The Zurich Study

III. Diagnosis of Depression

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Summary. A 23- to 24-year-old age group representative of the general population of the Canton of Zurich, was used to detect depression. The classifications obtained by means of the Feighner, RDC and DSM-III criteria are compared with our own concept, which differs in some aspects. A minimum of 2 weeks of depression is labeled as EDE (extensive depressive episode). Instead of the presence of a minimum number of depressive symptoms, social impairment at work is first examined as a case-defining criterion (EDE[WORK]); in a second step, a diagnostic threshold of three, and five, depressive symptoms for males and females respectively is adopted (EDE[SYM]). The consequences are presented relating to prevalence, incidence, sex distribution, overlap with other diagnostic concepts, severity, bipolarity and family history. An unequal sex distribution in depression is shown to be an artifact of definition.

Preference should go to a case-definition that could be specifically adapted to a given problem. On the whole, the DSM-III and EDE(WORK) criteria appear to be too broad. We will henceforth prefer the RDC and EDE(SYM) criteria, which both, however, necessitate further methodological and empirical study.

Key words: Epidemiology – Prevalence – Incidence – Depression – Sex ratio – Feighner, RDC and DSM-III diagnostics – EDE (extensive depressive episodes)

1. Introduction

Starting from the hypothesis of a continuum from normal sad mood to pathological depression, we first performed a categorization exclusively on the grounds of the duration of depressive episodes. This has been described elsewhere (Angst and Dobler-Mikola 1984b). The existence of such a continuum has been documented by symptomatology and other characteristics. Any attempt to distinguish between normal and pathological or between ‘case’ and ‘noncase’ on such a continuum obviously appears to be arbitrary. In fact, no generally valid definition of a psychiatric ‘case’ exists, as illustrated at the London symposium in 1981 (Copeland 1981). The best case-definition is a flexible one, and one that should depend on the problem(s) to be investigated.

Some current diagnostic sets of criteria for depression require a depressive mood change and the presence of a minimum number of characteristic symptoms. This approach is adopted by epidemiology. It avoids the contamination of a given illness definition with social consequences. This permits the study of the social consequences of the illness independently of the definition (DSM-III [American Psychiatric Association, 1980], Catego [Wing et al. 1974]). A disadvantage of the DSM-III is its very broad case-definition. Attempts have therefore been made to include the social consequences—apart from mood change and a minimum number of symptoms—to define a depressive ‘case’ (e.g., Research Diagnostic Criteria [RDC] [Spitzer et al. 1978]). These criteria require (1) assessment of depressive mood change, (2) stipulation of a minimum duration of episode (e.g., 2 weeks), (3) presence of a minimum number of symptoms and (4) social consequences of the symptoms.

Questioning the assumption that a psychiatric ‘case’ could be defined based on symptoms alone, we decided to follow another sequence, in that we placed the social consequences (4) ahead of the number of symptoms (3). In such a way, we first reach a group with at least a 2-week depressive syndrome with social impairment at work (EDE[WORK] = extensive depressive episodes with work impairment). This group is further narrowed by the additional requirement of a minimum symptom number, to the so-called EDE(SYM), thus approaching the RDC. Table 1 displays the different diagnostic concepts. Since the social consequences are an important factor of our first step of case-defining, we wish to be more explicit about this detail. The exclusion criteria of the DSM-III apply to all diagnostic groupings listed in Table 1. We term depressive mood swings of less than 2 weeks duration ‘Brief Depressive Episodes’ (BDE), but will report on them in another publication.

The design, investigation methods, selection of samples and other methodological aspects have been presented in previous papers (Angst et al. 1984c; Angst and Dobler-Mikola 1984b).

2. Social Impairment as a Diagnostic Criterion

Some, though unequal, attention has recently been paid to social impairment as an additional criterion for diagnosing depression. The RDC, for instance, explicitly require professional treatment and/or social impairment for a diagnosis. Quotation: ‘Sought or was referred for help from someone during the dysphoric period, took medication, or had impairment in functioning with family, at home, at school, at work, or socially’. Social impairment in this instance appears to be quite
Table 1. Definition of depression

<table>
<thead>
<tr>
<th></th>
<th>Feighner RDC</th>
<th>DSM-III</th>
<th>Zurich Study EDE(SYM)</th>
<th>EDE(WORK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressed mood</td>
<td>Depressed mood</td>
<td>Depressed mood</td>
<td>EDE(SYM)</td>
<td>EDE(WORK)</td>
</tr>
<tr>
<td>Duration of episode</td>
<td>4 weeks</td>
<td>2 weeks</td>
<td>2 weeks</td>
<td>2 weeks</td>
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<tr>
<td>5 of 8 symptoms</td>
<td>5 of 8 symptoms</td>
<td>4 of 8 symptoms</td>
<td>M: 3 of 8 symptoms</td>
<td>F: 5 of 8 symptoms</td>
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<td></td>
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<td></td>
<td>occupational impairment</td>
<td>occupational impairment</td>
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<td></td>
<td>- loss of performance</td>
<td>- reduction of performance</td>
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<td></td>
<td>- secondary conflicts</td>
<td>- absence from work</td>
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<td></td>
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<td></td>
<td>- loss of job</td>
<td>- - loss of job</td>
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<tr>
<td>social consequences</td>
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<td></td>
<td>- treatment</td>
<td>- - - treatment</td>
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<td>- self-medication</td>
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<td>- self-medication</td>
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<td>- social impairment</td>
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Table 2. Text assessing social impairment caused by depression

"Did your state have any effect upon your daily life performance or normal role functioning?
Were there certain things you were not/no more able to accomplish?
Did you feel in any way handicapped or did you experience difficulties?

e.g. in your work?
- loss of performance
- conflicts
- absence from work
- loss of job

e.g. in your leisure time activities?
- yes
- no

e.g. in contacts with friends, acquaintances, parents or partner?
- yes
- no"

broadly defined, leaving the interpretation to the diagnostician. The interview DIS (developed in the USA) also applies these criteria of the RDC to the DSM-III and to the Renard (Feighner et al. 1972) diagnostics of depression.

Our method deviates from the DIS mainly on two points. (1) social impairment is not assessed for each symptom separately, but comprehensively in the frame of syndromes, and (2) social impairment is assessed in a more detailed way. The approach used in our interview of 1979 is described in the Appendix. The results obtained helped simplify the strategies for the reinterview of 1981. A synopsis is given in Table 2.

Just a partial aspect of the impact depression may have on every day life was considered for the EDE(WORK) case-definition: impairment in occupational functioning. Our analyses show that impairment in other roles, such as leisure time activities, contact with other people, is very frequent. To avoid too broad a case-definition, it is therefore omitted.

Restriction to occupational impairment is of course problematic. For instance, ‘work’ means quite a different thing to a housewife, a student or a working person. To our surprise, however, the investigation of reduction in performance did not prove to be very difficult. On the other hand, we were not able to check the validity of the individual answers by direct observation of his/her behavior. Eventually, we must rely on a subjective estimate of impairment as perceived by the depressed persons themselves. For further analysis, we have divided occupational impairment into four points: reduction in efficiency, subsequent conflict at work, incapacity to work, loss of job. A rank order could be made up with the first three characteristics only, since, for instance, housewives cannot lose their jobs.

3. Number of Depressive Symptoms as a Diagnostic Criterion

Our analysis is limited to the eight depressive symptoms contained in the DSM-III, which are also the basis of the RDC and Feighner criteria. The frequency distribution of the eight symptoms is given in Table 3, depending on classification and subdivided by gender. The EDE category comprises all depressive episodes of at least 2 weeks duration which had manifested themselves in the course of 1 year. The frequency of the individual symptoms shows a marked sex difference. The median is three symptoms for males and five symptoms for females. The frequency also varies when different diagnostic criteria are applied. For example the category of probands having seven or eight symptoms is void in males.

The application of an equal cut-off point for males and females (e.g., presence of five of the eight symptoms) to assign a diagnosis will of course not change these sex differences. As we have reported it in another paper (Angst and Dobler-Mikola 1984a), men show fewer depressive symptoms for two reasons: they either perceive such symptoms to a lesser extent or underreport them, and they forget about them more readily than females. The latter fact becomes apparent especially when diagnosing earlier depressive states, e.g., in estimates of 1 year of lifetime prevalence rates. The first mentioned reason is remarkable in that men underreport depressive symptoms even in cases where they actually would be expected to be as depressed as women, e.g., stratified by social impairment. We therefore deem the application of different thresholds for diagnosing depression reasonable, i.e., following the median, three symptoms for males and five symptoms for females. The classification thus obtained will in this paper be referred to as EDE(SYM). It has been defined in Table 1.