastery' but not in 'self-esteem'. Between the RBD group and the EDE group there are no differences (Table 14). Summarized, people suffering from RBD or EDE often feel helpless and inferior to their environment.

### 6. Discussion

Our findings support the dichotomy of BDE lasting less than 2 weeks into recurrent (R) and nonrecurrent (NR) subtypes:

**Table 12.** Chronic conflicts and distress in the last 2 months—Controls vs depressive groups

| | Controls vs NRBD (n = 91) C.V. | Controls vs RBD (n = 88) C.V. | Controls vs RBD (SYM) (n = 35) C.V. | Controls vs EDE (n = 68) C.V. | Controls vs EDE (SYM) (n = 25) C.V. |
|---|---|---|---|---|---|
| *Disputes and controversies with* | | | | | |
| – parents: father | 0.10 | 0.21*** | 0.26*** | 0.07 | 0.05 |
| mother | 0.09 | 0.21*** | 0.24*** | 0.06 | 0.04 |
| – friends | 0.03 | 0.15* | 0.22*** | 0.12* | 0.04 |
| – at work | 0.17* | 0.12 | 0.21** | 0.18* | 0.22 |
| – partner: in group without steady partner | 0.01 | 0.10 | 0.09 | 0.11 | 0.01 |
| in group with steady partner but no common household | 0.14 | 0.23* | | 0.13 | |
| in group with steady partner in common household | 0.13 | 0.26** | 0.24* | 0.23* | |
| *Distress in contacts with* | | | | | |
| – parents: father | 0.09 | 0.17** | 0.20** | 0.13* | 0.04 |
| mother | 0.10 | 0.21*** | 0.27*** | 0.17** | 0.11 |
| – friends | 0.02 | 0.16** | 0.25*** | 0.13* | 0.14* |
| – at work | 0.13 | 0.29*** | 0.33*** | 0.20* | 0.24 |
| – partner: in group without steady partner | 0.07 | 0.19 | 0.15 | 0.05 | 0.15 |
| in group with steady partner but no common household | 0.30* | 0.25* | | 0.16 | |
| in group with steady partner in common household | 0.09 | 0.25** | 0.21 | 0.15 | |

C.V. = Cramer's V

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**Table 13.** Psychological coping resources—Controls vs depressive groups (NRBD, RBD, RBD(SYM))

|  |  | Controls 202 % | NRBD 91 % | RBD 88 % | RBD(SYM) 35 % |
|---|---|---|---|---|---|
| Self-esteem (Quartiles) | High | 25 | 22 | 15 | 9 |
|  | ↓ | 33 | 29 | 23 | 23 |
|  |  | 24 | 34 | 19 | 19 |
|  | Low | 17 | 15 | 43*** | 43*** |
| Mastery (Quartiles) | High | 36 | 19 | 9 | 9 |
|  | ↓ | 26 | 30 | 21 | 18 |
|  |  | 26 | 29 | 26 | 36 |
|  | Low | 12 | 23** | 43*** | 36*** |

**Table 14.** Psychological coping resources—RBD vs EDE

|  |  | RBD 35 % | EDE 68 % |
|---|---|---|---|
| Self-esteem (Quartiles) | High | 15 | 25 |
|  | ↓ | 23 | 28 |
|  |  | 19 | 20 |
|  | Low | 43 | 28 |
| Mastery (Quartiles) | High | 9 | 21 |
|  | ↓ | 21 | 21 |
|  |  | 26 | 21 |
|  | Low | 43 | 37 |

Recurrence means, in this context, monthly occurrence of depressive mood changes over 1 year. By applying additional diagnostic criteria such as 'work impairment' and presence of a minimum symptom number, a harder RBD(SYM) group can be obtained which was frequently in need of treatment. The NRBD subgroup has practically never been treated (1%), the RBD in 18%, and the RBD(SYM) in 33%. The latter should be considered as 'cases' as much from a social as a medical point of view.

The 1-year prevalence rate of RBD(SYM) cases is 4.4% at the age of 23 to 24 years, 3.9% in males and 4.9% in females. The male/female ratio therefore is 1:1.3. In point of fact, it is rather thought to approach 1:1, because men tend to under-report depressive mood changes (Angst and Dobler-Mikola 1984a).

Subjects with minor depression (RBD(SYM)) and major depression (EDE, EDE(SYM)), are equally ill, impaired, and in need of treatment. This is documented by several criteria (frequency of medical treatment, number of depressive symptoms, SCL-scale values, social impairment, positive family history). A syndrome of anxiety assessed by the interview was significantly more frequent in minor depression (RBD) with 50% than in major depression (EDE) with 29%. The RBD also tend to score a little higher than the EDE on the respective SCL-scale 'anxiety' with 2.0 versus 1.8 (not significant). So it is possible that among minor depressed subjects a premorbid trait of anxiety is frequently present as suggested by the study of Van Valkenburg et al. (1983). It could well be that subjects with RBD differ in personality from EDE being more unstable, 'neurotic' and hostile. Unfortunately the critical SCL-scale values (somatization, hostility, anxiety) do not differ significantly, but there still remains a trend to higher scores (more complaints) in the RBD(SYM) group.

The striking resemblance of RBD and EDE reconfirms the hypothesis of a continuum between short and protracted depressive manifestations. Akiskal's statement (1983) that actual major affective disorders can be superimposed on 'sub-affective disorders' and that the latter genetically represent attenuated forms of the major disorders is certainly legitimate. Progress has been made in diagnostics by the diagnosis of a 'double depression' (Keller et al. 1983), i.e., the presence of minor and major depression in one and the same person. Our own data cannot give evidence in this respect. However, it might be possible to find out prospectively about the risk of a RBD illness switching to major depression with time.

Our diagnosis of an RBD is not identical with the DSM-III concept of 'dysthymic disorder'. The latter requires chronicity, as persistent or intermittent depressive manifestations of at least 2 years' duration, whereas our diagnosis requires only 1 year of intermittent, nonchronic course. The second criterion of the DSM-III, subsyndromal intensity, is only satisfied with respect to time, i.e., a duration of less than 2 weeks. We have adopted the same strict conditions for the symptomatic threshold as in major depression, and even additionally required work impairment, to define a case. The exclusion criterion 'affective delusions and hallucinations' also applies for our case definition, but not that of an 'absence of hypomanic or manic swings'. The latter diagnostic requirement appears to be inconsequent and would not prevent an RBD diagnosis, but rather necessitate the supplement 'bipolar subtype'.

We believe our RBD(SYM) definition to be operationally more strict than the DSM-III concept of dysthymic disorder or atypical depression. Obviously, it results in a somewhat smaller group of depressive syndromes, which—as we hope to have proved—is nevertheless of clinical relevance. Further investigations will have to clarify the relationship between RBD(SYM) and personality disorders and other types of secondary depression. In the search for heterogeneity we shall break down the RBD(SYM) by age of onset, precipitation and conflict in social roles (conflictual depression).

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