

## Long-term Therapy of Affective Disorders: Monotherapy or Polypharmacy?

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### Introduction

In the treatment of affective disorders the use of a combined psychopharmacotherapy is nowadays common among physicians both in practice as well as in clinics. Analyses of prescriptions have shown that polypharmacy sometimes is used even more often than monotherapy (Grohmann et al., 1982; Müller-Oerlinghausen, 1977; Salzmann, 1981; Schüssler et al., 1982). Administration of several psychotropic drugs at the same time might be useful for a speedier onset of relief or intensification of therapeutic effectiveness at the start of treatment. In long-term treatment, however, polypharmacy might lead to unwanted effects, such as abuse of benzodiazepines or tardive dyskinesia caused by neuroleptics. Besides that it will lead to an increase of consumption of psychotropic drugs. The aim of the following study was, therefore, to analyse the prescription habits of the

psychiatrists in a large hospital during one decade, especially in respect to long-term treatment.

### Methods and Patients

Using the archives of the Psychiatric Hospital Weinsberg, all patients hospitalized from 1976 through 1985 diagnosed as "affective disorder" according to ICD-Nrs. 296 (8th or 9th revision, respectively) have been selected. All patients have been screened based on admission reports, clinical course during index treatment, and – as far as possible – on catamnesis; patients who did not clearly meet the criteria of an affective disorder have been excluded. Patients selected for the study have been divided into three diagnostical subgroups: unipolar, bipolar, and involutional depression. Next to sociodemographic data, medication at the day of discharge has been recorded, particularly dosages of antidepressant drugs and lithium. Indication for the dosage of lithium was blood level in mmol/l; antidepressants have been divided into low dosages (up to 75 mg/day of a tricyclic antidepressant or equivalent dosages of

**Table 1** Frequency of affective disorders, percentage of diagnostical subgroups and mean age of female patients at the Psychiatric Hospital Weinsberg from 1976–1985

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Total (mean age)	192 (55.0)	185 (55.4)	186 (55.5)	189 (56.6)	155 (55.5)	171 (55.8)	140 (58.6)	153 (58.3)	137 (60.1)	141 (59.9)
Involutional depression in % (mean age)	47.3 (60.6)	48.9 (61.4)	54.9 (62.6)	59.0 (63.4)	51.8 (63.3)	55.4 (62.9)	57.0 (67.1)	59.4 (65.0)	61.5 (67.6)	53.6 (65.5)
Unipolar depression in % (mean age)	25.8 (46.5)	26.4 (45.7)	24.9 (42.3)	21.4 (42.9)	25.5 (46.1)	26.6 (47.0)	22.3 (45.3)	21.8 (43.4)	21.1 (49.4)	20.0 (52.4)
Bipolar depression in % (mean age)	26.9 (53.3)	24.7 (54.1)	20.2 (52.7)	19.6 (51.2)	22.7 (48.2)	18.0 (50.0)	20.7 (49.6)	18.8 (54.4)	17.4 (46.9)	26.4 (54.3)

**Table 2** Prescription of antidepressant drugs (AD) at the day of discharge; percentage of monotherapy and combined therapy with other psychotropic drugs (PD).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Total number of prescriptions	157	151	162	159	144	132	121	137	101	101
Monotherapy (in %)	10.8	11.9	15.4	17.6	11.8	15.2	14.9	10.9	17.8	9.9
AD + 1 PD (in %)	61.8	55	54.3	57.9	74.3	58.3	55.4	65.7	58.4	41.6
AD + 2 PD (in %)	20.4	27.8	27.8	21.4	13.2	22	26.4	22.6	20.8	38.6
AD + 3 PD (in %)	5.7	4.6	2.5	2.5	0.7	4.5	3.3	0.7	3.0	9.9
AD + 4 PD	1.3	0.7	–	0.6	–	–	–	–	–	–

**Table 3** Prescription of lithium (LI) at the day of discharge; percentage of monotherapy and combined therapy with other psychotropic drugs (PD)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Total number of prescriptions	49	44	35	26	27	25	17	27	15	18
Monotherapy (in %)	6.1	6.8	2.9	—	11.1	—	—	—	6.7	—
LI + 1 PD (in %)	38.8	15.9	17.1	42.3	40.7	32.0	35.3	44.4	33.3	16.7
LI + 2 PD (in %)	38.8	56.8	54.3	50.0	44.4	48.0	53.0	51.9	40.0	44.4
LI + 3 PD (in %)	14.3	18.2	25.7	7.7	3.8	20.0	11.7	3.7	20.0	38.9
LI + 4 PD (in %)	2.0	2.3	—	—	—	—	—	—	—	—

non-tricyclic antidepressants, respectively), average dosages (75–150 mg/day), and high dosages (more than 150 mg/day). All together 3835 admission reports have been reviewed. In order to warrant distinction of data, results will be presented of female patients only, who represent 67–75% of all patients.

### Results

Table 1 shows for 1976 through 1985 the frequency of female patients admitted as well as the percentages of the diagnostic subgroups, both with respective mean ages. The proportion of patients with involuntal depression shows, on average, a slight increase.

The total increase of mean age by approximately 5 years was not only caused by the higher proportion of patients with involuntal depression since the mean age of patients with unipolar depression increased as well.

At the day of discharge mostly two or three different psychotropic drugs were administered as maintenance therapy (55–90% of all patients), less than 1% of the patients had five different psychotropic drugs, less than 1% had none. Table 2 shows the relative frequency of combinations of antidepressants with other psychotropic drugs. From all patients discharged with an antidepressant as main therapeutical strategy, on the average only 10–15% were treated in monotherapy. 55–75% were discharged with a combination therapy with one other drug; up to 1983 mostly a low potency neuroleptic was added, as of 1984 a benzodiazepine.

Approximately 20% of the patients were discharged with three different drugs; up to the late seventies primarily with a neuroleptic drug plus a low potency neuroleptic, as of the early eighties with a benzodiazepine and a low potency neuroleptic. During the decade researched, dosages of antidepressants were mostly low (46–58%) or average (40–46%), high dosages were unusual (0.8–7.4%).

Table 3 shows the frequencies of lithium prescriptions; during the whole period there was a continual decrease. Monotherapy was rarely used and there was a tendency to administer lithium in combination with two other psychotropic drugs, either with an antidepressant and a low potency neuroleptic or with a high potency and a low potency neuroleptic.

Lithium blood levels at the day of discharge were relatively constant throughout the decade, 0.56–0.70 mmol/l (mean 0.66).

### Discussion

On comparing prescription habits of antidepressants and lithium for long-term treatment of affective disorders at a large psychiatric hospital some remarkable changes were found. The dosages of antidepressants and lithium on the day of discharge remained nearly the same. Monotherapy was rarely used, the number of lithium prescriptions even decreased. On the other hand, the percentage of combination therapy clearly increased, so that after all the amount of psychotropic drugs administered really did increase. Of particular interest is the fact that although general prescriptions of benzodiazepines decreased within the last years (Wissenschaftliches Institut der Ortskrankenkassen, 1985), we found a higher rate of benzodiazepine prescriptions since 1984.

As we carried out a retrospective study, it was of course not possible to investigate the patients' compliance and whether or not the drugs were prescribed further more. Therefore it was impossible to find out if long term consumption of psychotropic drugs really increased, but it probably did.

During the last years consumption of psychotropic drugs has been discussed from a more critical point of view, so that reducing prescription of different drugs at the same time might be an appropriate contribution to rational psychopharmacotherapy. To find out if there is a continuing tendency for polypharmacy at our hospital will be the subject of further research.

### References

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