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### Depression, Burnout and Effort-Reward Imbalance among Psychiatrists

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Numerous studies have shown that physicians have a high risk of developing depression or burnout syndrome [1–6]. In our own pilot study on 829 psychiatrists in Germany, we found that 44.6% of the sample had suffered from a depressive episode [7].

Burnout is characterised by 3 dimensions: emotional exhaustion, an indifferent or cynical attitude towards clients (depersonalisation), and reduced personal accomplishment [8]. Ramirez et al. [5] and Taylor et al. [9] found that emotional exhaustion among British doctors increased from 32% in 1994 to 41% in 2002.

Maslach et al. [8] assume that the development of burnout is mainly due to adverse workplace conditions and the organisational structure. This dimension has been described by Siegrist et al. [10] as being caused by a negative effort-reward imbalance reflecting a disproportion between effort and reward (money, esteem, career opportunities) plus overcommitment (an excessive work-related commitment) at work.

Data gained from smaller samples indicate that psychiatrists and psychotherapists are at particular risk of developing psychological problems [11–14]. In our cross-sectional study, we examined the mental health of psychiatrists and psychotherapists in a larger German sample while focusing on depression, burnout and effort-reward imbalance.

At the annual congress of the German Association of Psychiatry, Psychotherapy and Nervous Diseases (DGPPN) in 2006, we distributed 2,430 questionnaires (return rate 51.8%); 1,089 questionnaires of 570 males (52%) and 519 females (48%) formed the final sample. The mean age was 45.4 years (SD = 8.5, range 26–69 years). The questionnaire contained questions on personal status, work situation and medication intake. The following self-rating scales were included: Beck Depression Inventory (BDI), Maslach Burnout Inventory-D and Effort-Reward Imbalance Questionnaire [8, 15–18]. The study fulfilled the guidelines of the Ethic Committee of the University of Ulm, and all participants gave informed consent.

**Depression.** On the BDI, 868 of 1,089 (79.7%) scored <11, indicating little or no current depression, 159 (14.6%) between 11 and

17 points, suggesting a mild depression, and 62 (5.7%) scored ≥18 points indicating at least moderate depression. Moreover, 450 of 1,081 (41.6%) psychiatrists indicated they had suffered at least one depressive episode according to the ICD-10 criteria; 152 of 472 (32.2%) reported a depressive episode diagnosed by a specialist; 23 of 1,082 (2.1%) had attempted suicide.

**Psychotherapy and Medication.** At the time of the study, 46 of 1,086 (4.2%) were undergoing psychotherapy, and 324 of 1,089 (29.7%) had completed psychotherapeutic treatments beyond the psychotherapy sessions mandatory for training in psychiatry. Of the 1,077 who replied, 13.3% took at least one psychotropic or analgesic medication regularly at the time of the study: 63 (5.9%) antidepressants, 27 (2.5%) sedatives, and 74 (6.9%) analgesics.

**Burnout.** An emotional exhaustion score of >4.5 was reached by 131 of 1,089 (12.0%) of the sample, but only 8 (0.7%) scored >4.5 for depersonalisation, and only 2 (0.2%) scored <2.5 for personal accomplishment.

**Effort and Reward Imbalance.** A negative effort-reward imbalance (>1) was shown by 163 of 841 (19.3%) in the sample, whereas 114 (10.5%) of the total sample (n = 1,087) displayed evidence of overcommitment.

This is the first major study carried out on burnout, depressive symptoms and effort-reward imbalance among German psychiatrists. One substantial finding of the study is the high self-rated lifetime prevalence of depression of 41.6% among these psychiatrists. Also noteworthy is that a fifth (20.3%) of the sample showed evidence of acute depressive symptoms. When compared with data from the literature reporting a 4-week prevalence of 5.6% and a lifetime prevalence of 17.1% for depression in the German population, our findings appear unexpectedly high [19]. One possible interpretation is that psychiatrists are subject to more strain than the normal population (e.g. the handling of suicidal or aggressive patients). On the other hand, psychiatrists are more sensitive to depressive symptoms, more aware of their own mental symptoms, and probably have a higher ability for introspection. Moreover, it is possible that it is still difficult for individuals in the general population to consult a doctor about a mental problem. Further, the return rate was only 51.8%, so this might be also a biasing factor since perhaps 'healthy visitors' were less interested in participating in the study or depressed subjects decided not to return the questionnaire. However, one would intuitively assume visitors to a congress are healthier than those who stay at home. Another possible bias regarding acute depressive symptoms is that the diagnosis was not established objectively, but based on the BDI.

The psychiatrists heightened perception of depressive symptoms might also be reflected in their high medication intake, as 13.3% of the sample took at least one psychotropic or analgesic medication regularly at the time of the survey. In the study by Balon [20], 15.7% of psychiatrists (n = 567) treated themselves for

depression in the past, and 22.2% thought that they should treat themselves for depression. According to Ohayon, 6.4% of the combined German, Italian, French and British population take psychotropic medication, and 1% take antidepressants [21]. This could be the result of higher rates of depression in psychiatrists, the availability of medication for physicians, or a better acceptance of psychotropic medication.

Unfortunately, the figures for rates of burnout cannot be set in direct comparison to the German population as norms do not exist. Nevertheless, one may wonder what influence emotional exhaustion may have on empathy, one of the psychiatrist's core tools in creating an effective doctor-patient relationship.

An effort-reward imbalance was found in 19.3% of psychiatrists. In comparison, an effort-reward imbalance of 16.3% was found by Larisch et al. [22] in a cross-sectional investigation of middle-aged German public transport employees (n = 316).

The major limitations of our study are that it is based on a sample collected at a professional congress and it is cross-sectional in nature; thus, the results are not generalisable to other collectives. Further longitudinal studies that compare, for example, psychiatrists with physicians of other medical specialisations are necessary to determine the specificity of the obtained results and to analyse how stress, due to a specific work, can cause burnout and depression.

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#### Conflict of Interest

The lead author states that there is no connection to any company whose product is mentioned in the article, or to any company which sells competitive products.

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